Original article

Analysis of the Sociomedical Records of Pregnant Girls Under the Age of 15 at Three Mexican Hospitals. Notes for Social Work

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Abstract

This article proposes a double objective, one technical and one academic: 1) To establish some elements to access and systematize statistically the information of socio-medical records collected by the Department of Hospital Social Work. 2) To explore information obtained from the socio-medical records of women with pregnancies before the age of 15, attended during 2017 in three hospitals in Mexico to describe their socioeconomic, educational, and health profile.

The women in question made their transition to adult sexual and reproductive life before the age of 15. Most of them had incomplete secondary education, lived in a free union or were single, worked at home, and had had at least five prenatal consultations. 94% of these women were in their first pregnancy; the percentage that had resolved their pregnancies through vaginal deliveries was high; only a few of them had had cesarean or abortions. Once their babies were born, a high percentage used postpartum contraception. Social Workers must be organized at the time of filling the socio-medical record and systematize the information to propose actions to prevent pregnancies in adolescence. Hospitals should report cases of sexual abuse in pregnant adolescents.

Keywords: Adolescence; Social welfare; Demographic statistics; Social reports; Maternal and child health; Sexual abuse.

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Análisis de expedientes sociomédicos de mujeres con embarazos antes de los 15 años en tres hospitales de México. Apuntes para el Trabajo Social

Resumen

Este artículo se propone un doble objetivo, uno técnico y otro académico: 1) Establecer ciertos elementos para acceder y sistematizar estadísticamente la información de los expedientes socio-médicos recabada por el departamento de Trabajo Social hospitalario. 2) Explorar información obtenida de los expedientes socio-médicos de mujeres con embarazos antes de los 15 años, atendidas durante 2017 en tres nosocomios mexicanos, a fin de describir su perfil socioeconómico, educativo y de salud.

Las mujeres atendidas realizaron su transición a la vida adulta en el ámbito sexual y reproductivo antes de los 15 años. La mayoría tenía secundaria incompleta, vivía en unión libre o en soltería, se dedicaba al hogar y había tenido al menos cinco consultas prenatales. El 94% cursaba su primer embarazo; era alto el porcentaje que había resuelto sus gestas por medio de partos vaginales; pocas habían tenido cesáreas o abortos. Al finalizar su embarazo, un alto porcentaje usaba anticoncepción posparto. Es importante que la o el trabajador social sea metódico al momento del llenado del expediente socio-médico y sistematice la información para proponer acciones para prevenir futuras gestas a estas edades. Los hospitales deben reportar casos de abuso sexual en adolescentes embarazadas.

Palabras clave: Adolescencia; Bienestar social; Estadísticas demográficas; Informe social; Salud materno-infantil; Abuso sexual.

Summary: 1. Introduction, 2. Methodology, 2.1 Limitations of the Study, 2.2 What Data Should Be Systematized and How This Can Be Achieved, 3. Findings, 4. Conclusions, 5. Bibliographic references.

1. Introduction

It is estimated that 11,808 babies were born in 2016 to girls between 12 and 14 in Mexico. The age-specific fertility rate (ASFR) for this age group was 3.55 births per thousand girls of this age for that year (Meneses & Ramírez, 2018). Yet in 2021, 3,019 births were recorded for girls of the same age, placing the fertility rate at 0.2 per thousand girls under 15 (Instituto Nacional de Estadística y Geografía [INEGI], 2023). Since 2015, following the implementation of the National Strategy for the Prevention of Adolescent Pregnancy (ENAPEA, Spanish acronym), a series of intersectoral actions have been implemented in an attempt to reach the established goal of eradicating pregnancies in girls 14 years of age or younger by the year 2030; however, a considerable distance remains to be covered (Consejo Nacional de Población de México [CONAPO], 2023).

Pregnant girls under the age of 15 usually come from low-income families and communities marked by vulnerability, poverty, social inequality, and instability (Consejo Nacional de Población [CONAPO], 2018; Fondo de Población de las Naciones Unidas [UNFPA], 2013; 2017; Herrera, 2016; Meneses *et al.*, 2020; Pacheco-Sánchez, 2015; Pantelides & Binstock, 2007; Pérez-Baleón & Lugo, 2020a; Sánchez-Bringas & Pérez-Baleón, 2016; Stern & Menkes, 2008; UNICEF, 2017).

Other factors associated with this phenomenon are the persistence of child marriage, exclusion from or abandonment of education, sexual violence, lack of access to comprehensive sex education at an early age, the absence of accessible and amenable healthcare services, unequal power relations between the sexes, and the impossibility of accessing legal termination of pregnancy (LTP) when needed (CONAPO, 2023; UNFPA, 2013; UNICEF, 2017).

Furthermore, motherhood and mothering exacerbate situations of vulnerability that existed prior to the pregnancy. Adolescent mothers interrupt their studies and find it more challenging to complete them; they have fewer opportunities to access the labor market; they assume adult responsibilities and roles early on, in isolation and exclusion, and they can suffer aggravated emotional and psychological damage when the pregnancy is unintentional or a product of forced sexual intercourse (UNICEF, 2017).

Due to their age, girls who become pregnant before the age of 15 have not yet completed secondary school; some have not even completed primary school, so either they are not given sexual education, or it is very brief. Thus, they are rarely aware of the fundamental aspects of sexuality, birth control, and pregnancy. Girls in this age range sometimes report that they were not aware that pregnancy could occur if they had unprotected sexual intercourse, though another explanation for their pregnancy is the desire to have a baby (Meneses & Ramírez, 2018; Menkes & Suárez, 2003; Pacheco-Sánchez, 2015; Pérez-Baleón & Lugo, 2020b).

While a significant proportion of pregnant girls under 15 years of age may have already left school before conception, another portion may drop out because of the pregnancy. Those who live with their partners are less likely to stay in school. In contrast, those who reside with their family of origin and do not live in a marital union are more apt to receive support from their family to continue their education (Binstock & Gogna, 2017; Pérez-Baleón & Sánchez-Bringas, 2020; UNICEF, 2017).

An essential aspect of their pregnancy is the pairing with men several years older than the girls for courtship or marriage. These males are generally in their twenties and, at most, have completed secondary education (Pérez-Baleón & Lugo, 2020; Sánchez-Bringas & Pérez-Baleón, 2016). Only 1% of the pregnant girls under 15 years of age reported that the father of their child was in their same age range, while 40.1% indicated that he was between 15 and 19 years old; 22.7% fell in the range of 20 to 24, and 8.4% of the fathers were 25 or older. 28% of the girls did not declare the man's age, perhaps because they did not know it or possibly due to the circumstances under which the pregnancy occurred (CONAPO, 2018; Meneses & Ramírez, 2018).

When the men are older, they tend to be gainfully employed, making them feel they can already support a family (Céspedes & Robles, 2016; Meneses & Ramírez, 2018). In the relationship, it is usually these men who suggest the initiation of sexual relations, generally without protection, and, occasionally, the couple starts living together and having children; all this before the mother is 15 years old. As they lack experience and negotiation skills, the girls are easily convinced through feelings of love, seduction, or even by force (Pacheco-Sánchez, 2015; Pérez-Baleón & Sánchez-Bringas, 2020).

Thus, their first sexual encounters may be marked by sexual violence, and the girls may even become pregnant in their sexual debut (Pérez-Baleón, 2023; Pérez-Baleón & Lugo, 2020b). The younger the woman is at the time of her pregnancy, the less likely she will be in more equitable relationships with partners of her age (Mier *et al.*, 2020).

Unequal power relations and gender stereotypes prevent women from requiring men to use condoms, and they are associated with the belief that birth control is the woman's responsibility (Pacheco-Sánchez, 2015). In addition, the gender norms are manifested by the adolescent girls' desire to have children and start a family (Pacheco-Sánchez, 2015; Pérez-Baleón & Lugo, 2020b).

Marriage in adolescence increases the possibility of pregnancy at this stage of life (CONAPO, 2018; González-Garza *et al.*, 2005; Meneses *et al.*, 2020; Meneses & Ramírez, 2018; Menkes & Suárez, 2003; Pantelides & Binstock, 2007; Stern & Menkes, 2008). In Mexico, four out of every one hundred adolescent girls between 12 and 17 are married (INEGI, 2022).

Their partners usually have the expectation of early pregnancy, so the idea of birth control is only considered after their first pregnancy, and the means of contraception is implanted in their bodies, but that is done at the insistence of the healthcare system. If they have not begun to live as a couple, pregnancy is the motivating factor for the marital union, although, in this age group, it is very likely that the father of the child will not marry the mother (Pérez-Baleón & Lugo, 2020a).

It has been reported that adolescent females are at a high risk of becoming victims of sexual violence (Gómez *et al.*, 2011). Although it is not possible to determine whether all pregnancies are the product of forced sexual relations, pregnancy is more likely to occur within the framework of relationships with some power inequality (Escobar *et al.*, 2019). One in four of the pregnant girls under the age of 15 had very frequently been subjected to psychological or physical violence by the man who impregnated her, and eight out of every one hundred had been subjected to sexual abuse or coercion so that they would agree to engage in sexual intercourse (Pérez-Baleón, 2021; Pérez-Baleón & Lugo, 2021). The men with whom they have sexual relations are not always their affective partners (boyfriends or husbands), and it is mainly these men, those to whom they have no emotional ties, who expose the girls to various types of violence and even abandon them when they learn about the pregnancy (Pérez-Baleón & Lugo, 2020a).

In this population, the transition to adulthood, i.e., the initiation of sexual activity, the start of marital life, the first pregnancy, the birth of the first child, and leaving school, all take place in a short period and occur between the ages of 14 and 15 (Pérez-Baleón & Lugo, 2020b).

Although it is believed that pregnancy at these ages may, in large part, be due to sexual abuse perpetrated even by relatives close to the girls, few actions have been taken to document and prosecute these cases. Records of such events are kept by the public prosecutor's offices and based on the criminal complaints filed there. Other data are based on surveys, which, although they give a good idea of the prevalence of such cases, are subject to the limitations of the sampling method and the quantitative approach. Yet health centers and hospitals that treat victims of sexual abuse do not keep systematized records of the abuse, and health statistics do not include the incidence at the country level, so it is necessary to redouble efforts in this regard (Escobar *et al.*, 2019).

Therefore, this document proposes a double objective, one technical and the other academic. On the one hand, it seeks to: 1) establish certain elements that favor access to and the statistical systematization of the information from sociomedical records collected by hospital social work departments, and on the other hand, this article aims to: 2) analyze the information obtained from the sociomedical records of pregnant girls under the age of 15 who received medical care at three Mexican hospitals in 2017, to describe their socioeconomic, educational, and health profiles. The first objective is addressed within the Methodology in subsections 2.1 and 2.2, while the second is developed in section 3, Findings.

This article contains an introduction and a section on Methodology, with two subsections explaining the elements that limited the study, what data can be systematized in the sociomedical record, and how this can be achieved. It then presents the findings obtained by reviewing the records of pregnant girls aged 13 and 14 in three states of the Mexican Republic. Finally, we offer our conclusions on the topic and several variables that could be included in the sociomedical records.

2. Methodology

A study entitled "National Survey of the Determining Factors of Adolescent Pregnancy (ENFaDEA [Spanish acronym]). Towards a better understanding of the social, familial, and personal factors associated with teenage pregnancy and the development of proposals for intervention" was conducted in 2017 and 2018 at the National School of Social Work (ENTS, Spanish initials) of the Universidad Nacional Autónoma de México (UNAM, Spanish initials).

This study included a quantitative section that culminated in a public survey, the acronym for which was ENFaDEA, and a qualitative section comprising in-depth interviews with women and men with a history of adolescent pregnancy who were receiving health care at three previously selected hospitals for their pregnancies or those of their respective partners. The women were between 13 and 24 years of age at the time of the interview.

The hospitals at which the study was conducted were Hospital de la Mujer Zacatecana (HMZ) [Hospital of the Zacatecan Woman], located in the municipality of Guadalupe, in Zacatecas; Hospital General Dra. María del Socorro Quiroga Aguilar (HGDMSQA) [Dr. María del Socorro Quiroga Aguilar General Hospital], in Ciudad del Carmen, Campeche; and Instituto Nacional de Perinatología (INPer) [National Institute of Perinatology] in Mexico City (CDMX); the first two provide health care at the secondary level, and the third at the tertiary level. All three institutions provide services to the population that does not have Social Security healthcare coverage.

One of the selection criteria for the states was that they have a high adolescent fertility rate (AFR). According to INEGI (2009; 2014), in both 2009 and 2014, these states were ranked third, ninth, and 32nd in terms of AFR. For 2014, the AFR was 105.49, 83.20, and 51.89 live births to mothers between 15 and 19 years of age per 1000 women in that age range, respectively. The geopolitical importance of Mexico City and the opportunity to access the INPer, a tertiary care hospital with a clinic for adolescents, led us to include that city despite its last-place ranking. Another selection criterion was that one state be located in the north, another in the southeast, and the last in the country's central region (Pérez-Baleón *et al.*, 2020).

In addition to the interviews carried out with women and men, the clinical records of girls under 15 years of age who had received medical care for pregnancy in the semester prior to the

fieldwork were reviewed in the gynecology-obstetrics departments of the three hospitals where the care was provided; these records are the focus of the present article. In Zacatecas, the records from six months earlier were reviewed: February to July 2017; at the Campeche hospital, the review covered the months of March to August of the same year, while at the INPer, the records ranged from July to December 2017. The information in each record was initially collected by the social work department of each hospital (Pérez-Baleón *et al.*, 2020).

The records of this population were reviewed because when the study was designed, ethical questions were raised about whether to interview girls under 15 years of age or whether we should only approach the phenomenon of pregnancy at these ages through the records. Ultimately, both techniques were used to preserve the girls' emotional integrity and anonymity at all times since those conditions allowed us to approach them more closely. In total, seven girls under 15[1] years of age were interviewed. And 79 clinical records were examined: 35 in the HMZ, in Guadalupe, Zacatecas; 16 in the HGDMSQA, in Ciudad del Carmen, Campeche; and 28 in the INPer, in Mexico City (Pérez-Baleón *et al.*, 2020).

To access the hospitals, the ENFaDEA study protocol and the corresponding informed consent and assent forms were submitted to the state research and research ethics committees since these are responsible for approving or rejecting the conduct of studies in specific healthcare institutions (Pérez-Baleón *et al.*, 2020).

This approval granted access to the physical or electronic records of the population, from which sociodemographic, economic, sexual, reproductive, and contraceptive data was collected, as well as information related to prenatal care, pregnancy resolution, complications during childbirth, and data regarding the co-author of the pregnancy[2]; Then, a database was created in SPSS using this information (Pérez-Baleón *et al.*, 2020).

2.1 Limitations of the Study

Several aspects limited the information obtained in the records. The first is that there is no single form, at least in the area of social work in Mexico, for collecting information in the record; each institution has its own form, which does not allow for uniformity among the institutions. In addition, the forms are not always up to date, as they do not necessarily contain all the questions that would make it possible to characterize both the woman receiving care and the co-author of her pregnancy, nor to determine whether the pregnancy is the product of a situation of sexual

1 The results of the interviews of women from Mexico City with pregnancies before the age of 15 have been published in Pérez-Baleón and Sánchez-Bringas (2020) and in Pérez-Baleón and Macías-Velázquez (2021); while the information in the files had not been previously analyzed.

2 The word couple is avoided and the phrase "the co-author of the pregnancy" is preferred to refer to the man who impregnated the teenager, since they do not always become pregnant within a stable relationship.
It is suspected that pregnancy at these ages could often be the product of abusive relationships or even rape (Escobar *et al.*, 2019; Unicef, 2017).

violence or abuse. Furthermore, changes are periodically made to the forms at the discretion of the person in charge of the department, so some questions may be eliminated.

Although the forms may contain specific questions, the patients are not always asked them, possibly because, at the time of the interview, there was an overload of work, a low number of staff members due to a holiday or a weekend, or because a specific professional was absent for personal reasons, or the person giving the interview did not deem it necessary to ask specific questions; this latter reason was especially prevalent about the man who impregnated the adolescent. Therefore, in this regard, there needs to be a consensus among the hospital social work departments in order to establish a universal form for the collection of information from pregnant women, mainly from adolescents, with a particular emphasis on girls under 15 years of age and on the detection of possible cases of sexual violence or abuse, which must be monitored in order to prevent the woman and her offspring from having to return to environments that are potentially harmful to their health and well-being.

2.2 What Data Should Be Systematized and How This Can Be Achieved.

A database should be created to systematize the information collected by the social work departments, either in Excel or directly in the SPSS program. If it is done in Excel, transferring it to SPSS using Stat Transfer will be advisable. The hospital's IT staff can support this technical process and generate descriptive statistics tables[3]. For each variable so that, the social workers can analyze them. Nevertheless, social work personnel should be familiar with SPSS and descriptive statistics to characterize the population of interest and replicate the process described in the following section.

It is assumed that the database will contain a relatively limited number of questionnaires aimed at the population that the hospital serves in a given year, fewer than the number that would be obtained if a survey were carried out outside the hospital or if information from several hospitals were collected; thus, only descriptive statistics are considered for the creation of a profile regarding the population of interest.

The questionnaires to be used must have a unique folio number (ID), exclusive to this process. This folio number must be entered in the database to identify the person. This will eliminate the need to record the girl's or woman's name so that her anonymity may be preserved. If there is an error in the database, the record can easily be consulted to verify and correct the information.

[3] Statistics can be divided into descriptive and inferential. The first uses numerical or graphical methods to determine the patterns that a set of data follows, summarize the information and present it, giving an overview of it. They can be used for both samples and populations, while inferential statistics allows estimates, predictions and generalizations of the population to be made, based on a sample (Marques-De Cantú, 2004).

Each question must be converted into a variable. Statistical variables are characteristics or qualities that can be measured. For example, the questionnaire might contain the following question: What is your level of education? In the database, this question will correspond to the variable "education." It is recommended that the questionnaire contain closed-ended questions (categories), although there may be an option to enter an answer that is not included. For example, the responses to the education variable might be: 1) No schooling, 2) Primary school incomplete, 3) Primary school completed, 4) Secondary school incomplete, 5) Secondary school completed, 6) High school incomplete, 7) High school completed, 8) Undergraduate degree (complete or incomplete), 9) Graduate degree (complete or incomplete), 10) Technical degree, and 11) Other.

All responses must be numbered so that they may be entered into the database using numerical codes, which will facilitate the creation of the database. For example, if the adolescent with folio number 1 has completed primary school, the answer three would be entered into the education variable database. In SPSS, it is possible to indicate what the numbers mean in the values menu; for this, the value label is placed for each number; so, if we wish, we can see that the number 3 corresponds, in this case, to primary school completed. It is also recommended that a code book be prepared to indicate the variables and their response categories, with their respective numbering.

The variables are classified as qualitative or quantitative. Qualitative or categorical variables are expressed in words or codes. These are further divided into nominal and ordinal qualitative variables. Nominal (name) qualitative variables contain categories that do not follow an intrinsic ordering or ranking; for example, the variable "sex" is nominal because the categories can be indistinctly assigned, as follows: 1) Female, 2) Male, and 3) Other; or 1) Male, 2) Female, and 3) Other. The same situation occurs with variables such as place of birth, residence, religion, and type of birth since there is no established order in which one of the answers might be more critical.

Ordinal qualitative variables have categories that respond to some intrinsic classification (order), such as education, since primary school must be completed before secondary school, and the same is true for the subsequent levels of education. Other ordinal variables are days of the week or months of the year.

Quantitative variables can be measured numerically, and they are further classified as discrete and continuous quantitative variables. Discrete quantitative variables contain integer values, such as ages, to which we usually respond in terms of years and, in the case of babies, in months, while continuous variables have values that contain decimals, such as height or body temperature.

The statistical treatment and presentation of the variables depend on the type of variable being considered. For quantitative variables, measures of central tendency can be employed, such

as the arithmetic mean[4] (better known as the mean or average), the median[5], and the mode[6]; measures of dispersion, which account for the variability of the observations, can also be used. The most common of these is the standard deviation[7], But there are also percentages[8], proportions[9], And frequencies.

For qualitative variables, both nominal and ordinal, percentages can be used (see Tables 2 and 4), as well as proportions and frequencies, but not the measures of central tendency or dispersion because the mean of variables such as sex/gender cannot be obtained.

In some studies, there is a tendency to use the mean. However, this value is affected if there are extreme values in the calculation, besides the fact that it cannot consider the population that has not experienced the transition or event or the population for which the information does not exist because it was not collected (missing values); therefore, calculations can be obtained that do not necessarily reflect the behavior of a large part of the population. Thus, it is expected that the mean results tend to be generalized, as its disadvantages are unknown. One example of this is the mean age at first sexual intercourse, which only includes those who have already had sexual relations but can be taken as a reflection of the sexual behavior of an entire generation or age group, not just of the subgroup that has already had their sexual debut, which would be an error of interpretation (Pérez-Baleón & Lugo, 2021).

The median, on the other hand, considers the entire population regardless of whether it has already experienced this transition, and since it reflects, in this case, the age at which 50% experienced the transition regardless of the time at which it occurred, it is not affected by extreme values (for this example, women with highly early or late sexual debuts) nor by missing values; therefore, in the present study it was preferred to use the median ages, except for the instances in which 50% of the information was not available for a certain variable, in which case the first quartile was used, reflecting the time at which 25% of the population made the transition in question.

Once the database has been created, it is then possible to have SPSS generate tables for each variable: age, sex, education, marital status, occupation, age at menarche (first menstruation), age

4 The arithmetic mean is defined as the sum of the observations divided by their total (Infante-Gil & Zárate-De Lara, 1997).

5 The median is a value that divides the data into halves. One with all observations greater than or equal to the median and another with those less than or equal to it. For asymmetric data sets, this measure is preferred over the mean (Infante-Gil & Zárate-De Lara, 1997).

6 Mode is the value that occurs most frequently. There may be two or more values with the same maximum frequency (Infante-Gil & Zárate-De Lara, 1997).

7 The standard deviation is defined as the square root of the variance (Infante-Gil & Zárate-De Lara, 1997).

8 The percentage distribution shows the amount in percentage of each of the categories that make up the variable; the sum of these is equal to 100% (Pérez-Baleón & Lugo, 2020a).

9 The proportion represents the percentage value of one of the elements of the variable; That is, it is the relative weight of a category with respect to the total (Pérez-Baleón & Lugo, 2020a).

at first sexual intercourse, at first pregnancy, at the interview, among others; this makes it possible to begin to observe the behavior of each variable. Subsequently, the variables can be grouped in a few tables, presenting the response (category) with the highest percentage only, not all the categories; that is, the proportion of the category with the most significant response.

Occasionally, new groups can even be made. For example, in the case of education, here we present 11 response categories, but it is optional to include all of them in a research report, academic article, or presentation. They can be grouped depending on what the researcher wishes to emphasize. For example, the answers can be grouped as follows: 1) No schooling, 2) Primary school (complete or incomplete), 3) Secondary school (complete or incomplete), and 4) High school, among other ways. In the following section, Tables 2 and 4 present the ordinal and nominal variables, showing only one or two categories, generally those with the highest percentage, giving the proportions, in other words.

Although means, medians, percentages, and averages are preferred, for some variables, it is possible to present frequencies, especially in this analysis, in which a small number of cases, fewer than one hundred, and statistical generalizations cannot be made. That is, these data are not representative at the state level of the Mexican Republic, but they do give insight as to the behavior of the population studied and allow us to assume that other pregnant girls under the age of 15 who were treated at the same hospital, either in that year or in subsequent years, have the same sociodemographic characteristics and behaviors (see Table 3).

Another way to present the data is through graphs, be they pie charts, bar graphs, histograms, pictograms, frequency polygons, and scatter plots; this is a visual method of displaying information. It is recommended that either tables or graphs be used for the same variable, but not both, since the aim is not to saturate the research report with figures but to communicate the results obtained effectively and efficiently, emphasizing the most significant or representative results. Figures (charts and graphs) can be generated in Excel.

Tables must adhere to APA Style 7th Edition (2019) and contain five elements: 1) The table number, in bold text; 2) The title, which is to be placed below the table number, double-spaced and in italics; 3) The table should use headings to show what each column contains, and it is suggested that the text of these headings be centered; 4) The body of the table should include all of its rows and columns (including the header row); 5) Finally, the note is to be placed below the table. It describes the contents of the table that cannot be understood with the title alone or using the data themselves, as well as any abbreviations used and the copyright attribution.

3. Findings

This section presents the results of the 79 records, grouped by hospital/state, allowing specific comparisons among the three institutions. The variables analyzed contained information in the response categories. To present them, they were grouped by similarities: ages at specific transitions, sociodemographic and prenatal care data, reproductive data, use of birth control methods, and number of partners. Other data contained in the database that was created in SPSS, where the percentage of missing values was high, were as follows: age and other information about the co-author of the pregnancy; the identity of the provider for the household in which the girls resided, the number of household members, type of housing, and number of bedrooms; it was for this reason that these variables could not be presented.

Table 1 shows the median ages at the time the record was created, which in turn, it is understood, was the time at which the girls began to receive medical care for their pregnancy; we did not ask them for their ages at the conception of their first pregnancy nor for their ages at the conception of the pregnancy in progress in this study, which was not necessarily their first. In this case, it can be assumed that it is the same age since, in 94% of the cases, it was their first pregnancy.

However, it is essential to ask questions about current age, age at first pregnancy, and age at current pregnancy so as not to leave any room for assumptions, as well as their age at the time of the birth of the first child because, although the questions may seem repetitive, it is common for a woman to become pregnant at one age and have a birthday in the process, meaning that her child would be born when she was one year older than when she became pregnant.

Table 1 also shows the median age at menarche, at first sexual intercourse, and the age of the co-author of the pregnancy. It should be noted that, for the Campeche hospital, data on this last age and several other questions related to the adolescent female and the co-author of the pregnancy were not collected, or in some cases, the question was asked, and in others, the response was left blank; thus, the opportunity to characterize the men and to determine in what contexts and with which men these pregnancies occurred was lost.

Due to the missing cases, it was decided to generate the median age (50%) or even the age at the first quartile (25%) instead of the mean age. If complete information had been available for each of these ages, it would have been convenient to generate the mean age because it is a measure with which the public is more familiar. In this case, the values of the responses did not vary widely, so the problem of extreme values would not have existed.

The median age at menarche of the 79 girls who received medical care for pregnancies before the age of 15 was 11 years at all three hospitals; that is, 50% of these girls had already begun menstruation at the age of 11 or even earlier. (This is how median ages should be understood).

This variable is important because it indicates the time at which the girls begin to be fertile and can become pregnant if they have unprotected sexual relations (Table 1). The age range at menarche was from 8 to 14 years. In Campeche, this information was only collected for 11 of the 16 cases.

The median age at which 50% of these girls had their sexual debut was 13 years for all three hospitals. Again, this information was only collected for 11 of the 16 cases at the Campeche institution.

The median age at the time the record was created, also understood as when they were pregnant, was 14 years for the Zacatecas and Campeche hospitals; at the INPer, the median age was 13.5 years. That is, between the median age at first sexual intercourse (13 years) and at the first pregnancy (between 13.5 and 14 years), a maximum of one year had passed, though in some cases, the pregnancy must have happened at the same time as the sexual debut.

At the Zacatecas hospital, information about the age of the co-author of the pregnancy was only collected in 15 of the 35 cases. Thus, it was impossible to calculate their median age since it is necessary to have information on at least 50% of the population (18 cases). For this reason, it was decided to calculate the age of 25% of them, also known as the first quartile, which was 19 years, with a variability of 15 to 23 years (not shown in Table 1).

At the Campeche hospital, information about the males' ages was not recorded. At the INPer, it was collected for 19 of the 28 adolescents who received medical care; there, the median age of the males was 16.2 years old, with a range of 14 to 21 years. If we subtract the girls' median age at pregnancy from that of the males, we see that, in the case of the Zacatecas hospital, there is a five-year difference between them, in favor of the male; at the INPer the difference is 2.7 years, and for Campeche this information is unknown.

Table 1. Median ages, in years, at specific transitions of pregnant girls under the age of 15 treated at three hospitals.

	HMZ Zacatecas	HGDMSQA Campeche	INPer CDMX
Age at menarche	11	11	11
Age at first sexual intercourse	13	13	13
Age at the time of record creation/current pregnancy	14	14	13.5
Age of pregnancy co-author	19 (first quartile)	Unknown	16.2
Total no. of records (N)	35	16	28

Source: own elaboration based on records kept at Hospital de la Mujer Zacatecana, Hospital General Dra. María del Socorro Quiroga Aguilar, and Instituto Nacional de Perinatología.

Table 2 shows several sociodemographic variables, such as the education, marital status, occupation, and religion of the pregnant girls under 15 treated at the three hospitals, in addition to whether they received prenatal care. Only the category with the highest percentage (proportion) is shown. At the three hospitals, given the age at which the girls became pregnant, the education level with the highest percentage was incomplete secondary school, particularly at the INPer. Primary school, complete or incomplete, was also a fairly typical response for the Zacatecas and Campeche hospitals (data not shown in Table 2).

At the Zacatecas and Campeche hospitals, the percentage that reported living in a free union was high, a fact to which attention should be drawn, given their age, since before the age of 15, they were in child marriage relationships and were already pregnant. However, in these two states, the percentage reporting that they were single was also high, between one in four and one in five girls. At the INPer, the percentages followed the opposite trend, as the percentage of single women was higher; even so, one in three of these girls was in a marital union, most likely not legal (see Table 2).

At all three hospitals, eight out of ten girls were homemakers. The religion they declared in Zacatecas and CDMX was primarily Catholic, while in Campeche, they were not always asked this question, so the percentage for which the answer was unknown was high (see Table 2).

Once they were pregnant, they did not all receive prenatal care throughout their pregnancy, especially at the Zacatecas and Campeche hospitals. At the INPer, as it is a tertiary-care hospital, they were required to attend all of their appointments to be eligible to receive medical care until delivery. At this last hospital, they had a mean number of nine appointments, while at the others, this figure ranged from five to six (see Table 2).

Table 2. Sociodemographic and prenatal care data on pregnant girls under the age of 15 treated at three hospitals (proportions, in %).

	HMZ Zacatecas	HGDMSQA Campeche	INPer CDMX
Education			
Secondary school incomplete	54.3	43.8	78.6
Marital status			
Single	20.0	25.0	67.9
Free union	74.3	68.8	32.1
Occupation			
Homemaker	80.0	87.5	89.3
Religion			
Catholic	94.3	18.8	75.0

Unknown	2.9	31.3	0
Prenatal care			
Yes	65.7	56.3	100
Number of prenatal appointments (mean)			
No. of appointments	6	5	9

Source: own elaboration based on records kept at Hospital de la Mujer Zacatecana, Hospital General Dra. María del Socorro Quiroga Aguilar, and Instituto Nacional de Perinatología.

Table 3 shows the reproductive data of these adolescents. Due to the follow-up that was performed, in many cases, it was possible to determine whether the pregnancy was in progress or if it had already ended, if it had been a vaginal birth or a cesarean section. If the girls had had an abortion or a miscarriage, the latter being extremely likely because, in Zacatecas and Campeche, abortion is illegal. 94% had had only one pregnancy, but five girls (6%) had had two, which is why the number of pregnancies and N (the number of interviewees in the records) do not coincide for HMZ and INPer.

At the Zacatecas hospital, of the 38 pregnancies in 36 girls, 13 ended in vaginal births, 13 in C-section, and 12 in miscarriage or abortion. At the Campeche hospital, of the 16 pregnancies, 11 ended in vaginal birth, 3 in C-section, and 2 in miscarriage or abortion. At the INPer, of the 30 pregnancies in 28 girls, 13 ended in a vaginal birth, 7 in C-section, 2 in miscarriage or abortion, while five girls were still pregnant, and the outcome of 3 was unknown.

A high percentage of the girls experienced complications during childbirth, particularly at the HMZ and INPer hospitals (see Table 3). The reported complications were varied: miscarriage or abortion, preeclampsia/eclampsia, cephalopelvic disproportion, patients with prodromal labor, with vaginal septum, with moderate mental retardation, patients who suffered sexual abuse, post-C-section puerperium with a co-morbidity, tearing, and others (data not shown in the table).

As for the complications in the newborns, three cases were reported at the Zacatecas hospital, one in Campeche and six in CDMX. The most commonly reported complications were associated with low weight and preterm birth (data not shown in the table).

Table 3. Reproductive data on pregnant girls under the age of 15 treated at three hospitals (frequencies).

	HMZ Zacatecas	HGDMSQA Campeche	INPer CDMX
N	35	16	28
No. of pregnancies	38	16	30
No. of vaginal births	13	11	13
Number of C-sections	13	3	7
Number of miscarriages/abortions	12	2	2
Still pregnant	0	0	5
Unknown	0	0	3
Complications in delivery (percentage)			
Yes	65.7	43.8	60.7
Complications in the newborn (frequency)			
Yes	3	1	6

Source: own elaboration based on records kept at Hospital de la Mujer Zacatecana, Hospital General Dra. María del Socorro Quiroga Aguilar, and Instituto Nacional de Perinatología.

Since it is a government policy to promote the use of a contraceptive method (CM) after a pregnancy, which is placed before the woman is discharged, a high percentage of the use of CMs was reported. The Zacatecas hospital was the institution that showed the highest percentage; in that hospital, an intrauterine device (IUD) was the most commonly placed CM. In Campeche, although the IUD continued to be utilized, the subdermal implant rose in importance. This tendency was reported at the INPer but in a lower percentage for both contraceptive methods (see Table 4).

As for the number of affective-sexual partners reported by the girls, the most common response in Zacatecas was one, while at the other two hospitals, they were not always asked this question, so the percentage of an "unknown" response was high. However, they also reported up to two partners (see Table 4). This piece of data is essential, given that at their young age, some of the girls had already had two sexual partners. However, the contexts in which these relationships occurred are not known, nor to what extent they were mediated by seduction in order to obtain a sexual partner or by gender-based violence, child sexual abuse, or rape.

Other variables reported about the co-author of the pregnancy were his education and occupation. Generally, the males were employed as farmers, fireworks experts, employees, soldiers, laborers, painters, assistants, or students; others had no occupation. Yet the information was not collected in all cases, and no data was obtained regarding their education (data not shown in the table).

Table 4. Use of CMs and number of partners of the pregnant girls under the age of 15 treated at three hospitals (proportions, in %).

	HMZ Zacatecas	HGDMSQA Campeche	INPer CDMX
Post-pregnancy use of CMs			
Yes	80.0	75.0	64.3
Type of CM			
IUD	89.3	58.3	35.7
Subdermal implant	7.1	33.3	25.0
Number of partners			
One	85.7	31.3	35.7
Unknown	0	43.8	57.1

Source: own elaboration based on records kept at Hospital de la Mujer Zacatecana, Hospital General Dra. María del Socorro Quiroga Aguilar, and Instituto Nacional de Perinatología.

4. Conclusions

Briefly, the socioeconomic, educational, and health profile of the pregnant girls under the age of 15 treated at the three selected hospitals was as follows: they had a median age of 11 years at menarche, 13 years at first sexual encounter, and 14 years at pregnancy/record creation, except the INPer, at which this last age was 13.5 years. Thus, the transitions to adult life in the sexual and reproductive sphere were made between 11 and 14.

At the Zacatecas hospital, most of the girls had not completed secondary school, were living in a free union, worked as homemakers, professed Catholicism as their religion, and had had a mean number of six prenatal appointments. However, not all of the girls had received such care. The pregnancies ended in almost the same proportion among vaginal births, cesarean sections, and miscarriages/abortions; nearly two out of three girls experienced complications, in addition to three newborns. Four out of five women had a post-pregnancy contraceptive, generally an IUD. As for the co-author of the pregnancy, the age of the first quartile of the males was 19 years of age, and a high percentage of the girls had only one sexual partner.

At the Campeche hospital, the adolescent girls' education level was incomplete secondary school, though several had only completed primary school. They were in a free union, they were homemakers, and their religion was unknown, with a mean of five prenatal appointments, and nearly half had had no prenatal care. The majority of the pregnancies ended in vaginal births; four out of ten girls and one newborn suffered complications. Three out of four girls had post-pregnancy CMs, predominantly an IUD or subdermal implant. The age of the co-authors of the pregnancies was unknown, as was the number of partners of the girls.

At the INPer, the education level of the girls was incomplete secondary school. They were single homemakers, and all had had prenatal care, with a mean number of nine appointments. Vaginal births predominated; three out of five girls and six newborns experienced complications. Six out of ten had post-pregnancy CMs, generally an IUD or subdermal implant. The median age of the co-author of the pregnancy was 16.2 years, and at least one in three girls had only one sexual partner. A high percentage reported that they were Catholic.

It is common for Mexican hospitals to inquire about religion because some religions do not allow their practitioners to have blood transfusions. The religion that tends to predominate in Mexico is Catholicism; in northern states such as Zacatecas, it´s persistent influence in decision-making is notable in the sexual and reproductive sphere, evidencing more traditional behavior. In places such as Mexico City or Campeche, the Catholic religion is mixed with indigenous, secular, and other religious beliefs and syncretic traditions, so the impact of religion is not entirely clear.

However, religious influence has been observed when girls become pregnant because they tend to believe that they are carrying a baby in their womb and not a product of conception, which is why some refuse to consider abortion at the outset. Although others may consider this option, it is common for them not to do so, arguing that the baby is not to blame for their mistakes. They may also believe that abortion puts their own life at risk. These ideas are commonly disseminated in churches, but also in television programs and books with ideals related to religion aimed at this population (Pérez-Baleón & Macías-Velázquez, 2021).

The principal aspects associated with the occurrence of pregnancies in girls under 15 years of age are the lack of knowledge about sexuality and contraception, little or no use of CMs, relationships with men three or more years older than they are, and child marriage or early unions. The male is not always an adult; he can be a young man in his twenties who would prefer to associate with these girls rather than with a woman of his age, with whom he could establish more egalitarian gender relations, and the partners can also be adolescents of the same age (Meneses *et al.*, 2020; Mier *et al*., 2020; Pacheco-Sánchez, 2015; Pérez-Baleón & Lugo, 2020a; Pérez-Baleón & Sánchez-Bringas, 2020).

In this case, the males tended to be between two and almost five years older than the girls, although there were cases in which, for example, the girl was 14 years old and the male 23, so the difference between them was 9 years. An important aspect in the records, which coincides with the reports of other authors, was that at all three hospitals, the age and other information regarding the co-author of the pregnancy was rarely reported; this may have resulted from the girl not knowing basic information about the man with whom she became pregnant or because she was not asked for this information (CONAPO, 2018; Meneses & Ramírez, 2018).

The difference in the ages of the partners is an indicator of gender inequality, particularly when women, in this case, girls, are paired with an older male who belongs to a previous generation and has more experience and knowledge than she does since the young woman or girl can rarely negotiate the use of contraceptives, nor refuse to begin her sexual life, nor refuse to become pregnant, nor even to refuse to live with the male in some union. It is the males who suggest when and how to have sexual relations. Sometimes, they propose marriage or living as a couple; there is little or no use of contraceptives, under the argument that he knows how to "take care of her," that is, to avoid pregnancy by practicing coitus interruptus, but also because he is seeking to enhance his sexual enjoyment (Pacheco-Sánchez, 2015; Pérez-Baleón & Sánchez, 2020).

If they are already living as a couple, what is expected in societies such as Mexico is that a pregnancy should occur. Society rarely questions the legality of these unions, be they marital or otherwise. As a result of the ENAPEA [National Strategy for the Prevention of Adolescent Pregnancy (Spanish acronym)] (CONAPO, 2023), legal steps have been taken to prevent the occurrence of child marriages to such an extent that in 2019, it was established in the Federal Civil Code that, as a requirement for marriage, one must be 18 years of age (INEGI, 2023), even in Indigenous communities, which prevents judges from marrying them. It is, however, essential to insist upon the dissolution of relationships between an adolescent under 15 years of age and a young or adult man since these are relationships with pedophilic components. Fathers, mothers, professionals, and society in general should be informed so that they become aware of the legal mechanisms that have been established to prevent this type of pairing, in which the girl or young woman may be at risk of gender-based violence.

To reach intimacy, the men typically seduce the girls or win their hearts; relatives or family acquaintances may also take advantage of them sexually, in the belief that the women in their family are sexual objects that belong to them.

In this group, those who have disadvantages above and beyond the fact of being underage females are even more vulnerable to the occurrence of these types of situations. For example, among the individuals reported in the present study, there was at least one such case: a 14-year-old girl from the state of Zacatecas with moderate mental retardation who had suffered sexual abuse and, as a result, became pregnant and suffered complications during delivery. The details of who had abused her and how the hospital had responded, i.e., whether the violence protocol was activated or if her care simply consisted of prenatal appointments and admission for delivery, is unknown. What is clear is that the decision was made to allow her pregnancy to continue instead of offering her and her family a legal termination of the pregnancy.

UNICEF (2017) has indicated that there are no protocols for hospital appointments involving the investigation of the circumstances in which pregnancies in girls and young women originate since this depends on the commitment, training, and initiative of each professional. Some physicians have reported that they do not investigate this matter out of respect for the girl's

privacy or because they do not feel qualified. However, if they did investigate, they might be able to detect situations of sexual abuse. Teams specialized in adolescence and individuals with interdisciplinary training, such as social workers, are those who, to a greater extent, investigate to identify possible situations of this kind. At the same time, general health services more often treat the pregnancy of these girls and young women as merely another pregnancy, from a primarily biomedical standpoint, in which the outcome is considered successful if the mother and the baby go home healthy.

Without specific protocols, identification and intervention by health professionals are left to the best judgment of the healthcare professionals themselves or agreed upon as a team. The characteristics of the co-author of the pregnancy are not investigated, such as whether the pregnancy is the product of sexual abuse or rape or whether the aggressor is a family member who lives in the same house or the same general environment as the girl. The professionals involved in the care of these pregnancies do not typically offer LTP (Legal Termination of Pregnancy or abortion) as an option, even in cases where this procedure is permitted by law. Beyond some professionals' lack of knowledge about the regulatory framework, underlying personal attitudes exist as opposed to any interruption of pregnancy (UNICEF, 2017).

There is also no postpartum follow-up after hospital discharge. The counter-referral between the tertiary level of care, where these pregnancies and births are usually treated due to their categorization as high-risk events and primary care rarely occurs. This is partly due to poor coordination in the healthcare network and partly to such actions not being prioritized. Postpartum follow-up is essential for young mothers and their children, with a particular focus on adoption, adherence to contraceptive methods, breastfeeding, and the monitoring of possible cases of sexual abuse (UNICEF, 2017).

For situations in which the hospital suspects or has evidence of sexual abuse or rape, the ENAPEA indicates the following Official Mexican Standard as a resource: NOM-046-SSA2-2005, Intrafamily, Sexual, and Gender-Based Violence. Criteria for Prevention and Care. This regulation explains how to notify the Public Prosecutor's Office and respond to the victim by activating the violence protocol. The ENAPEA also indicates the Technical Guidelines for the Safe Care for Miscarriages and Abortions in Mexico issued by the Ministry of Health (2022 in CONAPO, 2023). Due to the girls' ages, it is also recommended that NOM-047-SSA2-2015 on Health Care for the Age Group of 10 to 19 Years of Age be consulted and that family planning counseling be provided in order to prevent subsequent pregnancies in the subsequent months (see Official Mexican Standard NOM 005-SSA2-1993 on Family Planning Services).

In addition, legal interruption of pregnancy, or abortion, which is indicated in cases of rape, must be offered, even in states where abortion is illegal; and the entire service must be provided from the gender perspective. Healthcare providers, doctors, nurses, and social workers must offer this service, regardless of their moral or religious convictions, even if the minor's family disagrees

and even if the minor does not request it since she is rarely aware that she has that reproductive right. Although the aim is not to force a woman or girl to terminate her pregnancy if she does not want to do so, it is her right to receive truthful and timely advice based on scientific, medical, and legal evidence so that she may be able to make the best decision, whether that be to continue with the pregnancy or to terminate it.

Between 10 and 15 years of age, it is more dangerous to carry a pregnancy to term in a body that has only just begun to develop and that often may be malnourished than to perform a therapeutic abortion, carried out with medication or aspiration and local sedation in the early stages of pregnancy.

In social work, it is essential to know the law and enforce it in favor of the well-being of these vulnerable individuals who experience pregnancy as girls or adolescents, which can be the result of a series of violent acts to which they have been exposed for all their lives, many times at the hands of their relatives. We must not contribute to the perpetuation of this violence and vulnerability.

The methodology section explained the process of accessing sociomedical records and indicated how the information they contain can be statistically treated. The Social Worker must be systematic when filling out the sociomedical record so that all necessary information may be collected, with nothing missing or incomplete.

Once the data is accessed, it is important to have some knowledge of descriptive statistics, Excel, and SPSS to process the necessary steps for the hospital's ethics committee to authorize a research protocol. Characterizing the population given medical care by the relevant institutions will allow us to propose actions to reduce and, where possible, eradicate situations such as those reported here by the provisions of the ENAPEA.

The data on the co-author of the pregnancy are of particular relevance (age, education, occupation, type of relationship with the girl, whether they are related, whether they live together, whether he contributes to her support or has abandoned her, a qualitative description of how they met, where they met, what the relationship is or was, the plans they have for the future, whether there was falling in love, convincing, seduction, or use of physical, economic, or verbal force to obligate the girl to have sexual relations and whether the violence continues).

In the case of these pregnant minors, it is essential to avoid treating them as if theirs were just another pregnancy since the pregnancy may be the result of a crime committed by a family member or of a pedophilic relationship established by a man several years older than she; therefore, care must be taken to determine exactly what type of relationship the girl or young woman is or was in and, if necessary, to activate the protocol for violence against women.

It is essential to delve into the negotiations that took place about the use of contraceptive methods, whether they were used in the first sexual encounter, whether they continued to be used, whether their use was discontinued or never occurred at all, the ideas or myths that are believed about contraceptives. It is also essential to establish the reasons for the non-use of contraceptives and the cause of the pregnancy (not knowing that she could become pregnant, believing she was infertile, the desire to have a child or leave the family home, lack of knowledge about or access to contraceptives, among others). These questions, in addition to asking her current age, her age at the first and subsequent pregnancies, and at the time of the birth of her child; whether she has attended prenatal appointments, the number of these visits, the morbidities detected, and the conclusion of the pregnancy; her level of education, her plans to resume or complete her studies, her expectations as a future mother and a possible wife, among other topics.

In addition to collecting specific data, it is recommended that a description of the history of the girl's pregnancy, her family situation, and her economic conditions be recorded in as much detail as possible. Social work department must lead the way in this regard because doctors may miss the opportunity in the appointments to detect cases of sexual abuse due to their workload and reluctance to ask questions. In general, overlook cases where monitoring the girls closely over time is necessary.

The second of the two objectives were addressed in the findings section and summarized in the conclusions. The main concern for future studies is to explore the role that men play in the occurrence of these pregnancies, to continue to envision practical actions to prevent the pregnancies, and detect possible cases of sexual abuse, to develop interventions that may be based on technology and social networks. For example, a WhatsApp account can be established and made available to adolescents, who can ask questions about sexuality and contraception without compromising their anonymity. This would make it easier to assist them in real-time.

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Author Contribution statement

Fabiola Pérez-Baleón: conceptualization, data curation, formal analysis, resource acquisition, research, methodology, project administration, resources, writing (original draft), writing (review of the draft and revision/correction).

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The author unequivocally states that there is no conflict of interest in the writing or publishing of this article, reinforcing the integrity and impartiality of the research.

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5. Bibliographic references

Binstock, G., & Gogna M. (2017). *Estudio sobre maternidad adolescente con énfasis en menores de 15 años* [Unpublished research report]. UNICEF.

Céspedes, C., and Robles C. (2016). *Niñas y adolescentes en América Latina y el Caribe: deudas de igualdad.* CEPAL; UNICEF. https://www.cepal.org/es/publicaciones/40180-ninas-adolescentes-america-latina-caribe-deudas-igualdad

Consejo Nacional de Población [CONAPO]. (2018). *Fecundidad en niñas y adolescentes de 10 a 14 años, niveles, tendencias y caracterización sociodemográfica de las menores y de los padres de sus hijos(as), a partir de las estadísticas del registro de nacimiento, 1990-2016*. https://www.gob.mx/cms/uploads/attachment/file/308970/Fecundidad_Menores_de_15_Final.pdf

Consejo Nacional de Población de México [CONAPO]. (2023). *Programa de trabajo de la Estrategia Nacional para la Prevención del Embarazo en Adolescentes 2022-2024.* https://www.gob.mx/conapo/documentos/programa-de-trabajo-de-la-estrategia-nacional-para-la-prevencion-del-embarazo-en-adolescentes-2022-2024

Escobar, J. C., Ariza-Navarrete, S., & Keller, V. (2019). *Embarazo y maternidad en niñas y adolescentes menores de 15 años. Aportes de evidencia socio-sanitaria y jurídica en la región.* Consorcio Latinoamericano contra el Aborto Inseguro - CLACAI. https://clacaidigital.info/handle/123456789/1273

Fondo de Población de las Naciones Unidas [UNFPA]. (2013). *Estado de la población mundial 2013. Maternidad en la niñez: enfrentar el reto del embarazo en adolescentes.* https://mexico.unfpa.org/sites/default/files/pub-pdf/SP-SWOP2013_1.pdf

Fondo de Población de las Naciones Unidas [UNFPA]. (2017). *Estado de la Población Mundial 2017. Mundos aparte: la salud y los derechos reproductivos en tiempos de desigualdad.* https://lac.unfpa.org/sites/default/files/pub-pdf/SP_WEB-READY_SWOP%202017%20report.pdf

Gómez, P. I., Molina R., & Zamberlin N. (2011). *Factores relacionados con el embarazo y la maternidad en menores de 15 años en América Latina y el Caribe*. Federación Latinoamericana de Sociedades de Obstetricia y Ginecología – FLASOG; Centro de Promoción y Defensa de los Derechos Sexuales y Reproductivos - PROMSEX. https://promsex.org/wp-content/uploads/2011/03/Factoresrelacionadosmaternidadenmenoresde15anosenlac.pdf

González-Garza, C., Rojas-Martínez, R., Hernández-Serrato M. I., & Olaiz-Fernández. G. (2005). Perfil de comportamiento sexual en adolescentes mexicanos de 12 a 19 años de edad. Resultados de la ENSA 2000. *Salud Pública de México, 47*(3), 209-218. https://www.redalyc.org/pdf/106/10647303.pdf

Herrera, C. (2016). Encrucijadas de la pobreza y el embarazo temprano en México. *Estudios de Género de El Colegio de México, 3*(6), 211-216. https://estudiosdegenero.colmex.mx/index.php/eg/article/view/178/83

Infante-Gil, S., & Zárate-De Lara, G. P. (1997). *Métodos estadísticos. Un enfoque interdisciplinario.* Trillas.

Instituto Nacional de Estadística y Geografía [INEGI]. (2009). *Encuesta Nacional de la Dinámica Demográfica (ENADID) 2009.* https://www.inegi.org.mx/programas/enadid/2009/

Instituto Nacional de Estadística y Geografía [INEGI]. (2014). *Encuesta Nacional de la Dinámica Demográfica (ENADID) 2014.* https://www.inegi.org.mx/programas/enadid/2014/

Instituto Nacional de Estadística y Geografía [INEGI]. (2022, october 10). *Estadísticas a propósito del día internacional de la niña.* INEGI. https://www.inegi.org.mx/contenidos/saladeprensa/aproposito/2022/EAP_DiaNina22.pdf

Instituto Nacional de Estadística y Geografía [INEGI]. (2023, september 21). *Día mundial para la prevención del embarazo no planificado en adolescentes (National data)*. INEGI. https://www.inegi.org.mx/app/saladeprensa/noticia.html?id=8459

Marques-De Cantú, M. J. (2004). *Probabilidad y Estadística para Ciencias Químico-Biológicas.* UNAM.

Meneses, E., & Ramírez M. (2018). *La situación demográfica de México 2017. Fecundidad en niñas y adolescentes de 10 a 14 años, niveles, tendencias y caracterización sociodemográfica de las menores y de los padres de sus hijos(as), a partir de las estadísticas del registro de nacimiento, 1990-2016. En Consejo Nacional de Población.* https://www.gob.mx/conapo/documentos/la-situacion-demografica-de-mexico-2017?idiom=es

Meneses, E., Muradás, M. C., & Ramírez, M. (2020). Factores relacionados con el embarazo en adolescentes: un análisis desde la perspectiva del enfoque ecológico. In F. Pérez-Baleón and M. Lugo (Coords.), *Los claroscuros del embarazo en la adolescencia. Un enfoque cuantitativo* (pp. 43-73). Universidad Nacional Autónoma de México.

Menkes, C., & Suárez L. (2003). Sexualidad y embarazo adolescente en México. *Papeles de Población, 9*(35), 233-262. https://rppoblacion.uaemex.mx/article/view/17267/12616

Mier, M., Rocha, T., & Llanes-Díaz, N. (2020). El embarazo en adolescentes mexicanas: entre el deseo y la ambivalencia. In F. Pérez-Baleón and M. Lugo (Coords.), *Los claroscuros del embarazo en la adolescencia. Un enfoque cuantitativo* (pp. 125-156). Universidad Nacional Autónoma de México.

Official Mexican Standard, NOM 005-SSA2-1993. From Family Planning Services. (1993). DOF: 05/30/1994. https://www.cndh.org.mx/sites/all/doc/Programas/VIH/Leyes%20y%20normas%20y%20reglamentos/Norma%20Oficial%20Mexicana/NOM-005-SSA2-1993%20Planificaci%C3%B3n%20Familiar.pdf

Official Mexican Standard, NOM-046-SSA2-2005. Family, Sexual and Violence against Women. Criteria for Prevention and Care. (2009). DOF: 02/27/2009. https://www.cndh.org.mx/DocTR/2016/JUR/A70/01/JUR-20170331-NOR19.pdf

Official Mexican Standard, NOM-047-SSA2-2015. For Health Care of the Age Group from 10 to 19 years of age. (2015). DOF: 08/12/2015. https://www.cedhnl.org.mx/bs/vih/secciones/normatividad/NOM-047-SSA2-2015.pdf

Pacheco-Sánchez, C. I. (2015). Agencia social, sexualidad y embarazo en menores de 15 años. *Revista Gerencia y Políticas de Salud, 14*(29), 62-82. https://doi.org/10.11144/Javeriana.rgyps14-29.asse

Pantelides, E. A., & Binstock, G. (2007). La fecundidad adolescente en la Argentina al comienzo del Siglo XXI. *Revista Argentina de Sociología, 5*(9), 24-43. https://www.redalyc.org/pdf/269/26950903.pdf

Pérez-Baleón, F. (2021). Perfilando el embarazo en la adolescencia en México. Principales resultados de la ENFaDEA. *Trabajo Social UNAM*, (27-28), 115-131. https://doi.org/10.22201/ents.20075987p.2022.27-28.82213

Pérez-Baleón, F. (2023). *Para mí es todo lo que tengo: embarazo, maternidad y paternidad en la adolescencia.* UNAM. https://www.researchgate.net/publication/375693337_Para_mi_es_todo_lo_que_tengo_embarazo_maternidad_y_paternidad_en_la_adolescencia

Pérez-Baleón, F., & Lugo, M. (2021). *Diagnóstico nacional sobre el embarazo adolescente.* UNAM. https://www.trabajosocial.unam.mx/publicaciones/descarga/DIAGNOSTICO%20NACIONAL_EMBARAZO_ADOLESCENTE_Ultima%20version_12_mayo2021.pdf

Pérez-Baleón, F., & Macías-Velázquez, Z. (2021). Entre los derechos reproductivos y la influencia familiar: significados asociados al aborto en adolescentes con embarazos antes de los 15 años. En K. A. Sánchez-Zepeda, E. I. Zazueta-Luzanilla, L. M. Galindo-Vilchis, and T. L. Meléndez-Elizalde (Coords.), *Familias y diversidad*. UNAM.

Pérez-Baleón, F., & Sánchez-Bringas, A. (2020). Desigualdad, género y sexualidad: La especificidad del embarazo en mujeres menores de 15 años. In F. Pérez-Baleón and M. Lugo (Coords.), *Los claroscuros del embarazo en la adolescencia. Un enfoque cuantitativo* (pp. 47-76). Universidad Nacional Autónoma de México.

Pérez-Baleón, F., and Lugo, M. (2020a). Contextos sociales, reproductivos y de pareja que delimitan los embarazos en mujeres menores de 15 años: un análisis comparativo entre

etapas de la adolescencia. In F. Pérez-Baleón and M. Lugo (Coords.), *Los claroscuros del embarazo en la adolescencia. Un enfoque cuantitativo* (pp. 75-100). Universidad Nacional Autónoma de México.

Pérez-Baleón, F., and Lugo, M. (2020b). *El momento sí importa: El embarazo en la adolescencia según etapa de ocurrencia. El Colegio Mexiquense/ Universidad Autónoma Metropolitana.* [Unpublished manuscript]. El Colegio Mexiquense/ Universidad Autónoma Metropolitana.

Pérez-Baleón, F., Romero-Pérez, I., and Sánchez-Bringas, A. (2020). Introducción. Aproximaciones cualitativas al estudio y a la comprensión del embarazo, la maternidad y la paternidad en la adolescencia. In F. Pérez-Baleón and M. Lugo (Coords.), *Los claroscuros del embarazo en la adolescencia. Un enfoque cuantitativo* (pp. 15-43). Universidad Nacional Autónoma de México.

Sánchez-Bringas, Á., & Pérez-Baleón F. (2016). De maternidades y paternidades en la adolescencia. Cambios y continuidades en el tiempo. In M. L. Coubès, P. Solís, and M. E. Zavala (Coords.), *Generaciones, curso de vida y desigualdad social en México* (pp. 109-137). El Colegio de México; El colegio de la Frontera Norte.

Secretaria de Salud. (2022). *Lineamiento Técnico para la Atención del Aborto Seguro en México.* Secretaria de Salud.

Stern, C., & Menkes-Bancet C. (2008). Embarazo adolescente y estratificación social. In S. Lerner and I. Szasz (Coords.), *Salud reproductiva y condiciones de vida en México* (pp. 347-396). El Colegio de México.

UNICEF. (2017). *Embarazo y maternidad en adolescentes menores de 15 años. Hallazgos y desafíos para las políticas públicas.* UNICEF. https://clacaidigital.info/handle/123456789/1227

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