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## Risk factors that trigger non-compliance with prenatal controls in pregnant

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### Abstract

The present investigation was carried out in the El Chical Parish, Tulcán canton, Carchi province and its main objective was to determine the main risk factors that trigger non-compliance with prenatal check-ups at the Chical health center. A bibliographic and field research was developed, with a quantitative and qualitative modality, a non-experimental design having exploratory, descriptive, and correlational scopes. The research methods used were applied, field and bibliographic research, among the most relevant results it was determined that there are 20 pregnant women of which 50% do not attend prenatal check-ups due to distance, 25% prefer to be attended by the midwife 13% do not attend due to their beliefs and the remaining 12% do not attend for fear of the gynecological examination, the pathologies that are sent by transfer to a pregnant woman is 37% due to preeclampsia, with 75% vaginal infections in pregnant women. Failure to comply with prenatal check-ups is one of the most obvious risk factors, presenting concomitant pathological states or abnormal conditions, affecting the normal course of pregnancy and the newborn, increasing the dangers to the health of the mother and the baby in the health sub-center Chical.

**Key words:** Prenatal controls, Promotion, Prevention, Risk factors.

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### Introduction

Prenatal control is a set of activities and procedures that the health team offers to pregnant women, this is very important, for the prevention of complications, through the early diagnosis of risk factors in the pregnant woman and diseases that can affect the normal course of pregnancy and the health of the newborn. It is the recommended strategy to detect pregnancy risks early, establish appropriate management, prevent complications and prepare the pregnant woman for childbirth and parenting.

Obstetric complications due to inadequate prenatal control are considered a public health problem, due to the morbidity and mortality figures that this entails, because according to the World Health Organization, maternal mortality is unacceptably high, every day about 830 women

die worldwide from complications related to pregnancy or childbirth. An estimated 303,000 deaths of women have died during pregnancy, childbirth or the postpartum period, a situation closely related to the health care received during pregnancy and childbirth. (3)

According to reports on the situation of maternal morbidity and mortality in Latin America and the Caribbean, there were 7600 maternal deaths in 2015 due to postpartum hemorrhages and hypertension, concentrated in countries with higher fertility rates, poverty and less access to quality health. Estimates show that in Chile and Uruguay maternal mortality is lower, 17 per 100,000 inhabitants, it is also recognized that in Ecuador, maternal mortality has been reduced by 50% but in other countries such as Venezuela it has increased. Comments (4)

Pregnancy is a physiological process, therefore, the care provided to pregnant women must be based on care for their normal development, the use of appropriate technology and the recognition of the important role that the woman herself has in making the decisions that affect her. Respect for the natural course of pregnancy should be at the forefront of all health care and any intervention should be applied only if it has demonstrated benefit and is in accordance with the needs and desires of each woman. Quality care for pregnant women involves: efficient monitoring of the process, home visits, tests and procedures based on scientific evidence, the involvement of users and adequate coordination between all levels of care. According to the WHO, early, periodic, and comprehensive pregnancy care substantially reduces the risk of complications and death, both maternal and perinatal; It also promotes adequate childbirth care and, on the other hand, ensures favorable health conditions for mothers and their children in the periods immediately after birth, as well as reducing the incidence of disability due to congenital causes. Optimal prenatal care in low-risk pregnancy, according to the World Health Organization, includes a minimum of five check-ups by qualified health professionals (doctor or obstetrician). However, compliance with these controls alone does not guarantee the quality of care, since it is required that, at each visit, a set of activities and procedures that the health team provides to the pregnant woman be provided in order to identify risk factors and diseases that may affect the normal course of pregnancy and the health of the newborn. Maternal and child health care is a priority for the Ministry of Public Health, its main objective is the prevention of complications in pregnancy based on timely diagnosis and adequate care. The main causes of maternal and perinatal mortality are detectable and preventable through early, continuous and high-quality prenatal care, which allows the identification and control of the main obstetric and perinatal risk factors. Maternal death is preventable in most cases, effective intervention, and investment in safe motherhood has been proven not only to reduce maternal and child mortality and disability, but also to achieve better health, better quality of life and equity for women. their families and communities. These interventions are more cost-effective in the health sector, particularly at the first level of care. This CPG presents the main aspects to improve the diagnosis, evaluation, care, treatment and referral of pregnant women (6)

Absenteeism from prenatal care Among the factors that could be related to the lack of attendance at prenatal control, we have personal factors such as: the personal or socio-epidemiological characteristics of pregnant women, stand out in general since they are young women of reproductive age, living in neighborhoods with serious socioeconomic limitations, which would reveal their low educational level. and surrounded by an environment of family instability as they are family groups united by a concubinage. (2)

The main risk factors that have been identified in the studies presented above highlight different social, economic and educational factors, the most limiting sometimes being the distance that exists in rural areas and above all the idiosyncrasies and lack of awareness about the importance of prenatal check-ups. The main causes of maternal and perinatal mortality are detectable and preventable through early, continuous and high-quality prenatal care, which allows the identification and control of the main obstetric and perinatal risk factors, giving rise to complications such as infections, anemia, preeclampsia, hemorrhages, perineal tears, incomplete delivery, low birth weight and prematurity. Comments (7)

The Parish of Chical is a place of Awa population that consists of 1928 inhabitants which a part of the population is of 1411 fertile women who are in the age of 14 - 45 years, currently consists of 31 pregnant women from different communities such as: Guare, San Marcos, La Guaña, El Pailón,

Peñas Blancas and Gualpi Alto, Medium, Low; which has a difficult access to be able to go to prenatal check-ups, for this reason it is difficult to make home visits.

### **GENERAL OBJECTIVES**

- To determine the risk factors that trigger non-compliance with prenatal care in pregnant women who attend the Chical health center in the period November 2022-March 2023.

### **SPECIFIC OBJECTIVES**

- Provide a theoretical basis for prenatal care through bibliographic sources.
- To diagnose the risk factors that trigger non-compliance with prenatal check-ups in pregnant chical mothers.
- To determine the complications that pregnant women present when they do not attend prenatal check-ups.
- Educational strategies for the recognition of warning signs in order to prevent mortality in the binomial.

### **Materials and Methods**

#### **Modality and type of research**

It is based on a mixed modality since it uses the two paradigm modalities as quantitative and qualitative.

**Quantitative research** because it employs the application and identification of the population, sampling and data collection through the survey.

**Qualitative research** presents an interpretative orientation of the results and the current description.

#### **Types of research**

The present research falls within the following types:

**Applied** research This research is based on implementing theory with practice and solving concrete problems on the topic of risk factors that trigger prenatal care in pregnant women, through the identification of risk factors to promote adequate education about knowledge of the subject.

**Field research is used to determine the problem to be investigated because it uses the research site itself, which identifies causes and factors of ignorance or different opinions about prenatal care in pregnant women.**

**Bibliographic research** is applied because research is carried out in different bibliographic sources such as books, journals, articles, websites, repositories, which will serve as a basis for the development of the theoretical bases.

#### **Population and sample**

**Population:** For this research, a survey was taken from 20 pregnant women from the health center of Chical-Tulcán.

**Sample:** In this research, the entire population is taken into account.

#### **Research techniques**

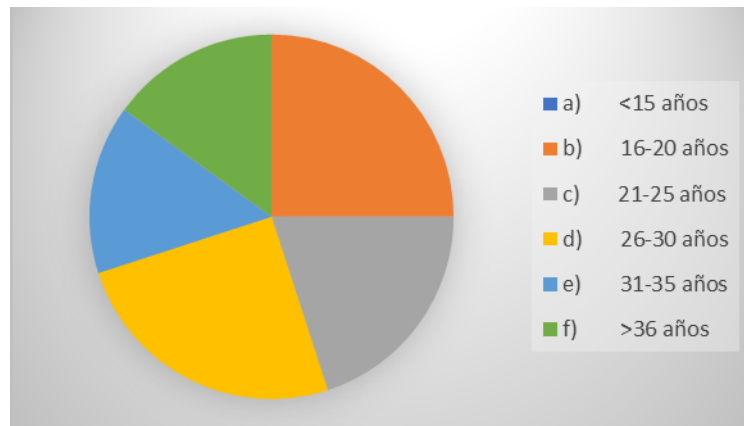
Research Instruments: Survey.

It will apply to pregnant mothers who come to the Chical Health Center and to health personnel.

**Results and Discussion**

**Analysis and interpretation**

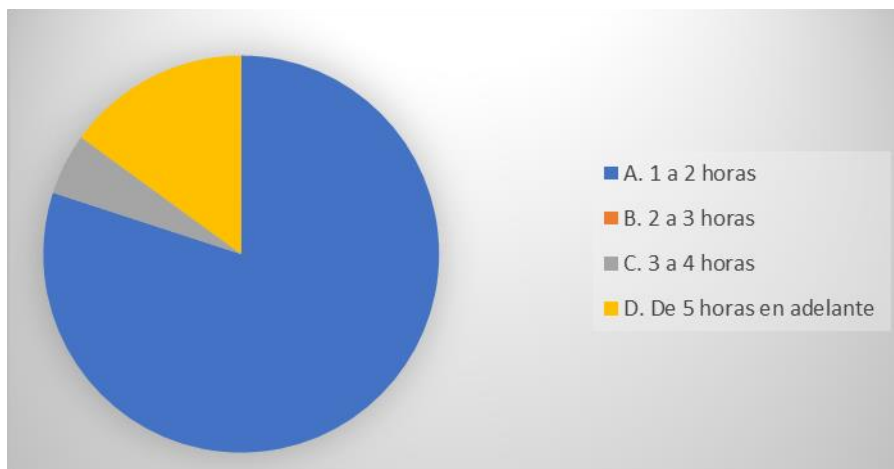
**Question 1. Age**



**Source: Field study**

**Analysis and interpretation:** In this graph it can be seen that 30% of pregnant women are between 16 and 20 years old and 15% are 36 years old, so they become a vulnerable group to pathological states both in gestation and in childbirth, increasing dangers in the mother and the baby considering high-risk pregnancies.

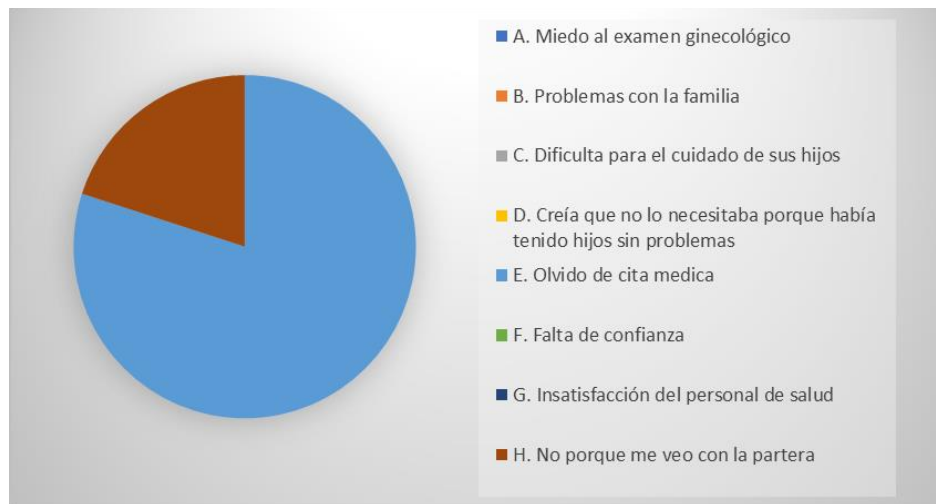
**Question 2. How long does it take to get to the health center?**



**Source: Field study**

**Analysis and interpretation:** In the graph we can see that 80% of pregnant women take 1 to 2 hours to arrive and 15% from 5 hours onwards, this represents a risk, standing for long periods of time during pregnancy can increase, the risk affecting the development of the fetus and swelling of the feet.

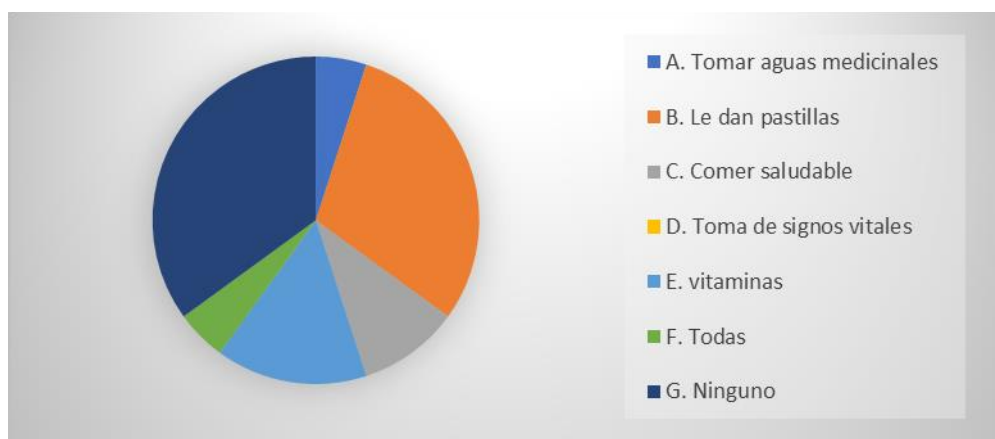
**Question 3. Why don't you go to prenatal checkups?**



Source: Field study

**Analysis and interpretation:** It has been identified that 80% of pregnant women fail to comply with prenatal check-ups due to forgetting to make an appointment. This is a very notorious risk factor since pregnant women have different activities: working and taking care of their other children, which are more important to them than attending their prenatal check-ups.

**Question 4. When do you visit the health center that is recommended to you?**



Source: Field study

**Analysis and interpretation:** We observed that 35% of pregnant women have identified that in home visits most pregnant women are not recommended anything in their gestation stage. During pregnancy it is very important to take some vitamins so that the development of the pregnancy is normal, otherwise it increases the risk of difficulties in the neurodevelopment of the offspring, altering the cognitive, language and motor areas.

**Question 5: Have you had any of these tests?**



Source: Field study

**Analysis and interpretation:** The research conducted has identified that 55% of most pregnant women have undergone all the examinations required by the health center. Prenatal exams are

tests done during pregnancy to monitor the health of the mother and baby. They can detect conditions that can put the baby at risk for problems such as premature birth if left untreated.

**STAFF SURVEY**

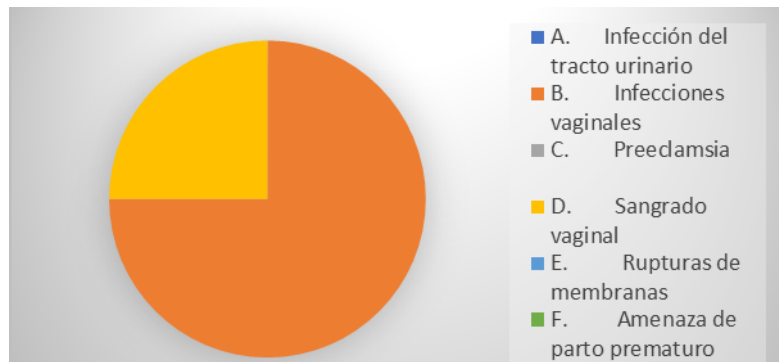
**Question 1. How many pregnant women come to us for warning signs?**



**Source: Field study**

**Analysis and interpretation:** In the graph you can see the highest percentage of sample is the 75% of women who present symptoms or warning signs such as headache, dizziness, fever and extreme swelling, it can be observed that pregnant women go to their check-ups when they present the alarm symptoms that implies that there is no proper education or training on how important it is to go to their clinics. Prenatal check-ups.

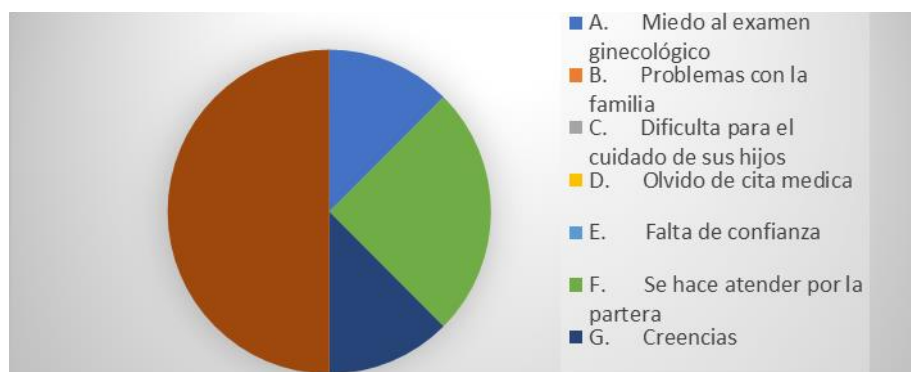
**Question 2. Which of the following diseases is most common at the Chical health subcenter?**



**Source: Field study**

**Analysis and interpretation:** In the graph you can see the highest percentage of the sample is the 75% of pregnant women who go to the health center due to vaginal infections, taking as a risk factor since, without treatment, they can have serious consequences in their gestation process, in the case of candidiasis it can cause the infection of Muguet in the future baby, that manifests itself a few days after childbirth.

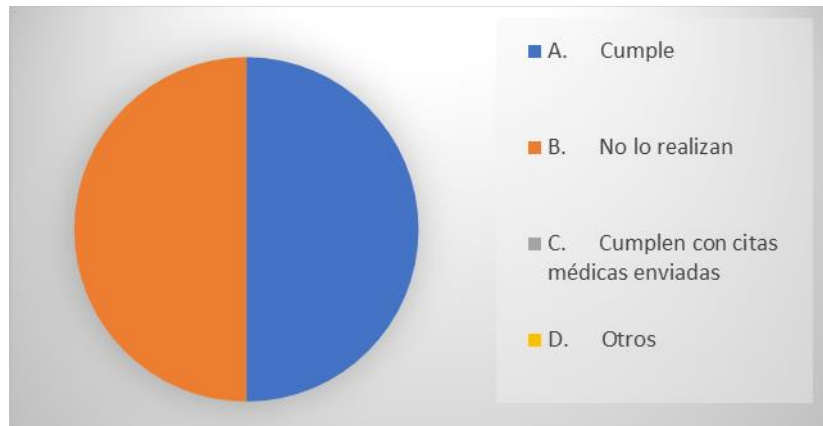
**Question 3. Why do you think mothers don't come for prenatal checkups?**



**Source: Field study**

**Analysis and interpretation:** In the graph it can be seen that the highest percentage of the sample is that 25% of pregnant women do not attend prenatal check-ups, this is due to geographical location for reasons that are considerably distant from pregnant mothers moving to their prenatal check-ups, this is a risk factor since in some cases they can generate more serious complications, With detrimental consequences for both the health of the mother and the baby, this can eventually lead to complications at the time of delivery.

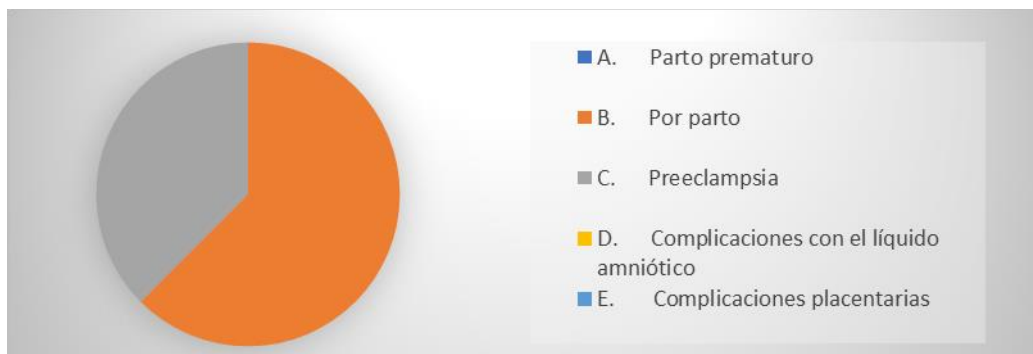
**Question 4. Do pregnant women take the tests sent?**



**Source: Field Study**

**Analysis and interpretation:** The research carried out indicates that 50% of pregnant women do not undergo the exams to control the health of the mother and the baby, this is due to lack of money, ignorance of the importance of the exams, lack of interest or lack of time, complicating the care and control of the binomial this can lead to complications such as congenital malformations or chromosomal alterations.

**Question 5. What are the most frequent pathologies that you send by transfer to a pregnant woman?**



**Source: Field study**

**Analysis and interpretation:** Through the intervention it was observed that 37% of transfers are due to preclasm could be due to antecedents and non-compliance with prenatal controls in the third trimester where they can detect warning signs of preclasm such as high blood pressure, high levels of protein in the urine that indicate kidney damage.

Prenatal control is a health service that aims to detect alterations in pregnancy in order to have a positive impact on the reduction of maternal and infant mortality, especially in highly vulnerable countries such as Latin America where women do not attend prenatal check-ups due to various circumstances such as low level of education, occupations of the home and child-rearing, lack of employment, scarce economic resources, geographical location of the home and the care center, lack of affiliation to social security, in addition to attitudinal factors such as beliefs and customs or low health quality (5,10)(10)(11)(12)The persistence of these factors increasingly limits pregnant women from seeking prenatal care and consequently presenting obstetric complications. This argument has been documented in several Latin American studies, several of them carried out in Colombia, where it is assumed that good prenatal control has a positive impact on the outcome of pregnancy, since most complications such as preterm delivery (13.8%),

abortion (22.8%), maternal deaths generally due to infections and hemorrhages, as well as approximately 75% of neonatal deaths, They can be avoided with timely gestational care(11,12). Ipia et al., (13) affirm that most obstetric complications and maternal death are preventable through timely medical interventions, i.e., they are susceptible to intervention during prenatal care. García et al. (14) add that Colombian women with little or no prenatal care or check-ups in advanced stages of pregnancy are more likely to have obstetric complications that lead to emergency intervention (25%) or fetal loss (15%). Based on this problem, health agencies are working to expand prenatal care coverage, especially in areas of economic and educational vulnerability, in order to achieve success in pregnancy

Studies carried out in Brazil also demonstrate the relationship between obstetric complications and the lack of prenatal care, Meloy et al.(16) conducted research on prenatal care in women in the puerperium highlight that adequate prenatal care is a determining factor in the prevention of maternal and infant morbidity and mortality, since it contributes to obtaining more favorable results from the performance of basic procedures such as clinical trials and laboratory and pregnancy follow-up through periodic visits for the timely detection and treatment of risk factors that bring complications to maternal and child health. These authors also state that regular attendance at prenatal check-ups can be decisive for the appearance of maternal and neonatal problems, including congenital malformations, infections, preeclampsia and eclampsia, low fetal weight gain and premature birth, internationally considered one of the most important public health problems today. Andrade (17) strongly supports this evidence and alludes to the fact that adequate and qualified prenatal care indisputably improves maternal and infant outcomes by significantly reducing complications during pregnancy, childbirth and puerperium, especially maternal mortality.

In Mexico, Juárez et al. (18) found results similar to those reported in Colombia and Brazil regarding the risk of obstetric complications due to lack of gestational health care, finding that almost 20% of women who did not start prenatal care in the first trimester of pregnancy had complications during the gestational and delivery period, including the loss of the fetal heartbeat (7.7%), lack of dilation (7.7%), premature rupture of membranes (7.7%), accidental delivery (7.7%), late delivery (7.7%), preeclampsia (26.9%), abnormal position (7.7%) and hemorrhage (11.5%). Hence, authors such as Nava et al. (19) argue that one of the most effective strategies to prevent obstetric complications is active prenatal control, especially in the first and third periods of gestation. Only with timely, regular and quality prenatal care can thousands of lives be prevented from being lost every year due to preventable causes (infections, hemorrhages), especially in less advantaged areas where inequity in access to health services still persists.

Ecuador, like other Latin American areas, has paid special attention to the prevention of obstetric complications based on prenatal and perinatal control; An example of this is Piña's research, in which it is stated that lack of adherence to prenatal control due to factors such as early age, beliefs, customs, lack of geographical accessibility, climate of the region and gender inequality causes the appearance of complications that can leave permanent sequelae in the mother, the newborn and affect the family and social context. These findings are also supported by those of Naula et al., who in 2019 developed a research based on clinical histories and sociodemographic surveys in a population of 365 patients, finding that 84.4% attended prenatal consultation due to the expansion of the national prenatal care network, which reduced the incidence of obstetric complications such as hypotonia, anemia, uterine atony, tears and incomplete delivery, in addition to maternal mortality at 0.5%.

For these reasons, it is possible to affirm the relationship between the lack of prenatal care and the appearance of obstetric complications because, as Hernández et al.(30) argue,(30) obstetric complications (maternal mortality is the most important) have experienced a marked decrease in recent decades due to the fact that 88.9% of women receive at least 6 prenatal controls by qualified professionals. This is encouraging, because by achieving health care during pregnancy, more satisfactory births can be guaranteed.

According to research carried out in countries such as Colombia, Brazil, Mexico, Cuba, Venezuela, Peru and Ecuador in recent years, it has been proven that deficient, incomplete or non-existent prenatal care is a significant indicator of poor obstetric outcomes both in the short and long term because the lack of diagnostic procedures that help monitor maternal-fetal health produces a false sense of security or low risk that can complicate the Complications such as: urinary tract infections, anemia, pressure alterations, hemorrhages, perineal tears, incomplete delivery and in the neonate, low birth weight and prematurity, and in both cases the probability of disability and



death due to poor monitoring, as well as the execution of inopportune therapeutic procedures that make it difficult for the pregnancy to reach a happy term.

## Conclusion

It was based bibliographically that the lack of prenatal controls is the cause of multiple aspects that are related to the lack of information, since a prenatal control set of activities and procedures that the health team offers to the pregnant woman in order to identify risk factors in the pregnant woman and diseases that may affect the normal course of pregnancy and the health of the newborn. It is worth mentioning that you should have at least five prenatal check-ups during the gestation phase.

The triggers for non-compliance with prenatal check-ups of a pregnant woman who have insufficient knowledge about birth control with 50% do not attend prenatal check-ups because of distance, 25% prefer to be seen by the midwife, 13% do not attend because of their beliefs and the remaining 12% do not attend for fear of the gynecological examination, They are at increased risk in antenatal care because of extrinsic, demographic, economic, and cultural risk factors that are associated with non-adherence to prenatal care.

In the research we found the complications that predominate in pregnant women who come to the Chical Health Center, they are 37% preeclampsia and 75% vaginosis, which is a great problem for both the fetus and the pregnant woman, affecting the normal course of pregnancy, increasing the danger of death of the binomial.

With the educational design and home visits through strategies to reduce the ignorance of the importance of the prenatal controls that are present during the gestation stage, for this a plan is used on how to carry timely and quality medical care, in addition to being able to make dynamic plans about how they would like to be their birth and therefore have a loving attachment of mother and child of mother. a correct way with mothers who are in the gestation stage of the Chical Health Center.

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