Educational Intervention for Indigenous Women of Childbearing Age to Increase Prenatal Care in the Canton of El Tambo

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Abstract:- Prenatal care is a set of clinical and educational procedures aimed at monitoring the development of pregnancy and promoting maternal and child health. The objective of the study was to promote prenatal care for indigenous women of childbearing age through educational intervention workshops in the community of Marcopamba, canton El Tambo. The research was qualitative, descriptive, cross-sectional, correlational, field and non-experimental design. Two tests were applied, one diagnostic and the other at the end of the educational intervention. The study consisted of 113 women of childbearing age, the mean age was 28.63, 48.7% had secondary schooling, 42% were single, 92.9% were Catholics, 46% went to the MSP as a health service, and their main activity was housework. Of the population, 36.3% is primigestation and 38.9% multigestation, 64.7% went for prenatal care, 31% went to the general practitioner, 17.6% went to the local midwife and 27.1% did not have any type of prenatal care. In conclusion, the results after the intervention were very satisfactory, with high percentages of knowledge about the importance of prenatal control, with the intervention carried out by the nurse contributing to this.

Keywords:- Prenatal Control, Indigenous Women, Childbearing Age, Knowledge and Beliefs.

I. INTRODUCTION

Prenatal care is a set of clinical and educational procedures aimed at monitoring the evolution of pregnancy and promoting the health of pregnant women and children. It involves welcoming the woman from the beginning of her pregnancy until the postpartum period. This period is characterized by physical and emotional changes that each pregnant woman experiences differently, so it should be fully attended by health teams (1).

Adequate follow-up of the pregnant woman is related to benefits for both the mother and the fetus and the future baby, enabling the detection and timely treatment of morbidities, reducing the incidence of low birth weight and prematurity, in addition to promoting the practice of breastfeeding. Maternal (2).

The woman perceives in her gestational state physiological and psychological processes that positively and negatively modify her daily life, gestation begins when the union of sperm and egg originates a zygote, embryo and continues its development process in fetus, child, adolescent and adult (3).

Maternal health is an event that for decades has occupied and continues to occupy the attention of international, national and local health authorities, due to the impact it has on maternal mortality, which is an indicator of the health of the socioeconomic development of a country. According to World Bank data 358,0000 deaths per year constituting about 99% occur in developing countries and most of them are avoidable, since medical complications are well known to prevent or treat them (4).

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Several studies on the perceptions of pregnant women in relation to the prenatal control program have demonstrated the importance of this program for early identification of risks and prevention of complications that have increased in recent years, with pregnancy-induced hypertensive disease, hemorrhage during delivery and gestational diabetes standing out as causes of maternal and neonatal mortality (5). The medical consultation of the prenatal control program should start from the first month of pregnancy on a monthly basis until the eighth month; the last month should be every fifteen days, allowing to identify obstetric risks in a timely manner such as preeclamsia, infections, risk of premature birth, gestational diabetes among others, so that strategies can be developed jointly

with parents and the health team to improve maternal and infant conditions (6).

Since 1994, the Ministry of Public Health of Ecuador, in order to reduce maternal mortality, created the Free Maternity Law, applied throughout the Public Health System; allowing a better clinical approach to uncomplicated and complicated obstetric events that support the reduction of maternal deaths through proper clinical management, it is also important to note that pregnant women have a deficit in their knowledge regarding their rights as health users (7).

According to the Ministry of Public Health of Ecuador (MSP) 2008, approximately 300,000 women become pregnant each year in Ecuador, but not all of them will receive quality care as they should. For example, in the period 2000 - 2004, only 57.5% of women complied with the MOH standard of having at least five prenatal check-ups (8).

The maternal death rate in Ecuador, for 2018, the province of Chimborazo has the highest rate of 9.60, which means that for every 10,000 pregnant women in this province approximately 10 pregnant women are at risk of dying, followed by the province of Zamora with a rate of 5.63. In Cañar, the rate reaches 2.87, which means that for every 10,000 pregnant women in this province, 3 pregnant women are at risk of death (9).

Only 44.4% (44.4% in urban areas and 26.4% in rural areas) of women received at least one postpartum check-up. (Profile of the health system in Ecuador 2008). There are several provinces and regions in which the percentages of mothers who do not receive even one prenatal and postpartum check-up are extremely high. Imbabura, Cotopaxi, Bolivar, Azuay and Los Rios exceed 75%, even reaching 80.4%. According to the Demographic and Maternal and Child Health Survey, provinces such as Bolivar, Cotopaxi, Imbabura, Chimborazo, Cañar, Azuay, Loja, Esmeraldas and the Amazon region have percentages of institutional childbirth care significantly lower than the national percentage (18).

According to the National Institute of Statistics and Census (INEC) the direct causes of neonatal mortality are: pre-term birth (28%), severe infections (26%) and asphyxia (23%), while the most important indirect cause is low birth weight (< 2,500 g). Other indirect causes are socioeconomic factors such as poverty, poor education (especially maternal), lack of autonomy of women, limited access to health care, traditional healing practices hindering (19).

All pregnant women should have early, periodic and comprehensive prenatal check-ups, as this helps to substantially reduce the risk of maternal and perinatal death and provides adequate care during childbirth and ensures favorable health conditions for mothers and their children in the period immediately after birth, and also reduces the incidence of congenital disability. Maternal and neonatal mortality are catalogued as indicators of development and guarantee of rights; when a woman dies, it causes a great impact on the family because this scenario is disorganized, especially for the youngest children, and when a newborn die, social development is compromised, because they represent the future (1).

The quality of prenatal care should not focus solely on quantitative aspects, such as the number of visits or the gestational age at which prenatal care begins, since this makes it impossible to visualize relevant impacts on its content. Therefore, it is necessary to incorporate strategies aimed at guaranteeing prenatal care with a comprehensive and decisive approach (2, 10). Among these, educational strategies stand out. However, on this subject, researchers have observed failures in educational activities during prenatal care, since low-risk pregnant women, who regularly attend prenatal care, arrive at the last month showing a lack of knowledge about the changes derived from pregnancy and a lack of preparation for pregnancy, experiencing childbirth (11, 12).

It is during prenatal care that women should be well oriented so that they can experience childbirth in a positive way, have less risk of complications in the puerperium, and be more successful in breastfeeding (11). Information about different experiences should be shared between women and health professionals. Strategies of support groups and training visits to pregnant women's homes by specialists have been successfully implemented in prenatal care models (13). This possibility of exchanging experiences and knowledge is considered the best way to understand the pregnancy process, adding the educational component to the care and allowing greater support to the pregnant woman during the entire prenatal period, thus contributing to better obstetric outcomes (14).

Therefore, in this context, health professionals should be trained for educational work, training themselves for the changes experienced during pregnancy, playing the role of educators and health promoters (1).

Given the importance of educational strategies in prenatal care and their possible relationship with favorable birth outcomes, this study aims to present a viable alternative to promote quality prenatal care for indigenous women of childbearing age through educational intervention workshops in the Marcopamba community.

It is during prenatal care that a space for health education should be created to prepare women to experience pregnancy and childbirth in a positive, inclusive, enriching and happy way. Therefore, the creation of a space for the exchange of experiences in the group setting is an indispensable condition for the mobilization of each one's stereotypes, which helps each participant to face situations of change generated by a certain degree of distortions and fears, since they tend to "resinify" their experiences through the recognition of others and of themselves. Educational activities with pregnant women to be carried out in groups or individually should have a clear and understandable

language, in order to promote general guidelines on pregnancy care, physiological and emotional changes, newborn care, breastfeeding and family planning, as well as to involve the father, respecting the culture and popular knowledge to facilitate the active participation of the woman during childbirth (15).

There are several tools that health professionals can use for educational actions, such as lectures, posters, brochures and video conferences in this time of pandemic, both in the professional's day-to-day work and by organizing groups. The latter can develop a bond of trust between professionals and users, promoting the construction of horizontal knowledge, valuing the individual, promoting integration among all participants, thus achieving greater interest and understanding on the part of the participants (16).

Adequate prenatal care and its interaction with delivery care services are essential for good pregnancy outcomes (17). In the community of Marcopamba, no related studies have been carried out and the community leaders are supportive.

It is necessary to provide better care to pregnant women, raising their level of knowledge about pregnancy, its main complications and consequences, and it is for this reason that this research aims to carry out an educational intervention with women of childbearing age in the community of Marcopamba, with the participation of the tennis player and other health professionals, all professionals, in order to increase the level of knowledge of the participating women and help reduce complications due to the absence or delay of prenatal care.

In this sense, among the objectives of this study is to increase the practice of health education activities with indigenous women of childbearing age in the community of Marcopamba, in the canton of El Tambo, about the health education received and how it occurs during prenatal care.

Background

Several studies on educational programs related to prenatal care show scientific evidence on the quality of care and application of this program in several Latin American countries and Ecuador in general, among which the following stand out:

The study conducted in Lima Peru, on Quality of Prenatal Control in health facilities of the first level of Care of Lima authored by Garcia M., O, in 2009 determined that the quality of control is good in relation to accessibility, safety and professional training, perceived as bad in relation to factors such as: low efficiency, lack of continuity, user satisfaction, discomfort due to availability of space, the work environment perceived as tense (20).

The qualitative study conducted in Mexico in 2012 by Avila, Gloria Angeles, on education of pregnant women on the care provided in prenatal care shows results such as: pregnant women consider that rural health centers that are dispersed are not accessible due to their geographical location, indigenous women are discriminated against because they are not granted consultation, they do not respect appointments, referral to other levels of care does not give the expected results, there is no follow-up, so they seek other alternatives such as going to traditional care or not going until some risk or delivery occurs (21).

Another study conducted in Colombia in 2012 related to education on Prenatal Control of Adolescent Pregnant Women in San Cristóbal Bogotá by Mayorga, shows results such as: the pregnant adolescents perceive the prenatal care they receive as positive, because it has helped them to feel the desire to protect and take responsibility for their children, they agree that this program is essential for the optimal development of gestation, birth, delivery, postpartum, where they have found confidence, information, welfare, citing as reasons for attending the control the fact that the baby is healthy and is born in good condition (22).

Another study conducted in Cartagena, Colombia in 2014 on the satisfaction of users of prenatal care in public health institutions and associated factors by Castillo, Ávila I, et al. showed results such as: the average age of the pregnant women was 23 years, 84% said they were satisfied with the care they received, among the associated factors they perceived were the good treatment of the staff, especially the nursing staff, they belong to the urban area, and good treatment is a determining factor for adherence to the program(23).

Research conducted in Heredia, Costa Rica on the analysis of prenatal care provided to pregnant women in the Province of Heredia who gave birth at the San Vicente de Paúl Hospital found that the infrastructure for prenatal care was good, but needed to be maintained and adapted to make it accessible, There is low coverage of the program with quality criteria, the reporting of information in the card is incomplete, and the participation of professionals in prenatal care is null, especially nursing, obstetrics and gynecology, even though Costa Rican legislation recognizes that nursing and obstetrics professionals are trained to provide adequate prenatal care (24).

The World Health Organization (2015) believes that maternal care is a priority that is part of public policies as a maneuver to improve pregnancy outcomes and prevent neonatal maternal mortality. However, not all pregnant women have access to appropriate prenatal care and many do not adhere to the indications or comply with the periodicity of prenatal care (24, 25).

The WHO states the following with respect to the essential objectives of prenatal care: to maintain maternal and child health, to achieve a normal delivery and adequate parenting. In Ecuador, the maternal mortality rate is a complicated indicator to assess, due to the variety of sources and the lack of precision in the data. According to INEC, in 2009 the maternal mortality rate was 69.7 per 100,000 live births; currently it is reported at 49.75 per 100,000 live births. The main causes of mortality according to hospital discharges are gestational hypertension with significant

proteinuria, eclampsia, postpartum hemorrhage, puerperal sepsis, ectopic pregnancy and unspecified abortion (25).

In 2016, Ministry of Health facilities attended 38.5% of deliveries nationwide, a figure that by 2010 increased to 47.4%. Nationally only 30.1% of births of indigenous women occur in hospitals or health centers. More than 40% of women in the provinces of Bolivar, Chimborazo, Cañar, Cotopaxi and Esmeraldas, and 30% of women in the entire Amazon region gave birth at home. The average number of prenatal care visits was 3.3 and, of the total number of visits, only 29.9% were first-time women; coverage of non-immediate postpartum care was 41.5 (26).

Prenatal care:

It is the monitoring and comprehensive evaluation of the pregnant woman and the fetus performed by the health professional to achieve the birth of a healthy newborn, without deterioration of health. Prenatal care involves a set of actions in visits by the pregnant woman to the health facility. (27). The World Health Organization (WHO) considers maternal care a priority, which is part of public policies as a strategy to optimize pregnancy outcomes and prevent maternal and perinatal mortality (28).

Characteristics of prenatal care: Efficient prenatal care should meet four basic requirements: early, periodic, complete and with wide coverage. Early: Prenatal care should begin as early as possible (in the first trimester) because of the relationship between the gestational age at the first check-up and pregnancy outcomes. Periodic: All low-risk pregnant women should complete at least 5 prenatal check-ups (one diagnostic check-up and four follow-up check-ups) with the completion of all activities recorded in the perinatal clinical history. Complete: The minimum contents of the check-up must guarantee effective compliance with health promotion, protection, recovery and rehabilitation actions. Broad coverage: Only to the extent that the percentage of the population screened is high (ideally covering all pregnant women) will it be possible to reduce maternal and perinatal morbidity and mortality rates. Intercultural approach: The provider should have knowledge of the traditional and cultural worldview with an understanding of ancestral healing practices according to the cultural diversity of the area of care (29).

Optimal prenatal care, according to the norms of the Ministry of Public Health of Ecuador (MSP), includes a minimum of five check-ups by qualified health professionals (physician or obstetricians) during the low-risk pregnancy period (30).

Comprehensive Home Visit to Pregnant Women: The follow-up of low-risk obstetric pregnancies should be carried out in primary care. The competency profile of the specialty of family and community medicine includes the knowledge and attitudes necessary to provide care to pregnant women, preferably in collaboration with other professionals.

Maternal mortality and the morbidity associated with

its determinants are serious public health problems that reveal some of the deepest inequities in the conditions and quality of life of the population. They reflect the state of health of women of reproductive age, their access to health services and the quality of care they receive, particularly during pregnancy, childbirth and within the first hours after delivery. Among the factors most associated with maternal mortality are the place of delivery, the personnel attending the delivery, the timeliness, the place and personnel attending complications and postpartum care.

Social factors for the abandonment of prenatal care: The publications coincide in pointing out the following factors as the main determinants of access: age, schooling, occupation, social stratum, place of residence, marital status and access to social security. Another study on access to prenatal care explains that there are factors that contribute to whether or not the pregnant woman attends prenatal care, with schooling and social support (support from friends and family) being the ones that determine attendance at prenatal care.

Socioeconomic level: Although socioeconomic level in itself is not a modifiable risk factor, interventions by the health team can favor risk reduction through access to programs and benefits of the social protection system (31).

Education: The absence of health education programs, and in particular for the pregnant woman, including early recruitment of the same is reflected in the lack of knowledge of the importance of prenatal care and lack of motivation; this serious failure of the health system was reported long ago by different authors (32).

Demographic: Gestation requires maternal care, so that risks can be identified and controlled in a timely manner; this care is expected to be provided by trained health personnel. Therefore, one aspect to be taken into account within the factors that explain maternal health is the access of the pregnant family to health services, in this sense, the distance of health professionals from the population that demands care should be analyzed first. It is also known that there is a great cultural distance between the population and the health services, so that people go to them only when they feel sick. Another problem related to access to services is economic limitations and affiliation to the general social security health system (33).

Cultural: In Latin America, despite massive programs to bring childbirth to clinics and hospitals, many women, because of their cultural beliefs, continue to give birth at home with traditional midwives, often without any possibility of medical support in case of complications or emergency. "When a woman detects a sign of pregnancy, she does not go directly to doctors or health units, but to the midwife for advice and pregnancy monitoring. The midwife will apply her knowledge and if she is trained, she will explain to the patient the importance of going to a health unit for prenatal care. Positive, if she is a midwife who has participated in workshops to strengthen her knowledge" (34).

Cultural reasons for maintaining midwives: There is a belief that midwives spend more time with their patients. While consultations in public services are quick and in most cases it is not possible to attend with companions, midwives make home visits and care is supported by the warmth of home.

Essential Neonatal Obstetric Care (NEC)

The CONE strategy is a strategy that responds to the general objective of the Comprehensive Health Care Model (MAIS) that offers integrated and continuous services to the mother during pregnancy, childbirth and puerperium, as well as to the newborn/newborn up to 28 days of life, 24 hours a day, 365 days a year. It also strengthens the epidemiological surveillance system for maternal mortality and incorporates neonatal mortality defined for this purpose (35).

According to the National Plan for Good Living 2013 -2017, its objective is to improve access, timeliness, continuity and quality of care for women of childbearing age and newborns in provincial networks of essential obstetric and neonatal care, with a family, intercultural and interinstitutional approach, as well as knowledge of risks and good family and community practices to reduce preventable maternal and neonatal deaths. (36)

OBJECTIVES

General:

- Promote the quality of prenatal care for indigenous women of childbearing age, through educational intervention workshops in the Community of Marcopamba, canton El Tambo, period: 2021.

Specific objectives: Characterize the study population according to sociodemographic variables of research interest, To identify the knowledge, beliefs and practices on prenatal control of women of childbearing age in the community of Marcopamba, To elaborate an educational intervention with a preventive and intercultural approach, aimed at indigenous women of childbearing age, to increase prenatal control in the stage of the vital cycle and To evaluate the impact of the educational intervention on prenatal control in women of childbearing age in the Marcopamba community.

II. METHODOLOGY

Type of research

Quantitative descriptive cross-sectional study with a quasi-experimental design (pretest, educational intervention and posttest).

Population

The population consisted of 158 women of fertile age from the community of Marcopamba, canton El Tambo, in the province of Cañar in the area of rural residence, according to the National Institute of Statistics and Census (INEC).

Sample

Simple random sampling was used. The sample consisted of 113 women of childbearing age from the community of Marcopamba, according to the Sierra Bravo formula of 1988, the error (5%) that we made in estimating the sample size, based on a confidence level of 95%, would follow the following formula, taking Z=1.96:

Inclusion and Exclusion Criteria

Inclusion Criteria: Women of childbearing age, belonging to the community of Marcopamba, canton El Tambo, who agreed to participate in this study.

Exclusion criteria: women diagnosed with an intellectual disability and those who did not agree to participate in this study by means of the authorization and completion of the informed consent form.

Instruments

The following instruments were applied: 1) Sociodemographic survey: age, marital status, level of education, religion, occupation; 2) Survey on women's knowledge, customs and beliefs about prenatal care.

Validation of instruments

Reliability: The reliability of the elaborated instrument was determined through Combrach's Alpha coefficient, obtaining a value of 0.7433 in the study developed by Quintero (37), considering its total internal consistency as acceptable in the two data collection instruments (Survey No. 1, Sociodemographic, composed of 10 items and Survey No. 2, composed of 28 items), with minimal modifications of the surveys applied in the aforementioned study.

Validity: The instruments to be used have been validated by 2 nurses specialized in prenatal care at the Universidad Autónoma de Nueva León, Mexico, with the Prenatal Care Beliefs Scale (ECCP) (37).

Procedure

The research was carried out by accessing the sample of women of childbearing age from the community of Marcopamba. First, permission was requested from the president of the community. Subsequently, a meeting was organized with the members of the community's board of directors to inform them of the objectives of the research. Then, home visits were made for the application of the pretest.

Subsequently, a face-to-face educational intervention was carried out with small numbers of women on self-care in the face of health emergencies, which lasted 40 hours, distributed in 4 hours per day for 10 days.

Once the educational intervention was completed, the post-test was applied, taking into account the respective identification coding of each participant who had previously agreed to participate in the study.

Statistical analysis

A descriptive analysis was performed using absolute and relative frequencies and measures of central tendency for both the pretest and the posttest. Subsequently, a normality test was performed using Shapiro Wilk, with assumptions of normality and homoscedasticity (Levene's test). Therefore, a t-test for related samples was applied to evaluate the impact of the educational intervention on prenatal control in women of childbearing age in the community of Marcopamba. Statistical analyses were carried out using the infostat statistical program.

Ethical procedures

The investigators assumed the obligation to ensure that the proposed study is scientifically sound, has adequate background knowledge, and can generate valuable information. Although social and scientific value is the fundamental justification for conducting this research, the researchers have a moral obligation to ensure that all research is conducted in a manner that preserves human rights and respects, protects, and is fair to the study participants and the communities where the research is conducted. Therefore, the data obtained were confidential, thus respecting the autonomy of the research subject with voluntary acceptance through informed consent.

III. RESULTED

Sociodemographic characterization and prenatal care.

The study consisted of 113 participant's women of childbearing age from the community of Marcopamba, finding that the mean age was 28.63 with a minimum age of 17 and a maximum age of 49, 48.7% had secondary schooling, 42% reported having a single marital status, 92.9% described belonging to the Catholic religion, with regard to health services 46% went to the MSP, indicating household chores as the main economic activity of the study population (Table N.-1).

Chara	f	%		
School Level:	Elementary	21	18,6%	
	Secondary	55	48,7%	
	Third level	37	32,7%	
Marital Status:	single	50	44,2%	
	married	33	29,2%	
	divorced	3	2,7%	
	widowed	1	0,9%	
	free union	26	23,0%	
Religion:	Catholic+	105	92,9%	
	Evangelical	5	4,4%	
	Christian	3	2,7%	
Health Service:	MSP	52	46,0%	
	IESS	22	19,5%	
	Private	14	12,4%	
	none	25	22,1%	
Economic Activity:	Household chores	40	35,4%	
	Public employee	8	7,1%	
	Private employee	15	13,3%	
	Merchant	6	5,3%	
	None	19	16,8%	
F	Other	25	22,1%	

Table 1.- Sociodemographic characterization

Characterization of knowledge, beliefs and practices on prenatal care in the study population.

According to the results obtained, 36.3% of the women had one pregnancy, followed by 38.9% who had more than two pregnancies, 5.6%, and 5.4% who are currently pregnant. Of the 85 women who had a pregnancy, 64.7% went for prenatal care, with the professional in charge of prenatal care being the general practitioner with 31%, the gynecologist with 16.5%, 17.6% went to the local midwife for prenatal care, and a significant percentage of 17% did not go to any professional for prenatal care (Table 2).

Característic	f	%		
Number of achievements	Primigestation	41	36,3%	
	Multigestation	44	38,9%	
	Nulliparous	28	24,8%	
Current Gestation	yes	6	5,4%	
	No	107	94,6%	
Current Gestation Semester	First trimester	2	33,3%	
	Second trimester	3	50,0%	
	Third Semester	1	16,7%	
Do you or did you attend or did you	yes	55	64,7%	
attend a pregnancy check-up?	no	30	35,3%	
Professional who performed the	General Practitioner	27	31,8%	
prenatal check-up	Gynecologist	14	16,5%	
	Obstetrician	4	4,7%	
	Midwife	2	2,4%	
	Midwife	15	17,6%	
	None	23	27,1%	

Table 2.- Identification according to practices on prenatal control

The Prenatal Care Beliefs Scale is divided into five subscales based on the Health Belief Model: Perceived Susceptibility: The woman believes in herself that she will have a normal or risky pregnancy; Perceived Severity: The woman foresees negative effects that could occur during pregnancy; Perceived Benefits: The woman believes that prenatal care reduces the risks during pregnancy; Perceived Barriers: Regarding prenatal care, the woman believes that it is not accessible or inconvenient. For factors such as cost, opening hours, location of the health center, embarrassment,

or previous experience; Signs for Action: People or media where the pregnant woman finds information about the importance of attending prenatal care.

After the evaluation of the scale, it was determined that for perceived susceptibility, 64.6% were at a moderate level; for perceived severity, 65.5% were at a low level; for perceived benefit of prenatal care, 98.2% were at a low level; for signs for action, 75.2% were at a moderate level.

Table 3 Characterization of knowledge and beliefs about prenatal care in the study population before the educational
intervention

Levels	Do	Download Moderate		High		
	f	%	f	%	f	%
Perceived Susceptibility	38	33,6%	73	64,6%	2	1,8%
Perceived Severity	74	65,5%	39	34,5%	0	0,0%
Perceived Benefits	111	98,2%	2	1,8%	0	0,0%
Perceived Barriers	12	10,6%	84	74,3%	17	15,0%
Signals for Action	21	18,6%	85	75,2%	7	6,2%

Educational intervention

After evaluating the results obtained, it was necessary to carry out an educational intervention to improve knowledge about the importance of prenatal care.

The educational strategy used in the intervention group was educational talks given by experts at the local community center. The women received training on prenatal control and its importance, psychology in pregnancy, nutrition during pregnancy, and dental care during pregnancy, the educational intervention was based on building a bond with the participants, talking about health during pregnancy, preparation for childbirth, infant nutrition and listening to the women's ideas and concerns regarding prenatal control and working with myths and taboos. Participants related their personal experiences of pregnancy and its care or the experiences of other women in the community to rationalize the concept of prenatal care with examples of mothers from similar cultural and community backgrounds.

The development of materials for the implementation of the educational intervention was:

- Facilitator preparation program.
- Education program for pregnant women.

- Support material with basic information on prenatal control for facilitators.

- Teaching materials: audiovisual material, banners, posters, triptychs.

Assessment of the impact of the educational intervention

The differences by levels before and after the educational intervention in terms of knowledge and beliefs about prenatal care were highly significant.

In the assessment of all levels, they show that after the intervention they are in the moderate-high range. According to the perceived benefits of prenatal care, the level is high. In relation to the perceived barriers, the participants are at a moderate level. It should be emphasized that the participants perceive that attending educational talks on prenatal care is a benefit, as it is an informative option in terms of signals for action.

Table 4 Characterization of the knowledge and beliefs about prenatal care of the study population after the educational
intervention

Levels	D	Download		Moderate		High	
	f	%	f	%	f	%	
Perceived Susceptibility	0	0,0%	80	70,8%	33	29,2%	
Perceived Severity	0	0,0%	4	3,5%	109	96,5%	
Perceived Benefits	0	0,0%	16	14,2%	97	85,8%	
Perceived Barriers	5	4,4%	97	85,8%	11	9,7%	
Signals for Action	0	0,0%	24	21,2%	89	78,8%	

IV. DISCUSSION

In this study 3 objectives were established from the theoretical concept whose abstractions serve to explain the behavior of the participants. The first objective was to population study characterize the according to sociodemographic variables of research interest, with the most prevalent results of 113 participants being women of childbearing age from the community of Marcopamba, the average age was 28.63, with a secondary school level, single marital status, Catholic religion, indicating household chores as the main economic activity of the study population. Regarding prenatal care, an important percentage of the pregnant women indicated that the health service they had was the MSP where they went for prenatal care, while there was a group of women who went to the local midwife for prenatal care, with a significant percentage who did not go to any professional for pregnancy control. A similar argument is made by Castillo, et al (38) in their study on the non-compliance with prenatal visits implies multiple risks. Personal, family and social variables determine regular attendance to these consultations; 53.26% of the women reported adequate use of prenatal control. Being older than 23 years, having more than secondary education, age older than 23 years, having a job, and health affiliation are associated with adequate use of prenatal care.

The second objective was to identify the knowledge, beliefs and practices of women of childbearing age in the community of Marcopamba regarding prenatal care. After the evaluation of the scale, it was determined that the perceived susceptibility was at a moderate level; the perceived severity was at a low level; the perceived benefit of prenatal care was at a low level; the perceived barriers were at a moderate level; and the signals for action were at a moderate level. From the point of view of Andrade, et al (39), prenatal care has shown maternal benefits and has been implemented in different contexts, with education being a fundamental pillar because it improves prenatal knowledge, the model is implemented in several countries, challenges coexist from the supply and demand side, which include health personnel, material resources and organization; from the demand side, recruitment and retention of pregnant women. According to Gonzalez and Landini (40), adherence to prenatal check-ups is an essential instrument for reducing maternal and infant mortality, based on accepting women as

compliant and responsible, allowing for greater dialogue to learn about the life context of women who attend prenatal consultations.

The third objective was to develop an educational intervention with a preventive and intercultural approach, aimed at indigenous women of childbearing age, to increase prenatal care at this stage of the life cycle, which had a positive impact on the assessment of all levels, demonstrating that after the intervention they are in moderate - high levels. As Fuentes, et al (41) state, more efforts are needed in teaching during prenatal care to provide pregnant women with appropriate knowledge about health during pregnancy, always considering the cultural factor. As expressed by Cáceres (42), prenatal care is a useful strategy to detect risks in pregnancy early, thus establishing adequate management, preventing complications and preparing the pregnant woman for childbirth and child rearing. However, not all pregnant women access the prenatal care program for various reasons, most of which are beyond their control.

V. CONCLUSIONS

Knowledge of the importance of prenatal care during pregnancy is a priority for the mother and baby, since it has an effective impact on morbidity and mortality rates.

Prenatal control allows reducing complications in the health status of the mother and the product of gestation. If prenatal care is not effective, the outcome would be negative.

There are protective factors related to proper compliance with prenatal care, being personal, family, affective and socio-sanitary, which should be strengthened with nursing interventions.

The promotion of care impregnated in the culture is a strategy in nursing, so that through the recognition of the sociocultural context of pregnancy, ways of providing culturally congruent care can be identified.

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