

Reducing Rates of Cesarean Sections in Asunción, Paraguay: A Qualitative Needs Assessment

Abstract

Background: The World Health Organization recommends that cesarean section rates should not be higher than 10-15%;¹ however, 46% of births in the metropolitan region of Asunción, Paraguay occur by cesarean delivery.² The use of non-medically necessary cesarean sections increases maternal and neonatal morbidity and mortality and drains healthcare system resources.³⁻⁵ This project will work in collaboration with the Centro Paraguayo de Estudios de Población (CEPEP) to evaluate the need for an intervention that would reduce cesarean rates in Asunción, Paraguay. *Project Objective:* The purpose of this project is to understand why the rates of cesarean sections are so high in Asunción, Paraguay and to evaluate the need to develop an intervention to reduce cesarean section rates. *Methods:* This study will use qualitative research methods to assess women's and doctor's attitudes about childbirth and cesarean sections. Data will be collected through focus groups with recently postpartum women who have had vaginal or elective cesarean births as well as individual interviews with women who have had vaginal births, women who had elective cesareans, and doctors.

Background

The World Health Organization recommends that cesarean section rates should not be higher than 10-15%;¹ however, rates are rising throughout the world.⁴ Cesarean section rates throughout Latin America are 33%.⁵ In the region of metropolitan Asunción, Paraguay cesarean section rates are particularly high at 46%.²

While the use of cesareans is an effective and life-saving medical treatment for mothers who need them, the overuse of cesareans without a medical indication increases maternal morbidity and mortality, neonatal morbidity and mortality, and health-care costs.³⁻⁵ In some countries with high cesarean rates, women have not preferred cesarean sections in most cases, but rather doctors have been shown to persuade women to have cesareans for non-medical reasons.⁶ Contributing factors to doctor's preference of cesareans include convenience of performing cesarean, the association of quality of care with technology and perceptions that cesareans are safer than vaginal births.^{4, 7} At the same time, studies in Latin America and elsewhere show that women's fear of birth, high levels of prenatal anxiety, family and social pressures, and availability of technology may lead women to prefer cesarean delivery.^{5, 8}

Repeat cesareans also contribute to high cesarean rates. Cesarean deliveries present subsequent challenges for future births, which often lead to repeat cesareans. Therefore, preventing a first cesarean birth potentially prevents cesarean deliveries at higher birth orders as well. Potential interventions to prevent first cesarean birth include an increase in childbirth education which would incorporate knowledge about relaxation methods and techniques for how to cope with the pain of childbirth, childbirth preparation, and active support during pregnancy and labor.⁸ In addition, since doctors in Asunción are not currently performing vaginal births after cesareans (VBACs),ⁱ a VBAC training program

ⁱ Mercedes Milan, email to Karen Andes, February 23, 2010

could also potentially decrease the high rate of cesareans in Asunción if women who have had one cesarean delivery are subsequently assumed to need to deliver by cesarean. However, in order to decide whether or not an intervention is necessary and what would be appropriate, it is essential to have a better understanding of the factors underlying the high cesarean section rate.

This project will work in collaboration with the Centro Paraguayo de Estudios de Población (CEPEP), an organization dedicated to the improvement of women's reproductive health in Paraguay. With the assistance of CEPEP, this project will evaluate the need for an intervention that would reduce cesarean rates in Asunción, Paraguay. Qualitative methods will be used in order to assess the perceptions that women and doctors have about cesareans and the need for a possible intervention to reduce the high cesarean rates in Asunción.

Problem Statement

There exists a large gap between the World Health Organization's recommended cesarean section rate of 10-15%¹ and the cesarean rate of 46% in metropolitan Asunción, Paraguay,² indicating that some of the cesarean deliveries that are taking place in Asunción are medically unnecessary. High rates of non-medically indicated elective cesarean sections have been associated with a greater risk of maternal and neonatal mortality and while also representing a drain on resources, especially in resource-poor settings.³⁻⁵ With such high cesarean rates in Asunción, a qualitative needs assessment is necessary in order to determine whether or not a program to reduce the rate of cesarean sections should be implemented.

Project Objective: The purpose of this project is to understand why the rates of cesarean sections are so high in Asunción, Paraguay and to evaluate the need to develop an intervention to reduce cesarean section rates.

Aims

1. To understand the attitudes that recent postpartum women had about vaginal births and cesarean sections during their last pregnancy.
2. To identify the reasons why some women choose vaginal birth and why others choose cesarean sections.
3. To assess whether the preference for cesarean sections comes from women, doctors, or both.

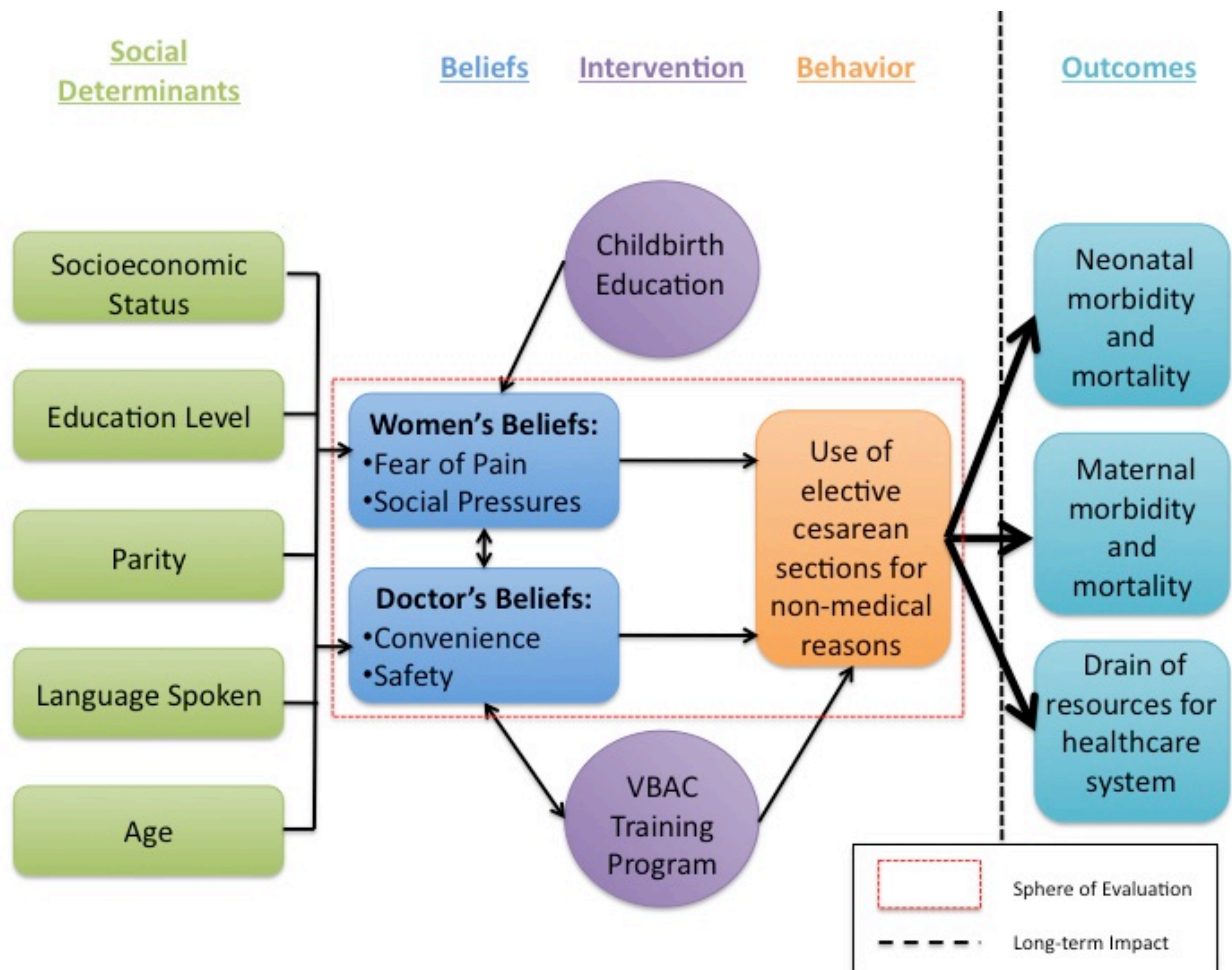
Research Questions

1. What are the general perceptions that women have about elective cesarean sections and vaginal births?

2. What differentiates women who prefer cesarean sections from women who prefer vaginal births?
3. Why do some women in Asunción prefer elective cesarean sections over vaginal births?
4. What are locally recognized indicators for medically necessary cesarean sections and why do some doctors decide to recommend elective cesarean sections?
5. Would primary prevention and/or VBAC training be considered appropriate potential interventions among doctors and women of childbearing age?

Conceptual Framework

The use of elective cesarean sections in Asunción, Paraguay are very high, which could lead to higher rates of maternal and neonatal morbidity in addition to increased health-care costs. Social determinants, such as socioeconomic status, education level, parity, language spoken, and age contribute to beliefs about childbirth. The sphere of evaluation in this study is to examine women’s and doctor’s beliefs and the way in which they impact the use of elective cesareans. Potential interventions to reduce the cesarean rate include childbirth education and a VBAC training program.



Design and Methods

Project Background and Context

This needs assessment will be conducted in collaboration with the CEPEP, an organization dedicated to the improvement of women's reproductive health in Paraguay. This project will use qualitative research methods to better understand the attitudes and experiences of women giving birth in Asunción, Paraguay and to understand doctor's preferences for type of delivery.

Project Site and Study Population

This study targets middle-class recent postpartum women over the age of 18, who currently live in the Asunción metropolitan area. Even though the highest rates of cesarean sections take place within the women of the highest socioeconomic status, the potential need for intervention impacts a wider range of women and therefore this study will focus on middle-class women. The target population for this study is women who have given birth within one month; however, if recruitment proves difficult, criteria for participants will gradually expand to include women who are three months postpartum and then six months postpartum. Shorter postpartum periods are preferred to ensure that women still clearly remember birth experiences and feelings that they had during pregnancy.

Recruitment of postpartum women will mostly take place at the CEPEP clinics in Asunción, where prenatal and postnatal services are provided. Access to public and private clinics for recruitment will also be available through contacts at the Instituto Nacional de Salud (INS) and the Universidad Nacional de Asunción (UNA).ⁱⁱ A brief screening will be used for recruitment. Screening will exclude women who are under the age of 18, who are currently pregnant, and who had a cesarean at their last birth due to a previous cesarean delivery. Women who had emergency cesarean sections will also be excluded from the study, since the focus for this study is elective cesareans.

Obstetric gynecologists or other doctors that deliver babies in Asunción, Paraguay will also be included in this study. Doctors will be recruited through CEPEP, the INS, and the UNA. Doctors will be eligible for this study if they are currently practicing and have performed at least one vaginal birth or cesarean delivery within the month prior to the interview.

Project Design and Methods

Focus Groups

In order to better understand the general perceptions that women have about vaginal birth and cesarean sections, focus groups will be conducted. Focus groups are a qualitative method typically used to understand community norms and ranges of opinions. There will be 4 focus groups with 6-8 recently postpartum women in each group. Women

ⁱⁱ My advisor, Karen Andes, has an active partnership with the Instituto Nacional de Salud and the Medical School of the Universidad Nacional de Asunción, funded by the USAID mission through Higher Education for Development.

who have had elective cesarean sections and women who have had vaginal births will be included in the same focus groups in order to foster the expression of differing perceptions and develop deeper insights into why there are varying opinions about different medical interventions during childbirth. A moderator who speaks both Guarani and Spanish will conduct the focus groups because colloquial Paraguayan Spanish typically includes considerable Guarani vocabulary. The moderator will be a woman recommended by CEPEP and will be trained by the researcher. The researcher, who is fluent in Spanish, will assist with the focus groups as a note-taker. The focus groups will last approximately 90 minutes and will be held in a private office space at the CEPEP facilities or another nearby location.

Focus groups will be used to help understand women's perceptions about childbirth. Key topical areas, or domains, of the focus groups will include women's feelings of fear around childbirth, women's exposure to childbirth education prior to giving birth, ways in which women prepare for birth, women's preferences about vaginal births vs. cesarean sections, and women's feelings about the possibility of having a vaginal birth after a previous cesarean delivery.

Individual In-Depth Interviews with Women

In order to understand why women elect to have vaginal births or cesarean sections, information about women's birth experiences will be collected in 20-25 individual in-depth interviews. These interviews will include 10 interviews with women who had vaginal births and at least 10 interviews with women who had cesarean sections. Recruitment will focus on women who had elective cesareans. Theoretical sampling will be used after the first 10 interviews with women who had cesareans in order to look for respondents who could fill the gaps in the data, which may include women who had intrapartum cesareans without medical indication. This will potentially provide additional insight into how women and their physicians make decisions during labor, which may differ from their original intentions to give birth vaginally. These criteria will be based on the experience of the woman's most recent birth.

Interviews will last approximately 60 minutes and will take place in a safe and confidential space in CEPEP facilities, women's homes, or another convenient and appropriate location. Women will be offered the option of being interviewed by the researcher in Spanish or by a trained interviewer, who is also fluent in Guarani, prior to beginning the interview.

Domains of the individual in-depth interviews with women will include the history of their last pregnancy and birth, childbirth education, decision-making about vaginal versus cesarean delivery, their relationship with their doctor or other providers during pregnancy and delivery, their social support during pregnancy and birth (including partners and others), experience of recovery after birth, future childbearing and delivery intentions, including reactions to the idea of a VBAC if the pregnancy in question was delivered by cesarean.

Individual in-Depth Interviews with Doctors

Information on doctor's opinions about childbirth and cesarean sections will be gathered during 10 individual in-depth interviews of approximately 40-45 minutes. While focus groups might be more appropriate to gain a better understanding of doctors' beliefs, individual in-depth interviews are more practical because of the doctors' schedules. The researcher will conduct the individual in-depth interviews with doctors.

Domains for the doctor interviews will include doctors' preferences for birth, doctors' attitudes about performing cesareans, reasons why doctors use cesareans, other medical interventions that are commonly used during birth, doctors' opinions on the pros and cons of cesarean sections, doctors' ideas on the safety of cesarean sections and other medical interventions, and doctors' feelings toward the idea of a VBAC training program.

Data Analysis

Focus groups and interviews will be recorded with participant permission and transcribed verbatim as soon as possible after each focus group or interview occurs. If needed, an assistant will be trained to transcribe recordings and provide translations for Guarani words used within the transcribed text. The researcher will review all transcripts and request clarifications/modifications as needed prior to departure in order to ensure the quality of the transcriptions. Analysis will take place upon return to Atlanta using MAXqda2007 software. The analysis will identify key themes in order to systematically assess the content of the data, including any patterns that may occur. The researcher will enroll in the qualitative data analysis course offered at Emory University in Fall 2010 in order to gain the skills to appropriately analyze the data.