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An Analysis of the Pregnancy and Childbirth Experiences Through Cultural and Mathematical Lenses

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An Analysis of the Pregnancy and Childbirth Experiences Through Cultural and Mathematical Lenses.

Maria Teresa Lopez-Flores Language, Literacy, and Sociocultural Studies

Being pregnant and giving birth is one of the most personal experiences. Nobody else but the pregnant woman can feel what she is feeling. However, her experiences during this process are highly influenced by her sociocultural context. In this, as in many other human activities, mathematics is present with or without realizing it. According to Frankenstein (1997), "mathematics occurs in contexts, integrated with other knowledge of the world" (p. 13). This project explores the mathematical and cultural practices that are embedded in the process of pregnancy and childbirth within two different sociocultural contexts: traditional Mexican *parteria* (midwifery) and western medicine, and the influence of context on this process. Specifically, this poster intends to emphasize how mathematics influences the same process differently contingent to the sociocultural context.

On the one hand, to explain the "normal labor" process, western medicine relies on mathematical concepts and terms such as internal fetal rotation and cervical dilatation. These terms and concepts, although relevant if used as general guidelines, are generally being overused causing healthcare providers to resort to technology and medical interventions when women do not progress at the "expected" pace. On the other hand, traditional Mexican *parteras* (midwives) use their empirical inherited knowledge, which is embedded with nuanced and multifaceted mathematical concepts and practices. During the poster presentation, the mathematical and cultural practices in both sociocultural contexts will be discussed. The impact that those practices have on women's experiences in the process of pregnancy and childbirth will also be discussed.

Frankestein, M. (1997). In addition to the mathematics: Including equity issues in the curriculum. In J. Tentacosta (Ed.), *Multicultural and gender equity in the mathematics classroom: The gift of diversity* (pp. 10-22). Reston, VA: National Council of Teachers of Mathematics.