Debate on the paper by Leal et al.
Debate sobre o artigo de Leal et al.
Debate acerca del artículo de Leal et al.

Beliefs and misbeliefs about current interventions during labor and delivery in Brazil

The study Birth in Brazil represents a real landmark for the field of scientific research on the topic of maternal and perinatal health. It arose from a specific Brazilian research call (Edital 057/2009 from CNPq/Decit) which asked for a nationwide survey on the consequences of mode of delivery for the health of both mother and child. At that time I led another proposal also submitted to this call. The winning proposal, this that the article currently under debate refers to, was led by Leal et al. I want to congratulate her and her team on the excellent work they performed. This indicates that the decision the examining committee took at that time was appropriate. To the best of my knowledge this is the first comprehensive assessment of childbirth conditions for a sample representative of the Brazilian population to which we have access.

Among the countless possibilities for analytically approaching the huge amount of data they have, we are now focusing on “Obstetric Interventions during labor and childbirth in Brazilian low-risk women” as highlighted in this issue of the journal. This research used the full sample from the original study with information on 23,894 women and then selected those that could be classified as low risk by excluding diagnosis of hypertension, diabetes, obesity, HIV-positive, gestational age outside the 37-41 week range, multiple pregnancy, non-vertex presentation, birth weight below 2,500g or above 4,500g, and inadequate birth weight for gestational age, remaining with around 57% of low risk women in the sample. Additionally, depending on the topics focused in analysis regarding labor and vaginal birth, women who did not enter into labor and those who had cesarean section were also excluded. Although following a framework design typical for a cross sectional study, some information from these women was gathered at 45 days and six months postpartum through telephone interviews. This could be a weak point of the study considering we have no information on dropout rates for these two additional data collection periods and this could have introduced a selection bias, taking into account the practical difficulties and the usual relatively high rates of unsuccessful contacts at least in Brazil.

The article deals with practices during childbirth, not all of them with strong evidence to support its use or recommendation for non-use, as well as with the unnecessary use of technologies and interventions that could even cause harm to both mother and fetuses, and the excessively high rates of cesarean section among these low risk women, and hypothesizes that in spite of the high coverage of hospital deliveries in Brazil, the quality of obstetrical care is generally low. It showed that among those recognized as best practices in labor among low risk women, including eating and mobility during the first stage of labor (dilation period), use of non-pharmacological methods for pain relief and the appropriate use of partograph to monitor the evolution of labor were poorly implemented countrywide, and provided to less than half of the women entitled to receive them. This is in fact important and I fully agree with this approach. Even if these practices or interventions were not recognized as effective in reducing risks of adverse events for mothers and children, they could anyway be recommended because they are not harmful at all and are related to women’s wellbeing, have good acceptance and could be understood as a full package of humane practices and attitudes for delivering women. In the same category the presence of a companion of her own choice could and should also be included, but for the current study this will be focused elsewhere.

On the other hand the article also deals with the alleged high rates of obstetric interventions used for these low risk women and assumed to be unnecessary. These include the use of intravenous catheter, oxytocin, amniotomy, epidural analgesia, uterine fundal pressure, episiotomy, cesarean section delivery, and lithotomy position for vaginal birth. All of them shown to be very often used in this population and only 5% of vaginal births among women occurred involving none of these interventions. Surprisingly for me the use of instrumental vaginal delivery, especially forceps, was not addressed at all in this topic. There is some evidence that the prevalence of forceps as a way of terminating pregnancies in Brazil is continuously decreasing at least during the last decade, showing that it was probably not necessary in those cases, with some potential harmful effects. I understand this as a positive fact that is not even mentioned. Although understanding that the female population we are talking about refers to low risk pregnant women, some other
additional conditions that could increase the risks associated with delivery were not taken into account, for instance the presence of a previous cesarean uterine scar which is highly prevalent among Brazilian women, high parity that is still found in the northern and northeastern regions of the country, and the use of drugs which is becoming more and more frequent among women from the outskirts of big cities in Brazil. It would be worth taking these points into consideration in subsequent studies that draw on this wonderful and powerful database.

Even for low risk women, there is a general international acceptance that these interventions are medically justified and therefore could not be classified as unnecessary interventions for a relatively low proportion of women. This is the case, for instance, of peripheral venous access and use of oxytocin (around 10–20% for cases needing an induction of labor or cervical augmentation), amniotomy (around 20%, not for AMOL – active management of labor – but for correcting some dystocias spontaneously appearing during labor), episiotomy (around 25–30% when the perineum is judged to be not elastic enough), or even cesarean section (around 15% is the most conservative figure traditionally recommended by WHO). To obtain a more realistic overview of our national current situation, I believe all these conditions and practices should be considered. Even with this, I am sure that the rates of use of recommended practices will still be low and those of use of non-recommended practices will still be high. But this is important in order to keep a balance between the most conservative and the most innovative approaches for obstetrical care.

However there are two issues that still need to be addressed, perhaps involving a more conceptual and philosophical view of the problem. The first refers to the use of epidural analgesia for labor. Unless the great majority of women experiencing labor state it is in fact not painful, and that it is easily manageable only with non-pharmacological pain relief methods, which of course is not case, I will never accept epidural analgesia in the list of unnecessary and potentially harmful obstetrical interventions. It represents in fact a dramatic improvement in modern obstetric care which enabled women to experience labor and delivery in a much more humane, painless and comfortable way with a companion of her choice. When appropriately recommended and performed basically and practically it only has advantages. This is the reason why it is in fact recommended as a practice for women in labor even by the Brazilian Ministry of Health 2. Whenever a woman requests it, of course, it should be extensively and freely provided and should then be used instead as a positive point in any evaluation of the quality of obstetrical care.

The second and last point to be stressed refers to the use of uterine fundal pressure. Nowadays it probably sounds like heresy, however somebody needs to start such a discussion. We are probably misled by what could be called anecdotal reports (in the media or even in the scientific literature) of women suffering obstetrical violence with care providers performing what is commonly known as the Kristeller maneuver using both their arms, or even knees, to push the uterine fundus to complete the second stage of labor, sometimes with serious adverse consequences such as hepatic rupture and hematoma of the abdominal wall. Certainly I am not crazy enough to defend such a practice. However, we should be cautious when using the term “uterine fundal pressure” and its real meaning in the context of good obstetrical practice. I am talking about a smooth and controlled fundal pressure with both hands (not arms nor legs nor knees) in selected cases with a prolonged second stage of labor and no cephalic-pelvic disproportion, to be applied with the consent of the woman in order to avoid an unnecessary instrumental delivery or even cesarean section and performed by a skilled professional. In fact the evidence already available on this topic does not support any kind of recommendation in favor of or against its use while more seriously performed trials are available for conclusions 3.

These two points are certainly misbeliefs that deserve at least additional discussions and well-designed studies to support their real role in the range of obstetrical procedures to be used for the wellbeing of women and their children.