

ORIGINAL ARTICLE

PREGNANCY PLANNING IN ADOLESCENCE*

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ABSTRACT

Objective: to analyze the pregnancy planning of adolescents according to the London Measure of Unplanned Pregnancy (LMUP) classification.

Method: a case-control study was carried out with 86 pregnant adolescents (cases) and 86 young pregnant women with no history of pregnancy in adolescence (controls), in Family Health Strategy units of Cuiabá-MT, from August to November 2016. The exposure and outcome variables were analyzed using bivariate analysis to test the association between pregnancy in adolescence and several independent variables.

Results: 63.9% of the adolescent pregnancies were classified as ambivalent, followed by unplanned, although they were desired, noting that 63.7% did not use contraception in the month in which they became pregnant.

Conclusion: the study identified that the adolescent pregnancies were desired, however, unplanned, revealing the ambiguity between intention and action, thus contributing to better comprehension and guidance in the reproductive planning of adolescents.

DESCRIPTORS: Pregnancy in adolescence; Unplanned Pregnancy; Pregnancy; Adolescent; Contraception.


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
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


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PLANEJAMENTO DA GRAVIDEZ NA ADOLESCÊNCIA

RESUMO

Objetivo: analisar o planejamento da gravidez de adolescentes segundo a classificação do London Measure of Unplanned Pregnancy (LMUP).

Método: estudo de caso controle, realizado com 86 gestantes adolescentes (casos) e 86 gestantes jovens sem histórico de gravidez na adolescência (controles) em unidades de Estratégia de Saúde da Família de Cuiabá-MT, no período de agosto a novembro de 2016. As variáveis de exposição e desfecho foram analisadas utilizando-se uma análise bivariada para testar associação entre a gravidez na adolescência e as diversas variáveis independentes.

Resultados: verificou-se que 63,9% das gravidezes na adolescência foram classificadas como ambivalentes, seguido por não planejada, embora tenham sido desejadas, destacando-se que 63,7% não utilizaram método anticonceptivo no mês em que engravidaram.

Conclusão: o estudo identificou que as gravidezes na adolescência são desejadas, mas não planejadas, revelando a ambiguidade entre a intenção e ação, contribuindo desta maneira para melhor compreensão e orientação no planejamento reprodutivo das adolescentes.

DESCRITORES: Gravidez na adolescência; Gravidez não Planejada; Gravidez; Adolescente; Anticoncepção.

PLANEAMIENTO DE LA GRAVIDEZ EN LA ADOLESCENCIA

RESUMEN:

Objetivo: evaluar el planeamiento del embarazo de adolescentes de acuerdo a la clasificación del London Measure of Unplanned Pregnancy (LMUP).

Método: estudio de caso-control que se hizo con 86 gestantes adolescentes (casos) y 86 gestantes jóvenes sin histórico de gravidez en la adolescencia (controles) en unidades de Estrategia de Salud de la Familia de Cuiabá-MT, en el período de agosto a noviembre de 2016. Se evaluaron las variables de exposición y desenlace utilizándose un análisis bivariado para probar asociación entre gravidez en la adolescencia y las diversas variables independientes.

Resultados: se verificó que 63,9% de los casos de gravidez en la adolescencia se clasificaron como ambivalentes, seguido por no planeada, a pesar de que el embarazo fuera deseado, destacándose que 63,7% no utilizaban método anticonceptivo en el mes en que se quedaron embarazadas.

Conclusión: el estudio identificó que la gravidez en la adolescencia es deseada, pero no planeada, lo que revela la ambigüedad entre la intención y la acción, contribuyendo así para la comprensión y orientación en el planeamiento reproductivo de las adolescentes.

DESCRIPTORES: Gravidez en la adolescencia; Gravidez no Planeada; Gravidez; Adolescente; Anticoncepción.

INTRODUCTION

The mean age at the first sexual intercourse (sexarche) has been decreasing in previous decades in Brazil⁽¹⁾, which raises concerns among health professionals, as this event inserts the adolescent population into contexts of vulnerability to Unplanned Pregnancy (UPP) and abortion⁽²⁾.

A UPP is one that happened because of an accident or error, which was not scheduled for a certain period of life and was not thought about in advance. Likewise, this can occur unintentionally due to failure of contraception or non-use of a Contraceptive Method (CM)⁽³⁾. The occurrence of this can have repercussions in several areas of life, such as study, work, finances, personal health and perspectives on life trajectories, among others⁽⁴⁾.

For some authors who initiated studies on pregnancy planning, the circumstances in which women become pregnant are summarized in six thematic areas: 1) expressed intentions; 2) desire for motherhood; 3) contraceptive use; 4) pre-conceptual preparations; 5) personal circumstances/timing; and 6) influence of partners. From this understanding, the planned or unplanned pregnancy can be identified⁽³⁾.

Pregnancy planning is commonly treated as synonymous with intentionality and the desire to become pregnant, resulting in inaccuracies in its comprehension. However, the desire and the intention to become pregnant are elements that make up the planning of a pregnancy⁽⁵⁾, since this planning is within the behavioral framework, which includes, among other elements, the adoption of measures focused on conception⁽⁶⁾.

Despite advances in CM options in the previous decades, there are records that in the period from 2010 to 2014, 44% of all pregnancies in the world were unplanned, and approximately 56% of all UPPs in that period ended in abortion. These data were revealed by a study that analyzed the global, regional and sub-regional trends of UPPs, comparing the period 1990-1994 with that of 2010-2014, revealing a global decline in the rate of UPPs per 1000 women aged 15-44 years. However, it was noted that the percentage of UPPs increased in Latin America, from 59% to 69% for the two periods analyzed⁽⁷⁾.

In Brazil, a national study on delivery and birth followed 23,984 women and their babies in public health facilities, revealing that 55% of the pregnancies were unwanted, and two thirds of the adolescents declared that they did not want the pregnancy⁽⁸⁾.

Among the studies carried out on pregnancy planning in adolescence, in the Brazilian context, it is noteworthy that they observed age, the partner and family income as characteristics associated with unplanned pregnancy⁽⁹⁻¹²⁾.

Considering the sexual inexperience, the explosion of emotions that are difficult to control during this stage, and the occurrence of new experiences, in which adolescent pregnancy is mostly a consequence and occurs without prior planning, this study aimed to identify and analyze the pregnancy planning of adolescents according to the London Measure of Unplanned Pregnancy (LMUP) classification.

METHOD

A case-control study was performed in Family Health Strategy (FHS) units of the city of Cuiabá-MT, from August to November, 2016.

To select the FHS units, the neighborhoods were divided according to the regions, which were organized in decreasing order according to the number of resident adolescents. Subsequently, the FHS units corresponding to the most populous neighborhoods were selected, considering the fraction of adolescents in each region.

To test the matching of the chosen variables, the odds ratio (OR) test of the participants of the two groups was used, thus guaranteeing the homogeneity of the groups in relation to the selected variables. The age variable was not used in the pairing of the participants.

In the determination of the sample size, a test power of 80% was considered, with a 95% confidence level, a maximum error of 2%, and a case:control ratio of 1:1, predicting a frequency of 21.4% of women who did not use any contraceptive method. A total of 172 participants were included, 86 in the case group and 86 in the control group.

In order to calculate the frequency of the event, the CM variable was used, based on the results of the National Health Study, this being a national survey carried out by the IBGE in 81,767 households of 1,600 municipalities. The study identified that in Mato Grosso, 21.4% of young women aged 20 to 24 years did not use any CM⁽¹³⁾, considering that in this type of study it is necessary to estimate a proportion of people exposed to the risk factor among the young women of the control group⁽¹⁴⁾.

In order to compose the case group, pregnant adolescents, aged between 15 and 19 years, who were enrolled in the SISPRENATAL program of the FHS units, were selected. The control group consisted of young pregnant women enrolled in the SISPRENATAL program, aged 20 to 24 years, with no previous history of pregnancy in adolescence. The choice of age group was justified by the need to include women who only became pregnant after adolescence. Thus, the possibility of sample loss due to the risk of becoming pregnant during this period was eliminated. Adolescents under 18 years of age who were not accompanied by their caregivers were excluded.

The pregnant women were approached while waiting for the prenatal consultations. The young people and adolescents aged 18 or over that agreed to participate signed a consent form. A terms of assent form was used for those legally responsible for the participants that were less than 18 years of age.

The data collection was based on a semi-structured questionnaire, validated by a group of experts in the area, investigating the independent sociodemographic variables (age, color, marital status, religion, schooling, per capita income, paid work) and on the London Measure of Unplanned Pregnancy (LMUP), aiming to verify the association with the dependent variable pregnancy in adolescence.

The LMUP is a pregnancy planning measurement instrument constructed and validated in the United Kingdom and is applicable for any type of pregnancy regardless of whether the outcome was birth or abortion. It consists of six items and the score is calculated from the sum of the points, ranging from 0 to 2 for each item, with a maximum total of 12 points. The score obtained is classified into three segments: 10 to 12 points corresponding to planned pregnancy, 4 to 9 points corresponding to ambivalence regarding the planning of the pregnancy, and 0 to 3 indicating unplanned pregnancy⁽³⁾. It should be highlighted that ambivalence is defined as the interaction of positive and negative desires in relation to the pregnancy⁽¹⁵⁾.

The version translated and validated in Brazil was used⁽¹⁶⁾, with this model being chosen due to the fact that it contemplates the elements that make up the pregnancy planning in a more complete way, considering that women have ambivalent attitudes and intentions.

The data were digitized using the Epi info version 7 program and analyzed in the SPSS version 2.0 program. In the descriptive statistical analysis, the position (mean, median, mode) and dispersion variables (variance and standard deviation) were used for the numerical variables. For the qualitative variables, the data distribution was presented in tables considering absolute and relative frequencies.

In the inferential statistical analysis, the exposure and outcome variables were analyzed using bivariate analysis to test the association between adolescent pregnancy and several independent variables. The chi-square test, Fisher's exact test or the likelihood

ratio test were used. In all tests, a significance level of less than 0.05 was considered, with the odds ratios (OR) and respective 95% confidence intervals (95% CI) calculated.

This study is linked to a larger project entitled "The family context and the occurrence of pregnancy in adolescence" and was approved by the Research Ethics Committee of the Júlio Muller University Hospital, under authorization No. 1.443.731.

RESULTS

Among the pregnant adolescents participating in the case group, the mean age was 17.55 years. Among the young women who only became pregnant after adolescence, who comprised the control group, the mean age was 22.38 years. As shown in Table 1, the unmarried/single status had a strong association with the occurrence of pregnancy in adolescence.

Table 1 - Distribution of sociodemographic characteristics according to the groups (n = 172). Cuiabá, MT, Brazil, 2016

Sociodemographic characteristics	Cases		Controls		OR ^b	95% CI	P-value
	n	%	n	%			
Color							
Black [†]	74	86	77	89.5	0.72	0.28-1.81	0.485
Not black	12	14	9	10.5	1	-	-
Marital status							
Unmarried/single	25	29.1	13	15.1	2.30	1.09- 4.88	0.027
Married/with partner	61	70.9	73	84.9	1	-	-
Religion							
Not religious	14	16.3	8	9.3	1.90	0.75- 4.79	0.171
Religious	72	83.7	78	90.7	1	-	-
Schooling							
≤ 9 years [‡]	33	38.4	4	4.7	12.76	4.28-38.10	<0.001
> 9 years	53	61.6	82	95.3	1	-	-
Per capita income							
≤1 MW	77	89.5	55	64	4.82	2.13-10.94	<0.001
>1 MW	9	10.5	31	36	1	-	-
Work							
No	67	77.9	43	50	3.53	1.82-6.84	<0.001
Yes	19	22.1	43	50	1	-	-

Note: [†]: Black color refers to the sum of self-reported black and brown colors. [‡]: 9 years of study corresponds to complete elementary education. p-value: Chi-square test. p-values highlighted in bold were statistically significant at the 5% level.

Lower levels of education had an association with the occurrence of pregnancy in adolescence. Among the case group, the mean number of years of schooling was 9.97 years, varying between 3 and 14 years (SD = +/- 1.89), with 11 years being more frequent. Among the control group, the mean was 12.26 years, ranging from 5 to 17 years (SD = +/- 2.00), with 12 years being more frequent in this group (Table 1).

With regard to the per capita income of the sample, the majority of the young women in the groups reported incomes of less than or equal to one minimum wage. However, income less than or equal to one minimum wage was associated with pregnancy in adolescence ($p < 0.001$). Work was also associated, with it being identified that in the case group the majority of the adolescents did not work at the time or had never worked. Among the control group, half of the young women worked regularly (Table 1). Regarding pregnancy planning, among the case group, there was a predominance of unplanned pregnancies, with only 17 (19.8%) having planned the pregnancy. In the control group, this value doubled to 35 (40.7%) (Figure 1).

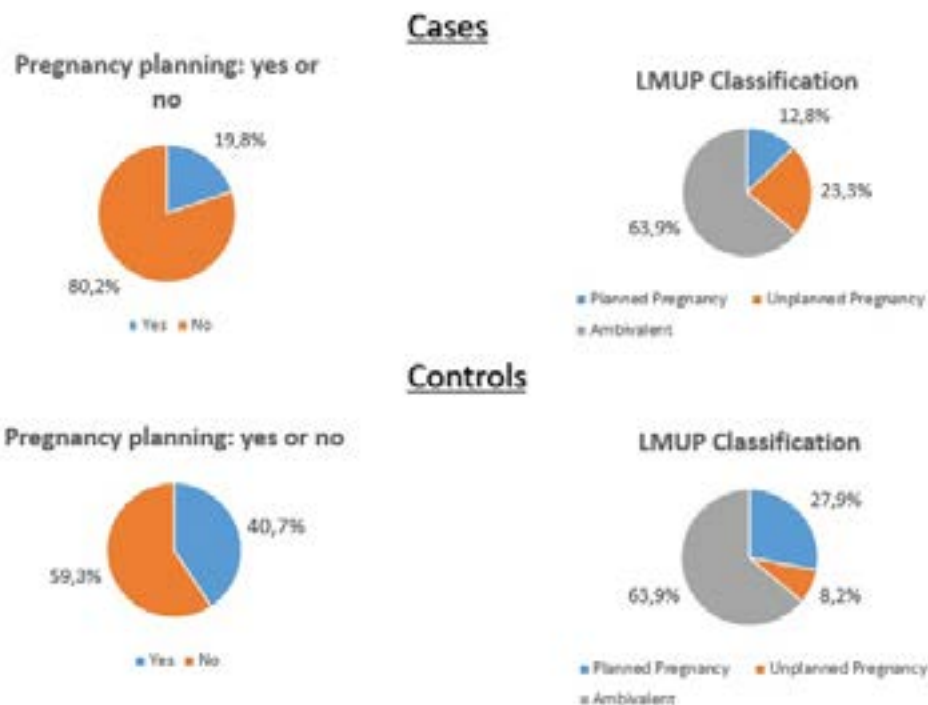


Figure 1 - Distribution of planned pregnancies according to the groups (n = 172). Cuiabá, MT, Brazil, 2016

According to Figure 1, among the 17 (19.8%) adolescents who reported the pregnancy as planned, with the application of the LMUP this was reduced to 11 (12.8%). Among the 69 (80.2%) adolescents who reported that they had not planned the pregnancy, after classification this value was reduced to 20 (23.3%). That is, six (7.0%) of the adolescents who claimed to have planned pregnancy and 49 (56.9%) who considered the pregnancy to be unplanned were classified as ambivalent after applying the LMUP, totaling 55 (63.9%) adolescents. After applying the LMUP, 63.9% of these pregnancies were classified as ambivalent, with the value being similar in both groups (Figure 1).

Regarding the use of a CM in the month that they became pregnant, in both groups the majority reported not having used one. Considering the moment of the pregnancy, in the case group, the majority responded "not quite the right time". Among those of the control group, the majority responded that it occurred at the "right time" (Table 2).

Table 2 - Distribution of the LMUP items according to the groups (n = 172). Cuiabá, MT, Brazil, 2016

LMUP Questions	Cases		Controls		P-value
	n	%	n	%	
Use of CM in the month you became pregnant					0.716
Always	14	16.2	11	12.8	
Occasionally	6	7	5	5.8	
With failures	12	14	11	12.8	
Was not using CM	54	62.8	59	68.6	
Moment of pregnancy					<0.001
Wrong time	20	23.3	4	4.7	
Not quite the right time	42	48.8	32	37.2	
Right time	24	27.9	50	58.1	
Intention to get pregnant					0.008
Did not intend to get pregnant	33	38.4	20	23.3	
Intentions kept changing	26	30.2	19	22.1	
Intended to get pregnant	27	31.4	47	54.6	
Desire to have a baby					0.017
I did not want a baby	15	17.4	8	9.3	
Mixed feelings	25	29.1	14	16.3	
I wanted a baby	46	53.5	64	74.4	
Conversation with partner about having children					0.001
Never	22	25.6	7	8.1	
There was talk, but no consensus.	44	51.2	40	46.5	
Agreement on getting pregnant	20	23.2	39	45.4	
Measure to prepare for this pregnancy					0.078
No	78	90.7	70	81.4	
Yes	8	9.3	16	18.6	

Note: p-value: Chi-square test. p-values highlighted in bold were statistically significant at the 5% level.

As shown in Table 2, regarding the intention to become pregnant, the highest proportion "did not intend" to become pregnant in the group of adolescents, while in the control group, more than 50% "intended" that this would occur. When considering the desire to have a child, there was a greater proportion among the young women when compared to the adolescents.

In relation to having talked with the partner about having a child, among the case group the majority mentioned that "there was talk, but no consensus". Among the young women in the control group, the frequencies of the responses were close, as 40 (46.5%) answered that "there was talk, but no consensus", and 39 (45.4%) reported "agreement to become pregnant". Regarding pre-conceptual preparation, in both groups, the majority answered that they did not take any measures to prepare for the pregnancy (Table 2).

Among the adolescents in the case group that had pregnancies classified as unplanned

and ambivalent, only 4 (20%) and 10 (18.2%), respectively, always used a CM. In contrast, among the UPPs, 8 (40%) were not using a CM, with this value increasing to 35 (63.7%) among the ambivalent pregnancies (Figure 2).

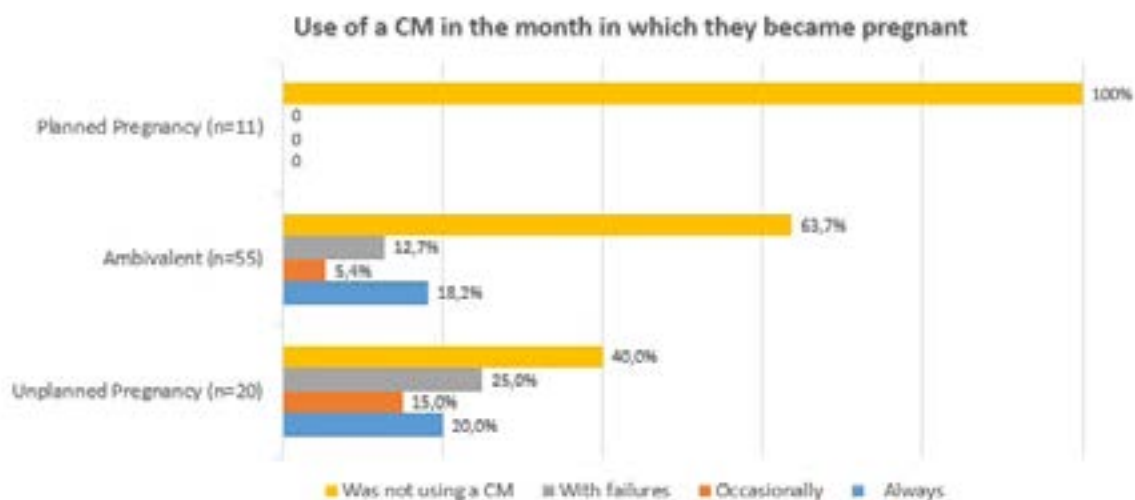


Figure 2 - Distribution of the use of MAC in the month in which they became pregnant, among the adolescents according to the classification of the pregnancy. Cuiabá - MT, Brazil, 2016

DISCUSSION

From the difference found between the question whether the pregnancy was planned or not and the classification of the LMUP, it can be presumed that it is not possible to estimate the planning by means of a single question. This aspect involves several factors, with the terms planning, intention and desire being commonly treated as synonyms. From this perspective, a study that discussed the meaning and measures of unintended pregnancy, pointed out that closed-ended questions that aim to classify pregnancies in a dichotomous way are not able to capture the cognitive processes through which women reflect on the pregnancy⁽¹⁷⁾.

Data from the present study revealed that more than 60% of adolescent pregnancies were classified as ambivalent. However, this value was similar among the young adults. This also occurs in high-income countries, as shown in the study conducted in the UK, which, when analyzing the prevalence of UPPs and the associated factors, found that pregnancies classified as ambivalent were more prevalent among young women aged 16-24 years⁽¹⁸⁾.

A study to estimate UPP risk through a model based on the interaction between positive and negative desires among adolescents aged 18 to 19 years showed that those with ambivalent maternal desires were at greater risk of UPPs⁽¹⁵⁾.

Subsequently, studies on UPPs added, in the theoretical model, the desires of the partners, and understood that the women's perceptions of the desires of the partner improved the model when estimating the risk of pregnancy⁽¹⁹⁾. From the data of the present study, it was verified that the adolescents talked less with their partners when compared with the young women who planned the pregnancy, indicating that the maturity of the relationship influences the attitudes that define their lives. This demonstrates that it is necessary to understand the multiple factors involved in these events and to develop theoretical models that involve multiple dimensions, which have not yet been explored in

the research on the occurrence of UPPs.

In the present study, UPPs were more prevalent among the adolescents when compared to the young women with no history of adolescent pregnancy. The same result was recorded in a study carried out in the state of Rio Grande do Sul, concluding that the lower age of women has a greater association with UPPs⁽¹¹⁾.

During adolescence, many girls idealize motherhood, however, do not plan it, and do not understand the components that involve a planned pregnancy, according to a study conducted with the aim of identifying sociodemographic, behavioral, and clinical aspects. The type of abortion practiced by the adolescents indicated that, although there was a strong desire for motherhood in them, they probably did not have the maturity to plan all the necessary elements. In addition, a strong association between desired and unplanned pregnancy with abortion was verified⁽²⁰⁾, which highlights the need for greater attention to the reproductive planning of this population.

In addition to age, the literature indicates that other factors interfere with pregnancy planning, such as a low level of education⁽¹⁰⁾. From this, it is possible to affirm that the lower educational level was a factor that contributed to the occurrence of UPPs. Despite the age difference between the groups of this study, the cutoff point of nine years of schooling established allowed all the participants of both groups to have had the chance to achieve this level of education.

It was verified that the majority of the adolescents wanted to have a baby, indicating that the family constitution is important for the young women of the studied context, since in the less favored classes, with limited opportunities, school resources and economic conditions, marriage and maternity can constitute a possibility for better living conditions for the adolescent.

A study of national representativeness, in which the demographic characteristics and sexual and reproductive behaviors of young women were analyzed, emphasized that the desire to have children is associated with the economic class, and the lower the economic status and the lower the schooling, the higher the percentage of those who reported the desire⁽²¹⁾. Possibly lower educational prospects and consequent professional advancement among adolescents from disadvantaged social classes, as verified in the present study, lead to a greater desire for pregnancy as a form of social realization and recognition.

A study that focused on the consequences of adolescent pregnancy showed that although the majority of the pregnancies were desired, the life of the adolescents was impacted by the arrival of the baby. The majority of the participants reported regret in some way, and a desire to do it differently if it were possible, since the child brought a lot of responsibility⁽²²⁾. It is possible that pregnancy is influenced by a cultural model that values maternity, however, does not reflect the real transformations that the arrival of a child entails in their lives.

When observing the data of the adolescents that did not plan the pregnancy, the high percentage of adolescents who did not use a CM in the month in which they became pregnant was highlighted. Therefore, the non-use of a CM cannot be considered only as an indication of pregnancy planning, i.e. not using a CM does not mean that the woman wants to become pregnant, as verified by previous studies^(9,23).

It was evidenced that the highest proportion of non-use of a CM was among those adolescents that were classified as ambivalent regarding the pregnancy. Similar findings were reported in a study in Michigan, USA, which, when evaluating the effect of pregnancy intentions on the consistency of the use of a CM among adolescents, found that girls with ambivalence toward pregnancy planning were more likely to not use or inconsistently use a CM⁽²⁴⁾.

The quantitative approach is highlighted as a limitation of this study, as it does not allow a deep investigation of the context of the relationship of the couple, the family

context and other factors involved. Accordingly, future studies of a qualitative nature are indicated for a deeper understanding of this area and of the unplanned and ambivalent pregnancy.

CONCLUSION

It was found that a large proportion of the pregnancies in adolescence were classified as ambivalent. It was also observed that pregnancy planning was not common in adolescence, however, the pregnancy was desired for many of them. This indicates that the family constitution is important for young women in the context studied, as it is often influenced by traditional structures that reinforce motherhood as the main social function of women and/or the lack of opportunity for fulfillment.

Various factors seem to influence pregnancy planning, such as the context of the personal and affective life and the social reality, making it a complex event to understand, especially in adolescence.

Providing conditions for the reduction of UPPs in adolescence is a challenge posed for health care providers, from the highlighting of the factors that interfere in the pregnancy planning. This study may contribute to rethinking strategies in the development of reproductive planning offered to this population.

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