

ARTICLES

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“Women Come Here on Their Own When They Need To”: Prenatal Care, Authoritative Knowledge, and Maternal Health in Oaxaca

Physiological and anatomical concepts about reproduction held by traditional midwives in Southern Oaxaca differ considerably from those of biomedicine. Government training courses for traditional midwives disregard these deep-seated differences, and also the underlying conceptual rationale of ethno-obstetrics. These courses constantly reinforce and actively promote the biomedical model of care. But rural midwives, despite these training courses, do not substantially change their obstetrical vision and ways. The strength of their own authoritative knowledge, fully shared by the women and men of their communities, allows them to continue their traditional style of care, despite pressures to conform to biomedical values, beliefs, and practices. Suggestions for a mutual accommodation of biomedical and midwifery approaches to prenatal care include training medical personnel in ethno-obstetric techniques and rationales, teaching midwives basic medical interventions, addressing in intervention programs all social actors participating in reproductive decision making, and adopting an interdisciplinary approach that includes nonmedical aspects of maternal care. [authoritative knowledge, ethno-obstetrics, traditional midwives, prenatal care, maternal health, Mexico]

In the state of Oaxaca, as in many other Mesoamerican regions, traditional and empirical *parteras* (midwives) continue to attend the great majority of births (Buekens et al. 1990:680; Cosminsky 1986:79; Population Information 1980:35; Zolla 1983:25–26), especially those that occur in peasant and indigenous

rural areas. In many Oaxacan rural communities the kind of perinatal care these midwives provide, referred to in this article as "ethno-obstetrics" (McClain 1975), is usually deeply embedded within its own explanatory model in which obstetric knowledge is collectively valued as the result of long years of practice and accrued hands-on experience.

This article focuses on prenatal care as taught in certification training courses and as actually practiced by midwives in their communities. It addresses the interplay between the hands-on authoritative knowledge of traditional midwives and the biomedical system. After describing the reasons behind national health authorities' increasing interest in traditional midwifery over the last two decades, I turn to the results of that interest—institutional training courses for traditional midwives—and examine their explicit and implicit rationales, objectives, and methodology. Using ethno-obstetric data gathered in southeastern Oaxaca between 1986 and 1988, I show the substantial conceptual differences, as midwives experience them, between the biomedical prenatal care taught during "training" and the kind of care midwives actually provide to pregnant women. I link these different realities to Jordan's (1993[1978]) concept of "authoritative knowledge" in distinct settings. Finally, I discuss the relevance of these ethnographic findings for maternal health care (MHC) policy.

National Health Policies toward Traditional Midwifery

In Mexico, health policy makers ignored or blatantly condemned all traditional medical practices, including midwifery, well into the mid-1970s.¹ The concern of policy makers was the rapid and widespread "modernization" of the health care system due to a systematic introduction of, and exclusive reliance on, biomedical medicine and modern technology.² This strategy was pursued in spite of the government's inability to provide coverage to large sectors of the population (COPLAMAR 1985; López Acuña 1984).

Since the late 1970s, and in response to a more favorable climate for the recognition of traditional medicine at national and international levels, Mexican health authorities have officially moved from denial and rejection to partial acknowledgement and acceptance (IMSS, Coordinación General 1983a, 1983b, 1983c, 1983d, 1983e). Nonetheless, efforts to legitimize and utilize traditional medical resources have been very selective. Because the conceptual foundations of the biomedical model have undergone no substantial changes, and its hegemonic role in the provision of care remains undisputed, the only areas of traditional medicine that could be recognized are those that show "potential" for being successfully "incorporated" within the national health system and are "justified" within biomedical thinking: herbalism (Zolla 1983:27) and midwifery. To a great extent, the acceptance of these traditional practices has had to do with what Menéndez calls the primarily empirical and technical nature of their practices (1983:42), which health authorities believe is easily reducible to the scientific rationale that supports the biomedical model without threatening the ideology or hegemony of the biomedical care system.

Recognition by national health authorities of traditional midwifery in particular has been dictated by the magnitude of the phenomenon within Mexico. In the 1970s parteras attended well over two-thirds of all births in the country (Zolla

1983:26); according to more recent estimates by the national health sector, as many as 80 percent of all births in rural Mexico are managed by traditional and certified empirical midwives (IMSS 1987, cited in Mellado 1989:21). This is especially true in states like Oaxaca that are characterized by predominantly rural peasant populations and low socioeconomic standards of living. In Oaxaca at the end of the 1980s less than 20 percent of deliveries were attended by biomedical practitioners (INEGI 1991).³

The declared necessity to improve maternal and child health services and coverage (one of the highest priorities of the primary health care approach that was adopted by Mexico in the late 1970s) has also made empirical midwives the natural focus of institutional interest. In the mid-1970s the reduction of the high Mexican natality rate through massive population control campaigns became a national priority. Midwives were also identified as potential intermediaries for the implementation of family planning services in their communities because they were already present and because they represented no additional cost to an already very strained governmental health budget (Urbina Fuentes 1986).

Training Courses

Mexican health officers embarked on a large-scale effort to incorporate midwives into institutional health care services through training courses. More than 15,000 parteras underwent training between 1974 and the early 1980s (Martínez Manautou 1986:74; Population Information 1980:35). Training began in Oaxaca at the same time; between 1979 and 1985, 779 midwives were certified by the Mexican Institute for Social Security alone (IMSS, Delegación Oaxaca 1986). Training continues today, although in a more sporadic manner. The main objectives of certification courses have been to "upgrade" midwives' skills in perinatal care, to teach them to identify and refer out high-risk pregnancies and deliveries, and to enroll them in family planning campaigns (Castañeda et al. 1992:268). As Jordan (1989) convincingly explained when she first addressed the issue of authoritative knowledge, these training courses are powerful instruments for imposing, extending, and further legitimizing biomedical obstetrics; this process parallels and is reinforced by the concurrent devaluation of ethno-obstetrics.

With few exceptions (such as the recent attempt to introduce a "dialogue methodology" in which trainers make an initial effort to take into account the previous knowledge of parteras by asking them a series of questions about their practice [IMSS 1989]) the goal of the courses continues to be the same today as it was before: parteras are there to "learn." Course content, teaching methodology, and interactional attitudes repeatedly stress the appropriateness and implicit superiority of biomedical obstetrical care and family planning. In the eyes of most medical officers and trainers, traditional midwives continue to represent a subordinate system of care, toward which health personnel feel "an absolute certainty about the ignorance and ineffectiveness of [their] ideas and practices" (Aguirre Beltrán 1986:234).

My observations of institutional training courses for Oaxacan midwives during the late 1980s and again in the early 1990s confirm that an unequal power relationship continues to characterize training. Trainers' lack of information about midwives' conceptual views, their accrued knowledge, and their practices still

abounds, and subtle undertones of contempt for them still exist because of their alleged ignorance, backwardness, and superstition.

Research Setting

The Isthmus of Tehuantepec is located in the southeastern portion of the state of Oaxaca in Southern Mexico. Because of its strategic location (it is the narrowest land tract that unifies the Pacific and the Atlantic oceans in North America) this region became the center of national as well as transnational economic interests in the late 19th and early 20th centuries when the first transoceanic railroad was built. During the same period the isthmus was also the target of agricultural development. Periods of economic growth alternated with periods of recession throughout this century. Today this region continues to be relatively one of the wealthiest and most developed areas of Oaxaca. Also, since the 19th century, the extant urban-based Indian Zapotec dominant elite, which is composed mostly of merchants or commercial farmers, has been consolidated. Their relationship with the neighboring Huave Indians and with other peasant villages has been characterized historically by economic exploitation and, at times, by political dominance, which has led to periodic surges of interethnic conflicts (Frey 1989). The four isthmus villages in which we conducted our research—San Francisco del Mar Pueblo Viejo, Coyul, Cabestrada, and Santo Domingo Coyotera—are, to different degrees, each linked to a regional market economy that is dominated by the mostly Zapotec urban centers. Ethnic identity is strong among the Huaves; San Francisco del Mar Pueblo Viejo maintains very distinctive cultural features that set it apart from the other communities under study. It is a settlement of approximately 250 families located in a secluded part of the Lower Lagoon of the isthmus. The Huaves are primarily shrimp fishers, a product that they sell in the Zapotec urban markets of the region. The organization of labor follows gender lines: men fish and women sell at markets.

Language, dress, and forms of social organization are important historical markers of change and continuity. Although the Huave language was supplanted by Spanish in the last generation, several older people in the village still speak it. While men have abandoned the traditional dress, women still commonly wear the *huipil* (traditional Indian blouse) and *enagua* (traditional Indian skirt), which they adopted long ago from the neighboring Zapotecs. San Francisco maintains a traditional form of local government that includes a communal assembly and a system of *cargos*;⁴ traditional customs—such as patronal feasts and ritual celebrations—are held throughout the year.

Coyul is a small coastal town of approximately 1,200 inhabitants, mostly dedicated to farming and fishing for self-consumption as well as for the market. Recently, with the completion of a major highway that divides the town into two halves, the pull to fully enter the market economy greatly increased. Fruit cash crops are increasingly common, and a growing number of adult males have found temporary employment in the construction sites of nearby tourist complexes or in the oil refineries of a nearby town. Women help in the fields during the peak season; otherwise they tend their homes, make food for sale, or are in charge of small stores. Coyul is recently settled, and is populated mostly by second- and third-generation migrants from the Chontal highlands, one of the indigenous areas of the isthmus. Although local government is officially incorporated into the national political

party system, it nonetheless maintains the indigenous system of cargos on a rotating basis. Visible manifestations of ethnic identity, though, are minimal, and Spanish has been the only language spoken for at least 20 years.

Cabestrada and Santo Domingo Coyotera are two rural communities in proximity to each other; they are located almost at the border between the states of Oaxaca and Chiapas. The entire population of Cabestrada consists of 42 *mestizo* families. Coyotera consists of approximately 50 households. The villagers are first and second generation migrants from nearby Zapotec localities, from other areas of the region, or from the state of Chiapas. Like residents of Coyul, the people of these two villages are increasingly switching from subsistence farming and fishing to raising crops and cattle for cash. Disparities in the size and quality of land parcels has created social stratification and considerable conflicts over land among the communities' *campesinos* (peasants).

Of the four communities, only Coyul boasts a government clinic, which was established by the Mexican Institute for Social Security in 1979 and is staffed with a *pasante* (a young doctor recently graduated from medical school) and a resident nurse. *Pasantes* usually serve in the facility for a period of one year. The current nurse has been working in the clinic since it first opened. Although the clinic offers all basic primary health care services at no cost, including prenatal and delivery care, almost no pregnant women take advantage of them. San Francisco del Mar falls under the jurisdiction of a government clinic located approximately two hours away (11.3 miles); Cabestrada and Coyotera are served by a public clinic an hour away (8.1 miles). As in Coyul, villagers may resort to health facilities for different medical complaints; women, nevertheless, almost never utilize them for prenatal and delivery services. Midwives are present in each of the four villages and attend most births.

Research Methods and Units of Analysis

This study is part of a larger research project that investigates conceptions and management of childbirth and other reproductive practices in rural and indigenous areas of the isthmus region during the late 1980s. Some of the midwives were first contacted during attendance at a 25-day-long institutional training course. Most of the 18 midwives attending this training came from Indian villages of the region. After visiting most of these communities we selected four for study, taking into consideration the willingness of the certified midwives to participate and distinctive characteristics of the villages such as ethnicity, natural environment, and the availability of institutional health services. Once in the communities we contacted every midwife there, both certified and uncertified, who provided perinatal care.

The data presented in this article are derived from fieldwork with eight parteras. At the time of this study they were the only practicing midwives in these four communities and managed more than 90 percent of the local births. In each locality we carried out extensive open-ended interviews with the midwives, observed their practices, and interviewed several of their women clients. We also interviewed institutional and private medical personnel who practiced in the areas or with whom parteras maintained professional interaction. We spent more than six months in each of the four communities.

Although we did not directly examine the dimension of change in the management and conception of pregnancy and birth, we considered in our analysis several variables, such as parteras' age, ethnicity, initial learning process and modality, their participation in training courses, and the extent to which they interacted with the biomedical health sector.

The Midwives

Five of the eight parteras we observed and spoke to had recently undergone training; of these, three were certified in a course we attended. Prior to training, one of them (40-year-old Yolanda) had trained with and acquired her obstetrical skills from a physician. For that reason her provision of care, with a few interesting adaptations, was biomedically oriented. The other three midwives had received no formal training, and they each expressed lack of interest in institutional courses.⁵

Faustina, a 39-year-old Huave certified partera, and Estela, a 45-year-old mestizo uncertified midwife, entered their profession via a magic or religious calling. Four of the other midwives acquired their skills as apprentices to senior parteras; one began to practice on-the-spot by assisting another woman giving birth. At the time of the study one midwife was under 40 years of age, three were 40–45 years old, and four were over 60. All had at least ten years of midwifery experience. With the exception of 67-year-old Sabino, a male *partero*, all had experienced motherhood, giving birth to four to ten children.

All the midwives charged a fee for their services. The highest fees were charged for attending a birth and providing postnatal care to the mother and the newborn. In 1988, these ranged from U.S.\$3.00 to U.S.\$35.00, depending on the services provided and the midwife. Yolanda was the only midwife who charged more than U.S.\$15.00 for attending a childbirth. Women who could not raise the requested amount usually paid the midwife in several small payments or gave her gifts.

Early on in the research it became apparent that the actual conception and management of pregnancy, childbirth, and the postpartum period were very similar in the four villages, regardless of the midwives' age, ethnicity, or previous participation in a training course. Our most salient observation was the tremendous gap that existed between the ethno-obstetric care that parteras provided and biomedical obstetrics as taught in training courses. Indeed the entire rationale underlying prenatal, childbirth, and postnatal care in these communities was not biomedical. Anatomical and physiological concepts mostly worked within a separate reference framework. Likewise, high-risk categories, diagnostic tools, and the treatment of gynecological complications also revealed differences between the two models of care (Sesia 1992).

Three central points are pertinent here. First, the conceptual gap dividing biomedicine and midwifery practices never was (and still is not) taken into account in training courses. Devaluation of ethno-obstetrics during training involves disregard for midwives' practices as well as for their underlying rationales. Training personnel never showed any interest in finding out what parteras do or why. Attending midwives were never asked about their physiological or anatomical conceptualizations of reproduction. Second, once back in their villages, none of the certified midwives substantially changed their conceptions of childbearing or the

type of care they provided. With very few exceptions the obstetrical practices of the trained parteras, even those that training overtly attempted to change, were strikingly similar to those of uncertified ones.⁶ Contrary to the government's expectations, certification courses seemed to be one of the variables that had the least impact on changing local midwives' views and practices. In accordance with other studies (Franzoni 1993; Mellado et al. 1989), our results suggest that the initial experience of becoming a partera and the extent and quality of interaction with the formal health sector after training may in fact have a much greater impact on local midwives' ways of conceiving and managing the birthing process than do certification courses (Sesia-Lewis 1987). Third, the great majority of village women widely shared and supported ethno-obstetric rationales and activities, regarding them as authoritative.

Prenatal Care: The Sobada and the Detection of High-Risk Pregnancies

In this section I will focus on prenatal care—specifically on the *sobada* (massage) and on the definition and detection of complications during gestation. Through this specific example I seek to demonstrate the full extent and the long-range implications of the conceptual and practical differences between ethno-obstetrics and biomedicine as systems of authoritative knowledge.

After missing a period, women usually waited two or three months before they paid their first visit to the midwife. The purpose of this visit was not so much to have their pregnancy confirmed (most women, especially multiparas, have few doubts about their own diagnostic abilities) as it was to have their first *sobada* with the person who would attend them. All midwives reported that most women initially called upon them between the third and fifth month of gestation. Some waited until the last trimester; a few did not see the partera, or anyone else, until the onset of labor.

Regardless of age, experience, certification, or community origin, all the midwives participating in the study (with the partial exception of Yolanda, the medically trained midwife) offered a very similar type of care to the pregnant woman. The visit was very different from the equivalent first visit to a medical office or clinic, in both its activities and its rationale. Usually it took place inside the sole bedroom of the midwife's house; sometimes the partera went to the woman's home. Yolanda was the only midwife to have a special, fully equipped room to receive clients and attend deliveries (a very powerful statement of professionalism that she did not share with anyone else in these communities).

The locus of activity during this prenatal visit is the *sobada*—the external massage. The woman lies down on the bed completely dressed, her gown raised only enough to uncover her abdomen. To detect a pregnancy the midwife feels the uterus by gentle external manipulation, looking for the *bolita* (little ball), a common euphemism for an engorged and hardened uterus. Upon locating and palpating it the partera gives an estimate of the month of gestation by the size of the uterus. (According to the mothers, parteras are usually correct within one or two weeks of their estimates.) She then moves the uterus from side to side and from bottom to top for several minutes. Meanwhile, she explains to her client that it is necessary to pull the *bolita* up and toward the center so that it becomes accustomed to its

correct position and will not hurt the mother by excessive pressure on her bones or other organs.

After the woman positions herself on her side the partera will apply some gentle pressure through similar movements on her lower back. If she complains of pain or ache in any specific place, the midwife will patiently massage the indicated point. It is important to stress that the entire examination is external; the partera never comes into contact with the woman's pubic area or with her internal reproductive organs.⁷ During the sobada the midwife checks to see whether or not the baby is in correct head-down position. If it is not and the mother is more than five to six months pregnant, she will attempt an "external version," a maneuver that most midwives claim they can easily do (see Jordan 1984). Parteras agree that they usually have to repeat the version at least three to four times in following sessions before the baby adopts the head-down position. In such a case they recommend that the woman come back at specific times for more sobadas. Otherwise most parteras do not set any time for the woman's next visit because, as María, a 62-year-old certified midwife from Coyul, says: "Women come here on their own when they need to."⁸

During training, teaching personnel usually place no importance on the sobada, at times neglecting to mention it at all. When the sobada is mentioned, it is in negative terms since it is associated with the external version, a maneuver that they strongly discourage. Midwives are repeatedly told that they should not attempt external version because it allegedly can cause harm to the fetus.⁹ Despite these warnings, trained parteras continue to give sobadas and perform external versions. Even Yolanda, the medically trained midwife, resorts to the sobada:

Many older women prefer not to come with me because I am not used to assisting in the old ways. But with all the women I provide care to, regardless of their age, I have not been able to refuse sobadas because they request it; this is so even if the doctor did prohibit me from doing it.¹⁰

Throughout certification courses trainers stress the importance of regular and periodic prenatal visits in order to control the healthy progression of pregnancies, identify possible risk factors and detect complications as soon as they arise. Despite this advice, however, neither certified nor uncertified midwives actively encourage their expectant clients to see them on a regular basis. Although they all agree that it is desirable for the woman to come at least three or four times during pregnancy—every two or three months at first, more regularly after the fifth or sixth month—their reasoning differs from that of biomedical practitioners. Faustina, the Huave certified midwife, expresses it clearly:

It is not good when they come for a massage when their belly is already big. If the baby is positioned too far up or on the side and you do not give a massage, it becomes more difficult to put him/her in the right head-down position. On the contrary, when you have been giving massages, is much easier for the child to come out properly. One knows that this is the case because, by giving massages in the last months of pregnancy, one feels that everything is working out right.¹¹

Thus the desirability of having some continuity of care during gestation is associated with the sobada. The prenatal sobada is undoubtedly the most important diagnostic tool, as well as the most significant preventive and curative prenatal

strategy, that midwives have. It has, in fact, several different functions: to estimate gestation time, to ascertain the baby's position (especially in the last trimester), to relocate the baby in the head-down position, to relieve and soothe pain and ache in the expectant mother, to establish physical and emotional contact between the midwife and the woman, and to detect when the time of labor and childbirth approaches.

Although parteras and women both appreciate the sobada's multiple functions, they each tend to stress different meanings of it depending on their different perspectives on the pregnancy. Gestating women privilege in their narratives the physical relief and the sensation of well-being that the massage provides:

When I was pregnant, I felt really heavy and I had much nausea. . . . I went to see my midwife and she massaged me. After the sobada one feels much better, much lighter.¹² [Alba, 29 years old, San Francisco del Mar]

I liked the way in which the midwife assisted me because she gave me warm baths and she massaged my waist and belly. With sobadas I felt good.¹³ [Romelia, 20 years old, Cabestrada]

Some women explicitly point to the sobada as the factor that most distinguishes midwifery from biomedical prenatal care:

I prefer the midwife to the doctor during pregnancy because she massages me and he does not. I go for at least three sobadas, once at four months of pregnancy, another time at six months and a third time when I am eight months pregnant. Then, once more during labor. . . . The sobada makes me feel well.¹⁴ [Josefina, 26 years old, Coyotera]

In contrast, midwives tend to stress instead the sobada's potential as a diagnostic and corrective tool in case of a transverse or breech fetal position:

When they come [for a sobada] I probe with my hand to find out how the baby is located. The best is when the baby comes right, but if it is positioned wrongly I have to relocate it. Sometimes one has to relocate [the baby] just once and there it stays. Other times, though, one has to continue massaging because certain babies are stubborn. If I did not massage, the baby could come in the wrong position and then who can bring it out? It is more difficult and one suffers more.¹⁵ [Josefa, 61 years old, uncertified midwife, Coyotera]

The importance that parteras place on the relocation of the baby needs to be understood within the context of their acquired knowledge and long-term experience. The delivery of a breech or transverse infant is the major complication that they recognize, that they face from time to time, and that they try to resolve with the tools and knowledge they have at their disposal. Unlike other anomalous or pathological conditions during pregnancy and childbirth, a breech or transverse baby is an obvious physical phenomenon that a midwife can easily and immediately detect. As the previous narrative points out, during the sobada the partera purposely utilizes the external version as a preventive measure to avoid later the potential difficulty and risk of attending a breech or transverse delivery. Thus this maneuver becomes a sensible, rational, coherent, and effective strategy of care given the limited technical resources that are available to these midwives.

Besides a breech or transverse baby, the only other pregnancies that midwives recognize—and not always—as potentially difficult are those of older mothers, usually in their forties, who have already had several children and have had previously experienced complications, or who have experienced bleeding and hemorrhage prior to labor. Signs of hypertension, edema, toxemia, or other preexisting conditions in the mother that could adversely affect the pregnancy (such as tuberculosis, diabetes, or any sexually transmitted diseases) are usually not detected nor recognized as potentially harmful. Even if a partera recognizes anemia as a condition that requires intervention (e.g., a vitamin shot) during pregnancy, an anemic pregnant woman is not considered to be at any particular risk for childbirth.

The notion of “risk” is, in fact, a biomedical one, mostly unknown to local midwives. As Jordan (1993[1978]) points out in reference to Yucatán, in south-eastern Oaxaca pregnancies are also considered normal events; for that reason signs of abnormalities are not sought. When a biomedically defined pathological condition arises, parteras usually do not recognize it. In the few cases in which they face what they consider a worrisome situation, midwives will do whatever they can, usually by attempting to bring the condition back to normal through the sobada. Even when a midwife concurs with biomedical practice in the identification of a risk factor, she will usually not refer the case out to a doctor or a clinic. Instead, she will mostly follow traditional norms of care to manage the problem. For example, Eugenia, a 44-year-old certified partera from Coyul, was the only midwife besides Yolanda to ever mention “swelling” as a potential problem. She then added that she could easily “fix” it with a sobada of the expectant mother’s entire body.

The ability and willingness of a midwife to attend any woman who seeks her, regardless of any specific adverse conditions, is considered in each of these communities a desirable quality because it is interpreted as a sign of courage, strength, and expertise. Although trained parteras are more likely to seek external help when a very difficult situation arises, none of them, not even Yolanda, would refuse to attend a pregnant woman when they are called upon.¹⁶ To refuse is socially unacceptable; a midwife who would do so would be the target of community criticism as a *partera sin valor* (midwife without courage); her reputation would suffer and she would lose clientele and prestige.

Courage, strength, and expertise are precisely the qualities that confer local authority and prestige on a midwife. They also mark what distinguishes her from any other woman. Most women share with parteras experientially based obstetrical knowledge, motherhood, and even the experience of assisting a daughter, a daughter-in-law, a granddaughter, a niece, or a neighbor in giving birth. Most could become midwives themselves; thus what makes the midwife stand out is precisely the authority she has acquired in her community through cumulative experience and display of courage (Galante 1988).

When a skilled partera faces a complication that she has learned to fear—such as profuse bleeding during gestation or after delivery—there are ways that she can seek outside help without losing her reputation. According to Faustina, one way is never to abandon a client; instead, escort her to the nearest private or government physician, clinic, or hospital; stay with her during the medical consultation or visit her during a clinic stay; and then bring her back home.

Faustina and Yolanda, the two *parteras* who do refer out particularly difficult cases, are the only ones who have established good rapport with trusted physicians in nearby towns. These doctors have learned to respect them and to acknowledge their midwifery skills in multiple ways and in front of clients. Faustina and Yolanda have protected their reputations because in the eyes of their communities they continue to successfully maintain full responsibility for their clients' well-being. At the same time their authority and expertise are not questioned by the medical personnel to whom they resort. Indeed, during interactions with medical staff their authority as midwives is actually reinforced in the eyes of their female clients and accompanying family members. Unfortunately, these circumstances are quite exceptional.

Discussion

From the above presentation, three topics deserve further consideration: the failure of certification courses to replace ethno-obstetrics with biomedicine as the primary source of authoritative knowledge, the construction of authoritative knowledge and its meaning by midwives within their own social milieu, and the relevance for maternal health policy of the prevalent ethno-obstetric model of care. These are addressed in the following sections.

Authoritative Knowledge

Jordan's (1992) analysis of the construction of knowledge in very complex technological settings illuminates the relationship between processes of teaching and learning, and the reproduction of power and authority. She convincingly argues that in technologically sophisticated social settings, such as the delivery room in a U.S. hospital, unequal access to information and to technology works to exclude laboring women from generating knowledge that "counts." This produces or reproduces a hierarchical distribution of knowledge in which the privileged party—the physician and his medical staff—establishes its knowledge system alone as authoritative and legitimate, thereby devaluing all alternative sources of information and practice (1992:2–4, 27–29). Conversely, in a situation in which access to complex technology and to the production of information is evenly distributed, authoritative knowledge is collectively and horizontally shared (1992:18–29).

In her discussion of knowledge production and transmission in training courses for traditional midwives, Jordan (1993[1978]:ch. 7) analyzes the unequal power relationships established between the authoritative and imposing biomedical system of care and midwives' devalued concepts and practices. She comes to the significant conclusion that by forcefully promoting bio-obstetrics as the only legitimate and authoritative model of care, trainers "not only devalue indigenous ethno-obstetric wisdom and skills, they disallow the very methods of indigenous knowledge and skill acquisition" (1989:935).

Jordan's insights into the unequal power relationship established between the biomedical and the ethno-obstetric system, and between those who have authoritative access to high technology and those who lack such access, are particularly relevant to the contradictory situation that Oaxacan *parteras* face, first in certification courses and again back in their communities. During training, midwives

experience a situation in which knowledge is produced and transmitted hierarchically, and in which they are placed in a subordinate and passive role. This training stresses in multiple ways the superiority of a technologically sophisticated model of care. Yet after being subordinated to biomedicine, parteras are encouraged to assume an authoritative role regarding their women clients.

If they had followed trainers' suggestions, the parteras would themselves have become actively engaged in the reproduction and expansion of the bio-obstetric model of care. But this hegemonic project has mostly failed for several reasons.¹⁷ These include the structural weaknesses of the project itself, and the relative strength of ethno-obstetrics at the community level. The ineffectiveness of the training method is paralleled by the inability of the state health sector to "follow up" on parteras after the training courses or to offer them further training to "reinforce" what they allegedly learned during certification.

Once back in their villages, certified midwives mostly continue to share knowledge and obstetric decision making with their women clients, and to use their own obstetric model of care. In prenatal care they all continue to perform external versions, and despite persistent warnings during biomedical training very rarely refer out difficult cases. The sobada maintains its central role to the exclusion of other preventive diagnostic measures taught in certification courses. In fact the sobada is now viewed at times as a technical fix, and, as a result, a solution for problems that midwives did not previously recognize. And despite biomedical efforts to displace it, it continues to serve as the privileged locus of interaction between midwives and gestating women: a space managed as much according to women's expectations as to parteras' skills.

Probably the best example of parteras' egalitarian ethos is that they do not attempt to impose a regular schedule of prenatal visits on their clients, although they are repeatedly encouraged to do so in certification courses. In most cases their behavior is a consequence of their midwifery knowledge and values that they started learning during their apprenticeships, that they have continued to accrue during their years of practice, and that are not likely to be displaced by a single biomedical training course. Midwives sustain the ethno-obstetric model of care and actively participate in the production of knowledge precisely because the model is widely shared—and reinforced in the process—by the great majority of villagers with whom they live and work. As such, it tends to be consensually constructed and socially reproduced at the community level. Perhaps the best statement about the collective strength of ethno-obstetrics came from Yolanda, who was particularly cognizant of and moderately sympathetic to the biomedical hegemonic project in training courses. Reflecting on her own use of client-induced sobadas, she shed light on the current cultural struggle in which local ways have successfully—so far—fended off biomedical assaults:

I have not been able to refuse sobadas because the women request it; this is so even if the doctor did prohibit me from doing it. Doctors have attempted to change local ways but they have not succeeded because here people's ways are stronger.¹⁸

The nature of the power relationship between the midwife and her clients reveals how ethno-obstetric knowledge is constructed and distributed. In these villages the partera with several years of experience enjoys her community's recognition as "expert" in the management of pregnancy and birth. Whether she is

certified or not does not influence villagers' perceptions about the quality of her work. Trained parteras are very much aware of this, and although some of them use their certification diploma as a symbol of higher status vis-à-vis untrained colleagues, they do not attempt to do the same with clients or their families. At the community level, recognition of their work is linked to their acquisition and mastery of specific manual skills such as the sobada, to their knowledge of how to support and encourage the laboring woman, to their successful management of multiple and difficult births, to their willingness to take care of the mother and the newborn according to local norms, values, and expectations, and to their cumulative show of strength and courage in the performance of their duties.

Despite public recognition of their expertise and authority, and regardless of certification, midwives' relationship with gestating or laboring women tends to be much more egalitarian in gestures, words, actions, and the process of decision making than the provider-patient relationship of bio-obstetrics. This is especially true with older and multiparous clients, whose experiences with multiple pregnancies and births are highly regarded and valued by parteras. Midwifery expertise does not bring with it the imposition of vertical authority. Within the ethno-obstetric model of care the woman—not the midwife—is still the active subject. As we have seen, pregnant women decide when and how many times to visit their parteras. During birth the nature of this power relationship becomes even more explicit: the partera helps, advises, supports, and even facilitates the process; what she never does is turn the woman into a passive subject.

We thus argue that while midwives do enjoy special consideration for their expertise, their empirical knowledge tends to be much more evenly distributed than medical knowledge in bio-obstetrics. Insofar as this knowledge is considered "important, relevant, and consequential for decision-making" (Jordan 1989:925), it is authoritative at the local level. Perhaps the reason that collective sharing of ethno-obstetric knowledge does not threaten the role of the partera as the expert is that knowledge is not everything that counts at the local birth scene. Other qualities distinguish her from other women including personal qualities that slowly build up a reputation, bring about authority and recognition, and, to the observer, offer a glimpse of the profound metamedical components of the local management of pregnancy and childbirth.

Relevance for Maternal Health

Two widely recognized advantages of bio- over ethno-obstetrics include the identification of relevant risk factors during pregnancy and the ability to resolve complications and emergencies successfully. The timely identification of risk during gestation and the successful resolution of obstetrical problems can significantly reduce maternal and perinatal morbidity and mortality. This holds great relevance for Oaxaca, where the rate of maternal mortality is the highest in Mexico, more than double the national average (120/100,000 versus 54/100,000) (SSA 1992). To address this problem, maternal health services need to be readily available and be able to manage obstetrical complications.

In Oaxaca, training courses have been largely unsuccessful in teaching parteras to identify risk factors or potential obstetrical emergencies, or to promptly refer affected women to institutional care. Institutional MHC, moreover, has faced

serious limitations in the provision of services that could effectively reduce maternal morbidity and mortality. Many rural regions of the state lack primary care facilities that are truly prepared to manage serious obstetrical complications. In short, many Oaxacan mothers have very limited access—geographically and financially—to specialized obstetrical care; should their midwives wish to transport, in many places there is simply nowhere to go.

Considering Mexico's recurrent economic crises from the early 1980s to the present and the severe budgetary restrictions that the public sector currently faces, it is unlikely that government health services will make major headway in extending or improving formal MHC coverage for rural Oaxaca in the near future. Attempts to extend coverage or to improve the quality of existing services are hampered for two reasons. First, the Ministry of Health and other public health institutions involved in primary care face increasing problems of understaffing, funding cuts, low wages, shortages in medical supplies, and inexperienced personnel. Second, despite a formal discourse to the contrary, institutional MHC policies and services at the primary-care level continue to be largely directed by an ideology that strives for modernization, sophisticated technology, and the medicalization of pregnancy and childbirth. It is completely unrealistic to attempt to implement this "cosmopolitical" (Jordan 1993[1978]:ch. 8) model in a state like Oaxaca; it cannot and should not be promoted at the primary-care level. Among other drawbacks, this model of care is economically unsustainable and culturally unacceptable in many peasant and indigenous areas of the state. An extension of formal MHC coverage could well result in the establishment of additional services of questionable quality and unjustifiable expense that many rural populations would likely underutilize.

Under present circumstances reliance on traditional midwifery in poor and isolated regions of the state is likely to continue—if not increase—in years to come. The strategy of implementing training courses for practicing parteras is appropriate; what needs to change is the content, methodology, and underlying ideology of these courses (Castañeda et al. 1992). This strategy, moreover, should be augmented by other interventions directed at the other social actors who make decisions about the management of pregnancy and birth.

Training courses have been the focus of much criticism in the anthropological literature; suggestions for change have been repeatedly put forward (Castañeda et al. 1992; Jordan 1989, 1993[1978]). I add that parteras should be taught to detect and refer gestating women at risk and to intervene with specific techniques when complications arise. Of course, this training should be done in a climate of profound respect and with the employment of a culturally and educationally appropriate methodology. When training has been done appropriately, midwives have shown tremendous interest in learning new techniques to improve the care they provide. Parteras could, for instance, learn how to detect high blood pressure during gestation with the use of the stethoscope, an instrument that should be made available to each of them upon completion of training. Training to detect this condition should be accompanied by training to manage it with effective herbal and drug therapy and other strategies, such as bedrest for the severely affected woman. That it is appropriate to teach midwives how to use pharmaceuticals correctly is indicated by the facts that several parteras have already incorporated certain drug therapies into their pharmacopoeia, and that drugs are freely available in the market.

Besides midwives, medical personnel operating at the primary and secondary levels of care should also receive training. They should learn about ethno-obstetric practices, their benefits, and their underlying rationales. At the same time, midwives should learn the limitations not only of ethno-obstetrics, but of bio-obstetrics as well, especially when the latter is applied in rural regions. Courses for medical staff should aim to teach trainees respect for parteras' ways and skills and should stress the necessity of establishing effective lines of communication with all empirical providers of care. The relevance for maternal health of establishing good rapport with traditional midwives is well illustrated by our case study: only parteras who were successful in finding physicians willing to back them up and stand up for them in emergencies referred women with severe complications. To be effective, such training should start early in medical or nursing school.

Finally, it is important to stress that both the women who receive midwives' care and some of their family members (especially husbands, mothers, or mothers-in-law) are active decision makers in the management of reproduction. In ethno-obstetrics pregnancy and birth are complex phenomena in which social control mechanisms, cultural values, and locally prevailing norms play important roles. In a context in which obstetric knowledge is, to a large extent, collectively shared and socially constructed, any intervention to improve maternal health that is directed at parteras to the exclusion of other participating social actors is likely to fail.

The need to involve mothers *and* their families becomes even more crucial when we consider that many of the obstetrical complications faced by peasant and indigenous women transcend the immediate context of midwifery care and encompass personal and socioeconomic issues such as poor maternal nutrition. Efforts should be made to increase awareness about the importance of the gestation period not only among parteras and their women clients, but also, and especially, among their husbands, mothers, and mothers-in-law. Such efforts should be interdisciplinary in nature, should include medical as well as nonmedical aspects of care, and should provide simple instruments to ameliorate families' life conditions such as agricultural techniques and products to improve and diversify the local diet. Among these social actors, awareness of the need for adequate prenatal care as well as of the importance of detecting and treating specific risk factors should be complemented at a minimum by awareness of the need for adequate maternal nutrition and rest during pregnancy and after birth.

In *Birth in Four Cultures* (1993[1978]:135–139) Jordan calls for a “mutual accommodation of the biomedical and indigenous systems.” Such an accommodation could be accomplished in Oaxaca if the national health sector were to relinquish its exclusively biomedical focus, change the philosophy and content of certification courses to address ethno-obstetric realities and needs, and include in intervention programs all actors involved in the cultural management of parturition. These strategies have great potential to effectively reduce maternal morbidity and mortality in Oaxaca. Moreover, they offer the promise of accomplishing these important goals while fully respecting the local cultures and their vital and consensually constructed systems of authoritative knowledge.

NOTES

Acknowledgments. The research on which this article is based was supported by a community grant from the Inter-American Foundation (No. MEX-249) from June 1986 to December 1988. It also benefited from a 1986–87 Master's thesis fellowship from the Inter-American Foundation (No. F2-081); a supplemental 1986 summer stipend made available from the funds of the Public Health Service Traineeship and awarded to me by the School of Public Health at the University of California, Berkeley; and a 1987 travel grant from the Program in Mexican Studies (Center for Latin American Studies) and the Cowell Foundation of the University of California, Berkeley. To all, my deepest thanks. I want to express my gratitude to Cristina Galante and Virginia Alejandre, my research colleagues in Oaxaca, for their support, friendship, and help. Above all, I want to thank all the women and midwives we extensively interviewed and with whom we spent long and gratifying times. I am thankful to Robbie Davis-Floyd for inviting me to participate in the panel "Birth in Twelve Cultures: Papers in Honor of Brigitte Jordan," which she organized and chaired in 1992 during the 91st Annual Meeting of the American Anthropological Association. An earlier version of this article was presented at that meeting. To Ana Ortiz at the University of Arizona, Tucson, and to Robbie Davis-Floyd go my thanks for commenting on this article and giving me important editing suggestions.

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1. In Mexico *traditional medicine* refers to all medical views and modalities of care that peasant and indigenous communities, among others, have developed historically to explain and cope with illness. Specifically, traditional medicine in Indian regions is characterized by (1) a collectively shared and socially constructed knowledge of the local environment's natural resources, including those identified and used for healing purposes; (2) a structured medical system composed of several different medical specialties; (3) the valued social role played by healers; (4) "anti-medical" specialists who have powers to willfully cause harm; and (5) the integration of biological, sociopsychological, and religious components in disease etiologies, diagnoses, and treatments, including supernatural as well as natural illness categories (Anzures y Bolaños 1983). This typology can be safely extended to many Mesoamerican agrarian localities that may have lost a specific Indian identity (such as that expressed by language) but still maintain sociocultural and economic characteristics resembling those of Indian communities.

2. Biomedical medicine is the hegemonic model of care in contemporary Mexico. From an ideological and practical viewpoint all other medical practices and conceptions are considered by national health authorities as subordinate (Menéndez 1984) (see note 17).

3. According to the most recently available statistics (INEGI 1991), slightly more than 10,000 of 108,000 births that occurred in the state of Oaxaca in 1991 were registered in government medical facilities. Government medical establishments that register births include, among others, all facilities that belong to the Ministry of Health (SSA), the Mexican Institute of Social Security (IMSS), and the Institute for Social Security at the Service of Federal Workers (ISSSTE). Unfortunately, there are no official data recorded on private medical care; according to SSA estimates, though, the private medical sector accounts for approximately 7–10 percent of all formal care in the state (Dr. Agustín Sanginés, personal communication, June 1993). This brings the total number of births occurring in the formal health sector to 17–20 percent. Due to the prevailing rural composition of the Oaxacan population, though, the presence of the private medical sector is minimal outside of the state capital and a few other smaller cities.

4. The cargo system is an administrative and religious organizational structure that was originally imposed by the Spaniards during colonial times. It survived the demise of colonial rule to become an important distinctive marker of Mesoamerican Indian organization and identity. It consists of the community civil and religious duties that all males beginning in

early adulthood have to periodically fulfill. Duties are assigned by the community assembly on a rotating basis according to age, experience, and previous performances on lower status and less demanding assignments. Duties follow an ascending hierarchy that involves greater involvement, responsibility, prestige, and financial burden with each succeeding step.

5. Mellado et al. (1989:29, 42) identify three different categories of rural midwives according to training received, type of care provided, and medical resources utilized. These include traditional midwives and empirical midwives with and without certification. They postulate a continuum along which midwife care may be plotted. On this continuum certified empirical midwives' care most closely resembles biomedical obstetrics; traditional midwives' concepts and practices fall within what here I refer to as ethno-obstetrics. With the full exception of one certified empirical midwife (Yolanda, the medically trained partera) and the partial exception of another, the six midwives who participated in the study fall within the category of "traditional" for the care they provide and the way they learned their obstetrical skills. I want to emphasize that all my observations concerning the strength of ethno-obstetrics are pertinent because the majority of the midwives in these communities fall into the category of "traditional." In other words, their practices lie at the end of the continuum, farthest away from the practices of biomedicine.

6. Training has had an unforeseen impact on the type of care that certified midwives provide. For example, midwives receive the message that swiftness and efficiency in postpartum care are the ideals toward which they must strive, and that provision of care for more than a couple of days is unnecessary. Trained midwives provide an average of two to four days of care after delivery. In contrast, untrained midwives follow up on their women clients for an additional three to seven days. With the exception of Yolanda (whose standard length of care has been one to two days since she began to practice), each of the four certified midwives decreased the time of postpartum care giving after attending training. Although teaching personnel do not explicitly remark on the "ideal" length of postpartum care, midwives are nevertheless taught that obstetrical hospital procedures are the "ideal" model of obstetrical care. They are exposed to the hospital time frame, where efficiency and medical technology rule over natural birthing time, and most women are dismissed from the hospital within 24 hours after delivery.

7. Internal examinations are performed routinely in biomedical perinatal care. Nakedness in general, and the exposure of the pubic area and internal examinations in particular, are major sources of concern, anxiety and disapproval for village women; such practices lead village women to reject and fiercely resist bio-obstetrics. As one said:

Cuando llegamos [al hospital] me desvistieron y me acostaron; ¡Me dió muchísima pena! Después me razuraron el parto [pubis]; los dejé hacer pero mi vergüenza creció más. Me dieron una bata blanca que no se podía cerrar, me hicieron acostar y cuando los médicos empezaron a poner sus dedos adentro y a lastimarme mucho, ¡mi vergüenza ya no tuvo límite! Nunca más voy a regresar! [When we arrived (at the hospital) they undressed me and made me lie down; I felt so ashamed! Afterwards they shaved my pubes; I let them do it but my shame grew. They gave me a white gown which could not be closed, they made me lie down and when doctors came and started to put their fingers inside it really hurt a lot and I was overwhelmed by shame! I will never go back!] [Olga, 37 years old, San Francisco del Mar]

8. "Las señoras vienen solitas cuando necesitan."

9. According to many biomedical practitioners in the United States and Mexico, the external version carries the risk of detaching the placenta from the uterine walls, provoking a premature birth. Nevertheless, it is noteworthy that U.S. biomedical obstetricians interested in lowering their cesarean rates are beginning to obtain training, often from midwives, in performing external versions (Bethany Hays and Robbie Davis-Floyd, personal communication, April 1995).

10. "Muchas mujeres más grandes prefieren no venir conmigo porque yo no estoy acostumbrada a atender como antes. Pero con todas las mujeres que atiendo, con las más jóvenes y con las más viejas, no he podido negarme a dar sobadas porque me lo piden, aun si el médico, sí, él me lo prohibió."

11. "Es malo que vengan a sobarse cuando ya tienen la panza grande. La razón es que si el niño viene muy arriba o de lado, cuando no se soba es difícil ponerlo bien para dar a luz. En cambio si el niño se ha ido sobando es más fácil que salga bien. Uno se da cuenta porque en los últimos meses uno soba y se siente que todo está bien."

12. "Cuando estaba embarazada, me sentía muy pesada y tenía mucho mareo. . . . Me fui con mi partera y ella me sobó. Después de la sobada una se siente mucho mejor, mucho más ligera."

13. "A mí me gustó cómo me asistió la partera porque me dió baños tibios y me sobaba la cintura y la panza. Con las sobadas me sentía bien."

14. "Prefiero ir con la partera durante el embarazo porque ella me soba y el médico no. Yo voy por lo menos a tres sobadas, una a los cuatro meses, una a los seis y otra a los ocho. Después, otra más durante el parto. . . . La sobada me hace sentir bien."

15. "Cuando vienen [para sobarse] yo las tiento para buscar cómo viene el niño. Lo mejor es cuando el niño viene bien, pero si está mal puesto lo tengo que acomodar. A veces hay que acomodarlo nomás una vez y ya se queda. Pero a veces hay que seguir sobando porque hay niños necios. Si no sobara, el niño podría venir mal acomodado y después quién lo saca, es más difícil y se sufre más."

16. None of the midwives ever admitted the occurrence of a maternal death while they were attending; some did state, though, that they had to deliver a stillborn once or twice during their years of practice. Commenting privately about each other, parteras do make assertions about others' inability to save the life of a baby during a serious childbirth crisis. Unfortunately, these declarations could not be properly cross-checked. Reliable data on neonatal and perinatal infant mortality are not available for any of these communities. Infant mortality rates in rural Oaxaca are chronically underreported, due most to the widespread practice of registering babies only after they are more than six months old. Extensive interviews with the mothers suggest that infant mortality rates have decreased in the last ten years; most of the references, though, were made in relation to babies after their first two or three months of life.

17. *Hegemony* refers to the process of social formation by which ruling classes (re)produce their power not just through coercive means but also by winning the active consent of subordinate social groups. Hegemony, then, involves the acceptance of the existing social order by those which it subordinates. For Gramsci, the institutions of civil society—education, medicine, mass media, religion, and so on—are the ones specifically involved in creating consent (1971:52–54).

18. "No he podido negarme a dar sobadas porque me lo piden, aun si el médico, sí, él me lo prohibió. Los médicos han tratado de cambiar las costumbres pero no han podido porque las costumbres de la gente aquí son más fuertes."

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