

Biomedicalization's Effect on Traditional Yucatec Mayan Reproductive Practices & Medicinal Plant Use

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Abstract

In this study, I examine Yucatec Maya women's experiences with the reproductive cycle regarding medicinal plant use as well as traditional cultural practices and beliefs. Medicinal plant use in general is still very prevalent in rural communities of Yucatan, Mexico due to the lack of biomedical healthcare accessibility, transportation, and costly fees of care. Maya women and traditional birth attendants use medicinal plants throughout the female reproductive cycle as needed to manage pain, inflammation, and for prevention against culturally important illnesses. Mayan plant practices have begun to be implemented into the biomedical healthcare system within the past few decades in search of new pharmaceuticals as well as for cultural accommodation. During pregnancy, childbirth, and the postpartum period Maya mothers follow strict traditional dietary guidelines and lifestyles, such as the "hot" and "cold" food system which is one of the most prominent beliefs observed in the Yucatan. Various cultures around the world adhere to similar practices and beliefs during the pre-, peri-, and postnatal periods, such as pregnant mothers in parts of Asia, the Middle East, and Europe. To emphasize the use of traditional cultural reproductive practices, I will conduct a cross-cultural comparison of these beliefs as well as how they differ in this study.

Objectives

The goals of this study were to examine how biomedicalization has affected the frequency of medicinal plant use and traditional cultural practices during pregnancy among Maya Yucatec women. In the past few decades, biomedical care has reached more regions allowing for more individuals to acquire care in hospitals. Many rural communities still do not have adequate access to biomedical clinics, so they must rely on *parteras* and medicinal plant use to maintain health during pregnancy (Anderson et al. 2004). Traditionally, medicinal plants have been used in Mayan culture since pre-Hispanic times to control pregnancy pains and ward off culturally important illnesses, but gradually ethnobotanical knowledge has been declining generationally due to biomedicalization and globalization (Hopkins et al. 2015). In this study, I analyzed the percentage of mothers who reported taking medicine supplied by clinics as compared to those who used medicinal plants during their pregnancies. I am also interested in traditional Maya prenatal practices, such as the strict dietary guidelines of the "hot" and "cold" food system. It is accepted in traditional practice that mothers are susceptible to cold illnesses that result in birth complications, such as a child being born underweight (Anderson et al. 2004). To combat this, *parteras* encourage mothers to eat "hot" foods, which are higher in calories, proteins, and fats (Manderson 1987). I hypothesize that even though the spread of biomedicalization and globalization have caused a decrease in traditional Maya practices followed during the reproductive process, rural communities still rely on these practices such as medicinal plant use and *parteras* assistance due to their lack of access to modernized services.

Methods

To answer the research questions, a literature review on reproductive medicinal plant use and traditional practices and how biomedicalization has affected these factors was carried out. Interviews were conducted between 2018 and 2020 in two villages, Coba (n=19) and Saheb Mucuy (n=28), located on the Yucatan Peninsula in Mexico. Qualitative interviews were conducted by Dr. Krumrine, Jessica Friedman, and Isabella Leech for a broader project of studying the growth and health of Maya children in the Yucatan. Researchers interviewed informants regarding birth location, dietary changes, and medications/herbs taken during pregnancy. According to the 2020 census, Coba has a population of 1,738 while Saheb Mucuy is home to 596 inhabitants (City Population 2020). Both rural villages are over 45 minutes away by vehicle from the closest city, Valladolid, which is not accessible to many. Three graphs were made using Microsoft Excel to examine the research questions. Figure 1 compares the percentage of biomedical doctors and *parteras* used as birth assistants in Coba and Saheb Mucuy. Figure 2 represents the dietary changes recorded in pregnant mothers in Coba. Figure 3 examines medicines provided by clinics and plants used during pregnancy in Coba.

Conclusion

Parteras assistance during childbirth were more likely to occur in Saheb Mucuy than Coba, which is most likely because individuals in Coba have more access to transportation and money to pay for biomedical care. About half of the women in Coba stated that they modified their prenatal diet with most changes referring to eating more natural, healthy sustenance and cutting out processed foods. These prenatal dietary shifts do not necessarily follow the traditional "hot" and "cold" food system but are more likely due to the influences of biomedicine on healthy eating patterns during pregnancy since Coba has more access to modernized services. Over half the of women in Coba also reported consuming vitamins, which came from a clinic, as well as some using medicinal plants during pregnancy. This is likely due to biomedicalization's influence on the community and the culture's ethnobotanical roots. These findings correlate with my hypothesis that rural communities still rely on traditional knowledge and practices since they are less globalized and lack access to modernized services.

References

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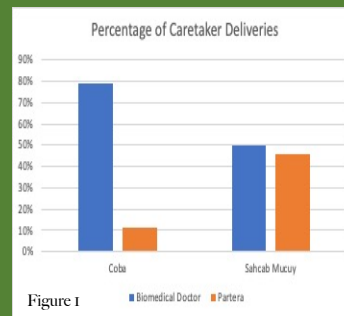


Figure 1

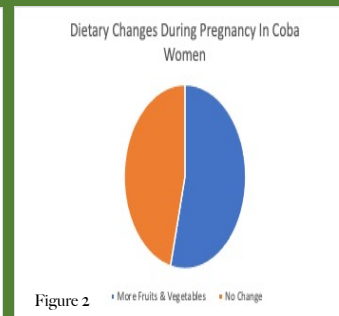


Figure 2

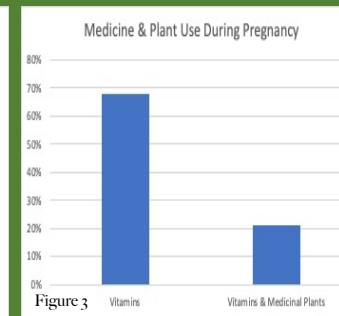


Figure 3

Results

According to the data collected in Coba and Saheb Mucuy, most children are born to biomedical doctors in hospitals. Figure 1 shows that 15 (79%) women in Coba, which has almost three times as many inhabitants as Saheb Mucuy, have physicians present for childbirth as compared to 14 (50%) women in Saheb Mucuy who gave birth in a hospital. Figure 2 represents the number of mothers in Coba who reported dietary changes during pregnancy. The data collected demonstrated that 7 (37%) out of 8 women who changed their diet, reported eating more fruits and vegetables. Additionally, 6 (32%) women reported no changes to their diet. Figure 3 demonstrates the percentage of mothers who consumed medicines and/or plants during their pregnancy. All 13 (68%) women who reported taking medicines or herbs stated that they all consumed prenatal vitamins. One informant stated that she obtained vitamins from a clinic. 4 (21%) women reported using some sort of medicinal plant along side consuming vitamins, such as mint for nausea, chamomile, and jaro (also known as arum lily). One informant stated that herbs are not being "used as much anymore" and that ethnobotanical knowledge is "not being transmitted to the next generation."