

Causes, Consequences, And Social Impact of Early Pregnancy in Patients Served in The Hospital University Erasmus Meoz Cúcuta In the Department of North from Santander, Colombia, Period 2017-2023

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Received Date: July 17, 2025 | **Accepted Date:** July 24, 2025 | **Published Date:** August 29, 2025

Citation: Claudia Ramírez, Claudia Velaides, Gabriela Neira, Mariel D' Jesús Núñez, Sánchez-Frank JV, (2025), Causes, Consequences, And Social Impact of Early Pregnancy in Patients Served in The Hospital University Erasmus Meoz Cúcuta In the Department of North from Santander, Colombia, Period 2017-2023, *International Journal of Clinical Case Reports and Reviews*, 28(5); DOI:10.31579/2690-4861/788

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Abstract:

Introduction: Adolescent pregnancy is one that occurs before optimal biological and socioeconomic maturity. It is influenced by multiple factors such as social inequality. In 2021, there was a global decline in teen births. In Colombia, it decreased in 2022 and finally maintained a constant rise from 2022 to 2023.

Objective: Determine the causes, consequences and social impact of early pregnancy in patients treated at the Erasmo Meoz University Hospital, Cúcuta, in the Department of Norte de Santander, Colombia, Period 2017-2023.

Methodology: A descriptive, observational, retrospective, cross-sectional study was carried out with a hypothetical-deductive method; using descriptive statistics. 10,780 cases were obtained and for validation.

Results: The group of adolescents over 14 years of age represent 96.67% and the minors 3.33%, 65.95% are Venezuelan adolescents, the newborns 9.91% and 4.66 were underweight and short height, respectively. 68.01% have insufficient prenatal controls. The prevalence of teenage pregnancy under or equal to 14 years of age has increased since 2020.

Conclusion: Between 2017 and 2023, the increase in teenage pregnancy in Cúcuta was influenced by the Venezuelan migration crisis. Most have insufficient prenatal care, but most do not require a cesarean section.

Key words: pregnancy; adolescence; birth; migrant

1.Introduction

He pregnancy teenager either early HE categorizes as a event of health public due to biological immaturity and socioeconomic, and is influenced by factors as inequality social, lack of opportunities, inequality of gender and ignorance about health sexual (Rojas, 2021). According to the WHO, worldwide a approximate amount of sixteen million of adolescents between 15 and 19 years of age age become mothers. Latin America and the Caribbean correspond to the second place of pregnancy teenager, HE calculate around of 66.5 births for each thousand youths of 15 to 19 years (Zegers-Hochschild et al., 2020). Meanwhile, in Norte de Santander, department of Colombia, the minors from 10 to 14 years old showed an increase in the rate specific of fertility by age (TEFE) of 23 and the teenagers of 15 at 19 presented 58.9 by each 1000 live births, this in turn

decreases drastically the quality and comfort in the lives of pregnant mothers (PAHO, 2020). By Pregnancy alone is already a high obstetric risk from the moment of conception, especially for teenage girls, that so much the mother as he fetus HE expose to multiple complications throughout the development of pregnancy and of the delivery. The complications and he risk that are can have depend of different factors, such as the age of the pregnant, the stage gestational, the characteristics organic so much of the mother as her son, (Calderon et al., 2020) . In Patricia Ortiz's study, Beatriz Child, Sonia Aguila, Patricia Ribeiro analyzed to students that were pregnant in different institutions educational of character public in Bucaramanga, capital of Santander, in where HE registered 48 teenagers pregnant women and by 2014 and until

the first half of 2015, maintained their studies in 22 centers of education public of Bucaramanga (Ortiz, Rodriguez, 2018) . The objective of this work was to determine the causes, consequences and impact social of the pregnancy early in patients attended to in he Hospital University Erasmus Meoz of Cúcuta, in he Department of North of Santander, Colombia, during the years 2017-2023, analyzing he context social of the pregnancy teenager in the population that HE wishes study for grasp the factors that determine their prevalence. It seeks to identify complications immediate to the delivery that present the children of are teenagers, the amount of controls carried out for measure the conditions of prenatal care, and the proportion of births vaginal and the facts to through of Caesarean section. In he In the statement of the hypothesis, the following are sought: the damage caused by he pregnancy early Yeah are mostly physicists as correspond to preeclampsia, delivery premature either macrosomia, in comparison with the consequences psychological; as the high percentage of girls or adolescents who are experiencing an early pregnancy that falls in desertion school.

2. Materials and Method

In this study HE employment the Model Positivist with an empiricist-intuitive approach or quantitative research. Descriptive, observational, and cross-sectional research. Inclusion and exclusion criteria were previously established, the inclusion criteria were: Women between 10 and 19 years old who are pregnant or are mothers; adolescent mothers with comorbidities, mothers who have attended their pregnancy, childbirth and / or cesarean section at the Erasmo Meoz University Hospital ; Women with pregnancy, childbirth and / or cesarean section in the period 2017-2023; women from any of the municipalities of Norte de Santander, Colombia. Exclusion criteria: Women deceased for reasons unrelated to early pregnancy; Women who have moved to another department; women with cognitive deficit that prevents them from answering the instrument independently. The variables studied were: race, age, body mass index, level of education, socioeconomic stratum, nationality, municipality of origin, maternal and neonatal consequence; measured with nominal and ratio scales respectively, their data being obtained from the review of medical records. The starting point was a

population that included the number of women between the ages of 10-19 who became mothers during the 2017-2023 time interval at the Erasmo Meoz University Hospital, Department of Norte de Santander, Colombia. Data was obtained from the Hospital's database with a total number of births filtered by the age referred to from 2017 to 2023 of 10,780. For sampling, a sampling type without replacement was used, a random or probability sampling method, with the stratified sampling technique with proportional allocation, using the year as a stratification variable, with confidence levels greater than 90% and predetermined sampling errors less than 5%. Relationship measures were calculated, such as Odd Ratio. In addition to the collection of data or information was used as a source from the Departmental Institute Health (IDS) of Norte de Santander in lapse of 2017-2023, and revision of stories clinics of the Hospital University Erasmus Meoz to through of the harvest of Information for research. As collection techniques: description, surveys, bibliographic information review (with other sources such as Scielo and Pubmed databases), and health and safety records.

3. Results

Through the check of medical records practiced to patients of the Hospital Erasmo Meoz acquired information that was analyzed. After obtaining the data led to the development of tables and graphs to show the results obtained from the information previously provided, in which include data necessary for answer the objectives and the question of research. As for non-categorical data, the following are taken into account: statistics descriptive of elderly relevance to its characterization. Of equal manner HE made a analysis inferential with conclusions statistics about of the parameters population based on the results that are obtained through the information sample. For get this HE they built intervals of trust for the parameters important. In the period from 2017- In 20023, 10,421 births were recorded in women over 14 years of age, while the remaining 359 were in women under 14 years of age, for a sample total of 1,780 patients treated at Erasmo Hospital Meoz,. Figure 2 shows the incidence of teenage pregnancy in the youngest age group, with the prevalence increasing since 2019, peaking in 2023, and the incidence reaching its highest point in 2021.

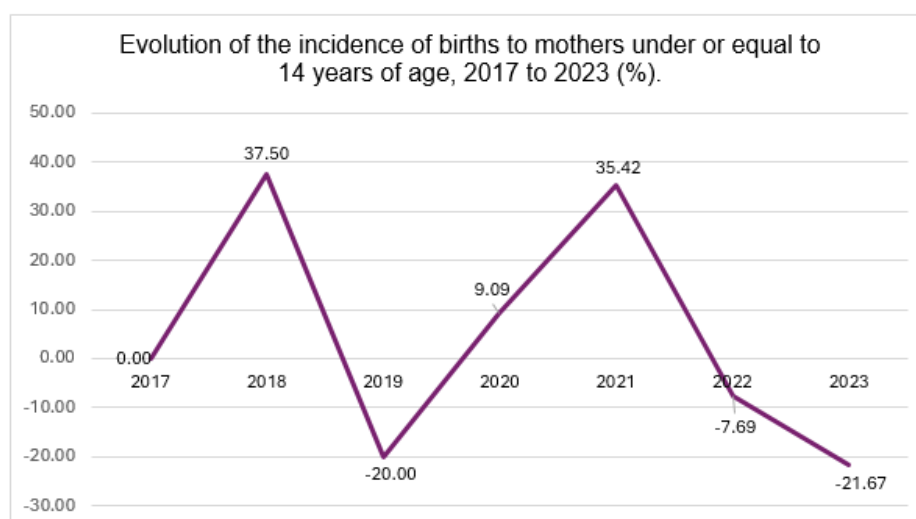


Figure 2: Evolution of the incidence of births to mothers under or equal to 14 years of age, 2017 to 2023 (%).

The mean age was around 17.41 years, with a coefficient of variation (CV) of 8.22%, indicating high age homogeneity. The minimum and

maximum ages were 11 and 19 years, respectively. 65.95% of mothers with early pregnancies were Venezuelan. The chi-square test of

independence and the odds ratio were used to verify the relationship between the two conditions. Regarding marital status, although 78.50% reported having a partner at the time of birth, 1,461 records lacked information in this area. Mothers over 14 years of age living with a partner had an OR 2.63 times greater likelihood; Colombian mothers were more likely to live without a partner, as were mothers living in urban areas. Regarding the educational level attained by adolescents, 1,490 records were found to be missing information. It is evident that 70.03% had

attained a maximum of secondary school. In how much to the complications that were able to introduce In the children of these women at birth, data indicative of prematurity and low birth weight or height were taken into account. Since the majority of newborns (89.35%) were the product of full-term pregnancies, only 10.63% were preterm. Most newborns had adequate weight and height for their gestational age (Table 8).

Category	Patients	%
Short stature	502	4.66
Regular size	9576	88.83
Tall size	702	6.51
Total	10780	100

Table 8: Newborn size categories.

Although 32% of adolescents had five or more prenatal visits, which is considered adequate, the vast majority (68%) did not have adequate prenatal check-ups, among which the 14.71% who did not have any visits

stand out, despite this, vaginal births predominated over cesarean sections, so it is intuited that the vast majority of adolescents had no indications to have a cesarean section (Table 9).

Variables	Caesarean delivery			Vaginal delivery			P
	LI	OR	LS	LI	OR	LS	
Over 14 years old	0.53	0.66	0.82	1.22	1.52	1.89	0.0001 **
Urban area	0.68	0.77	0.88	1.14	1.30	1.47	0.0001 **

Table 9: Relationship between delivery type and age group and area of residence. Odds ratio estimate with a 95% confidence interval.

LI: lower confidence limit. LS: upper confidence limit. OR: Odds ratio (odds ratio). P: significance level (ns, 10%, *5%, or **1%).

Source: Prepared by the authors.

Patients older than 14 years of age and those residing in urban areas have the highest chances of having a vaginal delivery, with OR of 1.52 and 1.30, respectively.

4. Discussion

The results demonstrate that the cases, in their majority (96.67%), correspond to teenagers older people 14 years old, the average age being 17 years and 5 months. The most of are teenagers were of nationality Venezuelan, residents in urban areas and they counted with a partner. In 2022, a study revealed that 2199 teenagers Venezuelans registered in Sisbén IV, aged between 10 and 19 years, were pregnant women. This report underlined the prevalence of teenage mothers with low educational level, especially among the that reside in Venezuela (National Administrative Department of Statistics (DANE), 2021). The data of the HUEM reflect a pattern similar, since 65.95% of mothers The adolescents treated were Venezuelan, with a light most residing in Colombia, although many still lived in Venezuela. In how much to schooling, of the records verifiable, he 78.03% there was reached to the less the education secondary. In how much to the place of residence, the majority of adolescents treated in he HUEM lived in areas urban (83.63%). However, DANE had observed a increase of births in teenagers of less 15 years in rural areas, reaching the 80.4% nationwide. State-wise civil, the most of the teenagers they had couple to the moment of the delivery, although there was a light most of Venezuelans without a partner in comparison with the Colombians (National Administrative Department of Statistics., 2022). The teenagers minors of 14 years presented minors probabilities of have couple, it that suggests that their pregnancies could be related to relations No agreed upon either without protection. A study by the

University CES in Medellín reinforces this idea to the find a correlation of the abuse sexual with teenage pregnancy (Restrepo Martinez & Trujillo Numa, 2016), although in this investigation No HE account with sufficient information to establish a connection direct. A elderly proportion of the infants children of mothers teenagers of this study were full term (89.35%) and with weight and size suitable (88.58% and 88.83%). Without embargo, he 68.01% of the mothers I carry out less of five queries prenatal (Tuñon et al., 2023). These results contrast with studies of countries like Argentina and Peru, where evidence that the mothers teenagers whose controls prenatal were insufficient, have a important relationship with he low weight to the be born that they arrived to present their children (Norabuena Huerta, 2024). Among the limitations of this study are its retrospective nature, which leads to limited availability of the required data and greater selection bias. Furthermore, the study was limited to a population in only one public hospital, making it impossible to compare locally with other care centers, including private ones. Furthermore, the study was cross-sectional, with no follow-up to ensure continuity for each case. Future prospective, longitudinal studies are recommended, with a broader scope of the study population, both in the public and private sectors.

5. Conclusions

Between 2017 and 2023, in Cúcuta, the increase of the pregnancy teenager was influenced by the situation border with Venezuela and the migration crisis, since the 65.95% of the cases involved to Venezuelan teenagers, many of whom which travel from Venezuela for give to light in Colombia. The most of are youths No receive the amount adequate of controls prenatal, well only he 32% has to the less 5 queries, and a 14.71% No receives no prenatal care. Despite from the lack of prenatal care,

almost all the newly born are product of full-term pregnancies, which count for both with weight and size suitable for the age gestational, by it so much, HE interprets that he pregnancy teenager in this population is not associated with problems low birth weight or size. As for the types of birth, there is a greater amount of births vaginal (66.29%) that of cesarean sections (33.71%).

6. Financing

Supported by resources internal. Self-funded.

Conflicts of interest: Not identified conflicts of interests between the authors.

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DOI:10.31579/2690-4861/788

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