Understanding Repeat Cesarean Births among Mexican Migrant Women in California and Mexico: A binational approach

Background

Unnecessary cesarean deliveries pose significant health, economic, and psychosocial burden to women, and deny them the opportunity for a safe, vaginal birth. Mexican women who migrate to the US (to perform seasonal work or to accompany partners engaged in seasonal labor, for example) are at especially high risk of undergoing unnecessary repeat cesarean deliveries because it is extremely difficult for US doctors to obtain women's medical records from Mexico and thereby document clinical information that could be used to assess if a woman would be eligible for a vaginal birth after cesarean (VBAC). Without access to Mexican women's medical records, a VBAC delivery cannot be considered, regardless of medical factors associated with patient's current pregnancy or with her preferences. Medical records document health factors that may have led to a prior cesarean delivery and note the type of uterine incision made for the first cesarean (low transverse versus deep fundal); if there is no medical indication for a cesarean birth, and if a low transverse incision was made during the previous cesarean, then a woman could undergo a VBAC safely.

Binational studies

California

In California, our colleagues have determined the extent to which medical records of Mexican migrant women who have had a cesarean delivery in Mexico are: a) requested and not received; b) requested and received too late for a VBAC to be performed, or c) are not requested at all (and the reasons they are not requested). Our UCSF co-principal investigators collected data in a sample of clinics that provide prenatal care services to underserved migrant communities in the Sonoma and Monterey Counties. They also carried out in-depth interviews with migrant women could not obtain their records during their pregnancies, to learn the context surrounding their previous cesarean delivery (most likely in Mexico), to better understand their attitudes towards the current repeat cesarean delivery (as well as the psychosocial impact of this delivery), and to hear their perspectives on the possibility of carrying a health card containing information on their obstetrical history. These results will be presented by our UCSF colleagues in a separate document.

Mexico

Because unnecessary repeat cesareans among US-based Mexican migrant women is a binational problem, our study has focused on documenting current cesarean practices in Mexico. In recent years, cesarean rates in Mexico have increased dramatically, in some settings accounting for up to 50% of all births, while the World Health Organization recommends that cesarean deliveries should not exceed 15%. A study estimates that cesarean sections are the most frequently performed surgical procedure and the number one reason for hospitalization in

Mexico. Because it is unlikely that women living in California who have had a prior cesarean delivery in Mexico can obtain medical records during their prenatal care, women and their physicians can't be sure what type of incision was made. We aimed at determining the prevalence of low transverse incisions in a sample of hospitals in areas of Mexico where large numbers of immigrants originate by carrying out a medical records review.

In addition to estimating the prevalence of low transverse incisions, we wanted to better understand Mexican women's and Mexican providers' attitudes towards cesarean births. The majority of cesarean sections preformed in Mexico are a result of cephalo-pelvic disproportion, history of a cesarean section, and fetal distress. Yet, the alarmingly high cesarean rates in Mexico suggest that many of these procedures are elective. Women may choose to have a cesarean section for various reasons including fear of pain with a vaginal birth, avoidance of undesirable effects of vaginal births, or because they perceive a cesarean section as the safer option. However, recent studies in other Latin American countries (such as Brazil), indicate that the high rates of cesarean sections are probably associated with physician's preference, rather than women's demand. As a final piece of our Mexican research study, we used qualitative methods to explore women's attitudes about cesarean births, including desire for a VBAC in a subsequent birth, as well as providers' attitudes about cesarean deliveries and their ideas for facilitating a Mexican migrant woman's eligibility for a VBAC in the United States.

Summary of research results

a) Medical records review

We conducted a retrospective medical records review in order to estimate the prevalence of different incision types for women who underwent cesarean deliveries in a sample of Mexican public hospitals (based in cities of origin of Mexican migrants in the California sample). We reviewed 1441 (86%) of the registered cesarean sections during 2000 in the five IMSS Oportunidades regional hospitals of the state of Michoacan and found that all records contained complete information[1] regarding the cesarean delivery and all uterine incisions were of the low transverse type.

b) Qualitative interviews with Mexican women

We conducted 10 in-depth interviews with Mexican women to understand their experience with, and attitudes towards cesarean deliveries. Our interviewees were all women living in areas of high migration in Michoacan, who had had at least one prior cesarean delivery and had either migrated themselves (n=2) or had a close family member who had migrated (n=8). Most of the women knew why their deliveries had ended in a cesarean section but only one woman had information on the type of uterine incision that had been practiced. We also wanted to find out what physicians had told women about the significance of having had a cesarean section for future births, in terms of delivery method and spacing of pregnancies. We found out that women had not always received this type of information and only two of them knew of the possibility of a VBAC for a subsequent delivery.

[1] Complete information was defined as containing data on the type of uterine incision and reason for conducting the cesarean section.

When women were asked to compare vaginal deliveries and cesareans, nine out of ten thought that a vaginal delivery is best for the woman because a vaginal delivery is the "desire of every woman", is less traumatic, recovery is quicker and there is less dependency on others, while a cesarean was thought to be painful and risky for the mother's life. The only woman that reported preferring a cesarean if she became pregnant in the future thought *"for me [a c-section] is better because a vaginal delivery hurts more than a cesarean."* Only one woman believed that a cesarean section was better than a vaginal delivery for the baby.

c) Qualitative interviews with physicians

We conducted 5 in-depth interviews with physicians in participating hospitals to document their attitudes and practices about cesarean sections in Mexico. Physicians agreed that the low transverse incision is the most common uterine incision practiced. Even though they all agreed it was possible to have a VBAC after a cesarean with a low transverse incision, none of the interviewed physicians spontaneously mentioned that knowledge on the type of uterine incision was a determinant for a vaginal delivery in these circumstances. When asked about the importance of registering the type of uterine incision in medical files, three of the doctors mentioned the future risk of uterine rupture with a deep fundal uterine incision. However, none of the physicians mentioned the importance of this information in the context of limiting a woman's opportunity for a VBAC *"if we conduct a deep fundal [incision] we will limit the patient's reproductive ability… in the sense that if she becomes pregnant again, we will have a high risk for surgical scar rupture."*

None of the physicians had had previous experience with migrant patient medical record exchange across the US-Mexico border. Most claimed that they have never had a need to obtain information from the US nor received requests from abroad. Physicians suggested the use of electronic web sites as a way of sharing this information and one doctor mentioned the possibility of using existing health cards, such as the Ministry of Health's national women's health card or the IMSS women's 20-59 year card, for this purpose.

With both women and providers, we also explored attitudes regarding the design of a new health card for women, adapted to migrant women's needs, or other strategies to improve the availability of information on Mexican women's birth history. We began by showing them the existing migrant health card, introduced by the National Ministry of Health during 2004, which no one had seen or used before. Physicians agreed in that they thought a health card was a useful way of sharing a patient's medical history and could be used as a strategy to share information across the border. Women's comments and insight on potential uses of the health card in this context were limited.

Conclusions and implications of research findings

100% of the cesarean section medical files that were reviewed in Mexico documented low risk uterine incisions that would allow for a VBAC delivery. This information provides a crude estimate of the high proportion of Mexican women who would be eligible for a VBAC if their medical records were accessible when they migrate to California. Enabling access to this information would not only contribute to reverse the cesarean section epidemic but it would potentially increase the VBAC rates among Latina women in California. Researchers have speculated that one reason why Latina women in California have

relatively lower VBAC rates compared to other US women is that they may have had a prior c-section in Mexico, making it difficult for physicians to obtain their medical records.

We have no evidence of existing mechanisms for clinical information exchange across the US-Mexico border from the findings of this study. The need for these mechanisms is not only justified by the implications of the lack of information on cesarean sections practiced in Mexico but by other conditions where careful follow-up is crucial for successful management, such as infectious diseases like tuberculosis. It is in the best interest of both countries to involve decision makers in the implementation of cross-border information exchange strategies.

Strategy for distributing results

Early in the year, on March 3 and 4, preliminary results of this study were presented at the "*XI Congreso de Investigacion en Salud Publica"* at the National Institute of Public Health (INSP) in Cuernavaca, Mexico. Mexican co-PIs recently hosted the first of two expert binational meetings in order to develop a strategy to facilitate the exchange of medical records for migrant Mexican women across the US-Mexican border. This meeting was held at the Population Council´s Mexico City office, on June 5, 2005. Our results were shared with 22 policymakers and other NGO and research institution representatives in Mexico (see attachments for list of participants and agenda). A second meeting will include policymakers in California this fall. Our findings will also be presented at the American Public Health Association's 133rd Annual Meeting in New Orleans, November 5-9, 2005 and we plan to further disseminate our results in an academic publication by December, 2005.

Use of results

Taken together with our colleagues´ findings in California, we hope to provide enough evidence to initiate a binational dialogue on this topic, identify promising ideas for future research and interventions, and promote ongoing institutional collaborations. Although we have not yet identified potential sources of funds, we plan to build on our research findings with a new research proposal. This project is one of the Population Council's priority areas of work.