Chapter 6

PRENATAL CARE IN PREGNANT ADOLESCENTS

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ABSTRACT

Introduction: The prevention of pregnancy in adolescence is of great social relevance because of it emotionally, physically and economically affects the adolescent and the family. Furthermore, the children of adolescent mothers have a greater risk of negative events during their lives. It has been reported that 59% of teenage pregnancies are unplanned. Therefore, there is a greater probability of partner and child abuse, careless child care, economic difficulty, loneliness, school desertion, having an unwanted marriage, and a modified or destroyed life project. Objective: To determine the profile of pregnant adolescents who come for prenatal care. Methodology: This was a descriptive cross-sectional study of 60 pregnant adolescents

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who came for prenatal care in the metropolitan area of a city in northeast Mexico. Results: Mean age was 16 years. Of the participants, 75.7% were in their third trimester of pregnancy. The mean age of first sexual encounter was 15 (12 -17) years and 61.7% mentioned having one sexual partner; 56.7% said this was an unplanned pregnancy. The predominant level of education was completed secondary school (40%); 50% had a common law relationship, 85% said they were housewives, and 41.7% had complications during their pregnancy. Conclusion: Adolescent pregnancy requires special health care since it has a greater risk of complications. Half of the pregnancies in this stage of life are unplanned, a finding that could affect the life and life project of adolescents.

Keywords: Adolescents, pregnancy, prenatal care.

INTRODUCTION

Pregnancy during adolescence is currently a health, social, educational, and family problem due to the circumstances that contribute to its occurrence and the consequences it creates for the mother, child, and family. Therefore, the prevention of pregnancy in this age group requires a multisectoral effort to reduce its numbers. The World Health Organization estimates that 11% of all births in the world are in adolescents 15 to 19 years of age (Organización Mundial de la Salud, 2014).

The prevention of pregnancy in adolescence is of great social relevance because it affects the adolescent and the family emotionally, physically and economically. The children of adolescent mothers have a greater probability of partner and child abuse, careless child care, economic difficulty, loneliness, school desertion, having an unwanted marriage, and a modified or destroyed life project (Ronsmans et al., 2009). Furthermore, complications during pregnancy and delivery are the second cause of death among adolescents 15 to 19 years of age worldwide (Organización Mundial de la Salud, 2014).

Preeclampsia, prematurity, delayed intrauterine growth, premature separation of the placenta, anemia, urinary infections, hemorrhage, and the presence of a narrow pelvic outlet and/or cephalopelvic disproportion are frequent complications during adolescent pregnancy (Salazar Cutido et al. 2006). Adolescents under 16 years of age have a four-fold greater risk of maternal death than women 20 years of age, and their newborn child´s mortality rate is greater than 50%. Children of adolescent mothers are commonly born with low weight, anemia, infections or congenital malformations (Ronsmans et al. 2009).

Furthermore, the Pan-American Health Organization (2010) confirmed that early pregnancy has health risks for the mother and child, in addition to repercussions on education and adolescents´ future perspectives.

With the aim of providing specialized care to women during pregnancy, regardless of their economic situation, age, and place of origin, a worldwide prenatal care program was created. This program is offered with different actions in most primary, secondary and even tertiary care centers. It provides worldwide coverage and is offered in many urban and rural areas. The WHO (2003) defines opportune prenatal care as the attention provided before 12 weeks of gestation since before this time the fetus is not fully developed and complications in the mother and child can be prevented.

However, due to diverse factors, not all women come for prenatal care, despite the importance of supervising, detecting and treating any abnormality that could occur during pregnancy. One of the main groups that do not come for prenatal care is adolescents. Villacis Vallejos, Becerra Cornejo, and Negrete Kerguelen (2012) report low compliance in prenatal care in adolescents (6.56%) during the first trimester. Most begin prenatal care in the third trimester (39.34%). This shows that a large number of pregnant adolescents do not come for early care, causing complications in the mother and child to not be detected or treated opportunely.

The prenatal care program is essential for a good evolution of pregnancy regardless of the woman's age. However, when pregnancy occurs in adolescence, it must be reasoned that the adolescent, because of greater vulnerability, has risk factors that can increase complications and affect the development of the child and/or promote not obtaining appropriate and timely care. Villacis Vallejos, Becerra Cornejo, and Negrete Kerguelen (2012) consider that pregnant adolescents are a vulnerable population with a greater lack of social and/or family support, a low socioeconomic and educational level, anguish, and emotional stress that contribute to low attendance to prenatal care appointments or inconsistency in the use of healthcare services, a fact that leads to deficient care during pregnancy.

It is relevant for healthcare professionals to know the profile and sociodemographic characteristics of pregnant women who come for prenatal care, even when they are adolescents, because of the factors that convert them into a vulnerable population and the greater probability of complications. The health system must identify these characteristics in order to carry out more effective actions and provide better follow-up in cases in which less support of the adolescent or a lower compliance in care of the pregnancy are identified.

OBJECTIVE

The objective of this present document determines the profile of pregnant adolescents who come for prenatal care.

METHODS

Study design

This was a descriptive cross-sectional study (Burns and Grove 2009) since the variables of the study were obtained at a specific moment in time.

Population

The population consisted of underage pregnant adolescents from a northeast state of the country. These were adolescents who came to a primary health care facility in the metropolitan area of a city in northeast Mexico.

Study sample

The study population was a convenience sample of 60 pregnant adolescents who came for prenatal care to a primary health care center.

Inclusion criteria

All adolescents who attended consultation accompanied by at least one parent or tutor were selected.

Instrument

A data card was used to collect information; this was developed by the study authors and included data such as age, weeks of gestation, marital status, and education, among others. In addition, it included open and multiple choice questions.

Procedure for data collection

The study was approved by the Research and Ethics in Research Committees of the School of Nursing of the Universidad Autónoma de Nuevo León and by the administrators and department heads of the Prenatal Care Department of the primary health care institution. Two interviewers were trained for the collection of the information. Informed consent was obtained if the participant met inclusion criteria and if at least one parent or tutor was present.

Information was managed in a totally confidential manner and voluntary participation was requested. The adolescent independently answered the instrument in the waiting room before the consultation. The questionnaire was read when requested if it was difficult to read or if the participant could not write or understand the question.

Ethical considerations

This study was in compliance with the provisions of the General Health Law in Health Research Matters (Secretaría de Salud, 1987), according to Title Two, chapter I, articles 13, 14, 16, 17, 18, 20 and 21 were considered; Article 36 of Chapter III; Article 45 of Chapter IV and Article 58 of Chapter V.

Data analysis

The statistical analysis was performed using the statistical program SPSS version 21 for Windows. Descriptive statistics were used to obtain frequencies, means, percentages, and sociodemographic distribution data.

RESULTS

The sociodemographic data of pregnant adolescents who attended prenatal care are shown below. Results are shown as frequencies and percentages, considering that the total sample was 60 adolescents.

Mean age of the pregnant adolescents was 16.1 years with a minimum of 14 and a maximum of 17. Forty percent (24) indicated that their educational level was completed secondary school, 28.3% (17) did not finish secondary school, and only 5% (3) completed preparatory school (see Table 1).

Table 1. Sociodemographic characteristics

Variable	Range	*f*	%
Age	14	4	6.7
	15	9	15
	16	22	36.7
	17	25	41.7

Note: n=60, f= frequency, %= percentage.

Table 1. Sociodemographic characteristics (continuation)

Variable	Range	*f*	*%*
Education	Incomplete primary	1	8.3
	Complete primary	17	28.3
	Incomplete secondary	24	40
	Complete secondary	1	1.7
	Incomplete technical school	5	8.3
	Completed technical school	1	1.7
	Incomplete preparatory	7	11.7
	Complete preparatory	3	5
	None	1	1.7

Note: n=60, f= frequency, %= percentage.

Regarding marital status, 50% (30) had a common law relationship. It is notable that 23.3% (14) of adolescents had a sentimental partner; in other words, they did not live with their partner and the partner was, in some cases, not the biological father of the child. The majority of the participants, 85% (51), were housewives (see Table 2).

Table 2. Marital status and occupation of pregnant adolescents.

Variable	Range	*f*	*%*
Marital status	Common law	30	50.0
	Single with partner	14	23.3
	Single without partner	12	20.3
	Married	4	6.7
Occupation	Housewife	51	85
	Student	4	6.7
	Works and studies	4	6.7
	Does not work or study	1	1.7

Note: n=60, f= frequency, %= percentage.

Mean age of initial sexual encounter was 15 years with a minimum of 12 and a maximum of 17. Of the total group of adolescents, 61.7% (37) mentioned having one sex partner and 38.3% (23) had two to five sex partners (see Table 3).

Table 3. Sexuality variables.

Variable	Range	*f*	%
Age of ISE	12 – 13	5	8.3
	14 – 15	36	60
	16 – 17	19	31.7
Sex partners	1	37	61.7
	2	14	23.3
	3	4	6.7
	4-5	3	5
	Did not answer	2	3.3

Note: n =60, f = frequency, % = percentage; ISE = initial sexual encounter.

Table 4 shows the characteristics of pregnancy with regard to gestational age, planned pregnancy, and complications. In 75.7% (46) of the cases, the pregnancy was in the third trimester, and in only 5% (3), it was in the first trimester. Thirty-four adolescents (56.7%) mentioned that their pregnancy was not planned. Twenty-five (41.7%) adolescents had one or more complications during their pregnancy; the most frequent were a urinary infection, 28.3% (17), and threatened abortion in 8 (13.3%).

Table 4. Characteristics of the pregnancy

Variable	Range	*f*	%
Weeks of gestation	08 – 12	3	5.0
	13 – 28	11	19.3
	29 – 41	46	75.7
Planned pregnancy	Yes	26	43.3
	No	34	56.7
Complications*	None	35	58.3
	Urinary infection	17	28.3
	Threatened abortion	8	13.3
	Depression and anxiety	2	3.4
	Gestational diabetes	1	1.7
	Other	3	5

Note:n =60; f = frequency; % = percentage. *Some participants had one or more complications.

Regarding the place of origin, 96.7% (98) were from the metropolitan area and 3.3% (2) from a rural area. It is important to point out that 85% (51) of the

participants came to the consultation with their mother and 15% (9) with their father.

DISCUSSION

The mean age of the pregnant adolescents who participated in the study was 16 years. This age of pregnancy is consistent with the literature (Lavielle-Sotomayor et al. 2014, Muñoz and Oliva 2009, Della Mora 2006, Gutiérrez-Gómez et al. 2002); therefore, this confirms that adolescents are currently mothers for the first time at an early age, despite being in late adolescence. This stage is characterized by a lack of maturity and independence, characteristics that are necessary to face and overcome the challenges of maternity.

The minimum age of the participants was 14 years, with this being greater than that reported by Dalton (2014), and Nieves, Hernández, Chávez, Díaz, Guevara, and Lucas (2014), who mention a minimum age of 10 years with participant characteristics similar to the population of this study. It is felt that these ages are extremely low for facing the responsibilities of a pregnancy and child education.

Half of the adolescents were in a common law relationship. We deduce that a common law relationship is currently the most frequent marital relationship, possibly because of the lack of commitment on the part of the partner to formalize the relationship. A common law relationship is considered a more accessible and economical situation.

Almost one-fourth of the participants mentioned not having a sentimental partner. This is relevant because a pregnancy is expected to be enjoyed by a couple and furthermore, the father is expected to provide economical, moral, and psychological support. However, the reasons why adolescents did not have a sentimental partner were not addressed in this study. When the father of the child is not with his partner during pregnancy or does not take responsibility for the education and support of the child, this directly or indirectly influences the care of the pregnancy.

Most of the participants were housewives. This result is in agreement with the literature (Ramírez-Aranda et al. 2013, Panduro-Barón et al. 2012, Gutiérrez-Gómez et al. 2002).

Because of the age of the pregnant woman, it is expected that the study and prepare herself academically to face the difficulties that can occur in life. When a pregnancy occurs at a young age, it will usually impact the individual´s personal and professional life project, making her abandon her studies to become a

housewife, without demeaning the responsibility that this represents.

Almost half of the pregnant adolescents had a completed secondary level of education and only 5% had completed preparatory school. This result supports other studies that show that pregnant adolescents have an incomplete basic education (Sandoval, Mondragón, and Ortíz 2007, Rangel et al. 2004). When the adolescent is faced with the need to work because of a lack of economic resources, the low level of education represents a strong obstacle to obtaining a good job with sufficient wages to support her family or contribute to household spending, particularly with the expenses of a newborn.

Of the participants, 75.7% were in their third trimester of pregnancy. This result is in contrast with Moya-Plata, Guiza-Salazar, and Mora-Merchán (2010) who in a population similar to this study, pointed out that most adolescents start prenatal care in the first trimester of gestation. It is common to see adolescents come to prenatal care when the pregnancy is advanced and when complications can no longer be detected or treated. Because of this situation, one of the priorities of healthcare personnel should be to make an effort to get pregnant women in general, and especially adolescents, to begin prenatal care during the first trimester of pregnancy to achieve greater success in the surveillance of the mother and unborn child.

The mean age of the first sexual encounter was 15 years and some adolescents also reported having had their first sexual relationship at 12 years of age. This situation demonstrates the need to implement strategies and programs to avoid the start of sex life at an early age since individuals do not have enough maturity or conscience of the great responsibility that this represents. In addition, adolescents are not sufficiently prepared to be mothers or they can become infected with a sexually transmitted disease that can affect the rest of their lives. The start of sex life can be influenced by diverse factors such as the lack of affection and family care (Lavielle-Sotomayor et al. 2014).

More than one-third of adolescents mentioned having more than two sexual partners, some even mentioned having six sexual partners. This is in accordance with the literature that reports that if sex begins at an early age, the number of sexual partners is greater (Cutié, Laffita, and Toledo 2005, Oman et al. 2004, Rostosky et al. 2004). These numbers are truly relevant because of the probability of contracting a sexually transmitted infection and, considering that they are already pregnant, obviously, there was no protection at the moment of their sexual encounter. The number of HIV infections indicates that the majority of these cases were diagnosed in young individuals, which means that they were infected during adolescence.

Thirty-four adolescents (56.7%) mentioned that their pregnancy was not

planned. This is in agreement with the literature (Lavielle-Sotomayor et al. 2014, Munares-García 2013). The lack of planning of the pregnancy reflects the lack of family planning, responsibility, and in most cases, the lack of a life project. However, it is important to recognize that there is also a considerable percentage of adolescents who want to get pregnant. Regarding this, Oviedo and García (2011) mention then an adolescent does not become pregnant by accident but wants to have a child to build her own family and mitigate her perceived loneliness.

Almost half of the adolescents had complications during their pregnancy with a urinary infection and threatened abortion being the most frequent. This is in agreement with the literature in which threatened abortion was the most frequent complication in pregnant adolescents (Panduro-Barón et al. 2012). Urinary infections and threatened abortion are complications that can be detected and prevented during prenatal care; however, considering that the great majority of adolescents come to prenatal care during the third trimester, medical complications in the mother and child can be expected.

Is relevant to point out that 15% of the adolescents came to prenatal care accompanied by their father. This situation has not been scientifically demonstrated since no studies that analyze the role and support of the pregnant daughter by the father were found. There are many cases in which both parents work and possibly, because of the schedule or flexibility in the father's workplace they were able to accompany their daughter to their prenatal care consultation. It could also be that the father supports his daughter in her decision to have a child and that she may not have her mothers´ support.

Limitations

The results of this study cannot be generalized because the sample is not representative and it is small. However, it shows the current and relevant panorama regarding pregnant adolescents who come for prenatal care. Another limitation is that the sample is not equal in each of the trimesters of gestation; therefore, comparisons between cannot be made.

Recommendations

It is necessary to carry out a similar study with a larger representative and randomized sample so that the results can be generalized and to confirm the results of this study. Participants should also be grouped in clusters, with a similar number of participants from each trimester and age so that comparisons and

significant differences between them can be identified. It is convenient to carry out quantitative studies to find the reason why adolescents do not come early to medical care centers.

Conclusion

Despite the efforts that have been carried out, pregnancy in adolescents continues to be a national and international problem. The situation requires special attention because there is a greater risk of complications in the majority of adolescents. Half of the pregnancies in this stage of life are unplanned, a finding that could affect the life and life project of adolescents, exposing them to greater difficulties in their development as adolescents and parents and in their children.

There are diverse factors that influence and interact in the adolescents´ decision to opportunely and adequately attend prenatal care. Regardless of these factors, it is essential that the adolescent attend prenatal care and carry out the minimal care necessary to favor the good development of the pregnancy, minimizing the probability of complications that frequently occur during adolescence.

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