LYNDON B. JOHNSON SCHOOL OF PUBLIC AFFAIRS
WORKING PAPER SERIES

WORKING PAPER

Number 23

THE UTILIZATION OF *PARTERAS* AS A SOURCE OF MATERNAL/CHILD HEALTH CARE ALONG THE U.S./ MEXICO BORDER

U.S./Mexico Border Maternal and Child Health Care Project

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1983

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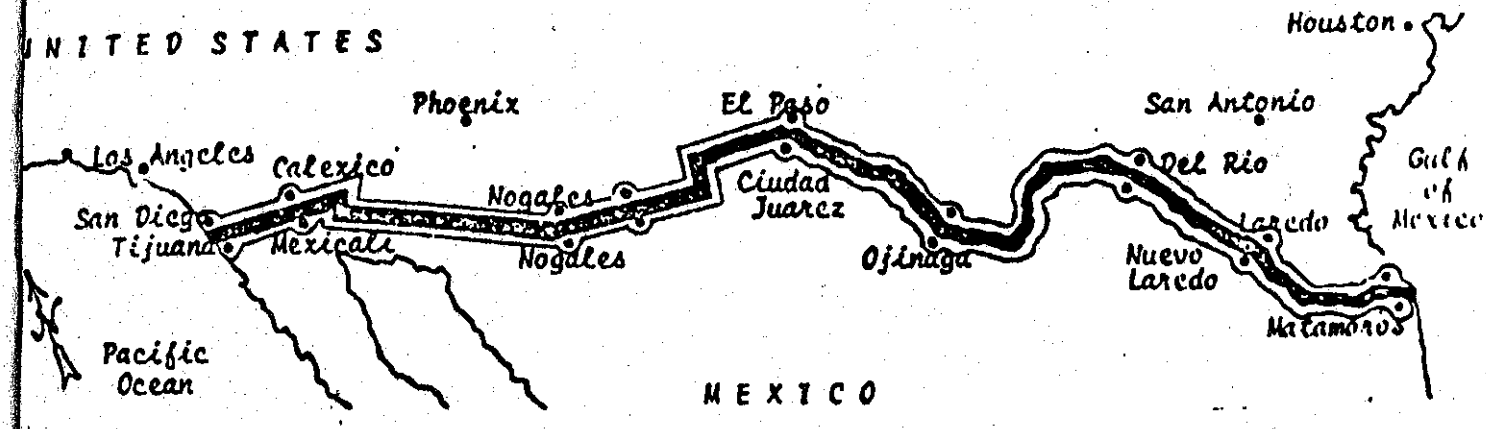

Border Study Area

Preface

This is the third in a series of working papers from the Policy Research Projects at the Lyndon B. Johnson School on maternal and child health on the U.S.-Mexico border. These projects have been conducted under a contract with the American Academy of Pediatrics funded by a grant from the Robert Wood Johnson Foundation. In addition to these funds, the projects have been supported by funds from the Hogg Foundation, the Lyndon B. Johnson Foundation, and a grant from the Henry J. Kaiser Family Foundation to the Lyndon B. Johnson School.

This overall project was initiated by the American Academy of Pediatrics and its Community Health Services Committee. At the time of initiation this committee was chaired by Dr. Fernando Guerra and included Dr. Antoinette Eaton, Dr. Louis Fine, Dr. Paul LaMarche, Dr. William Oberman, Dr. Bernard Portnoy, Dr. Theodore Scurletis, Dr. Earl Siegel, and Dr. Stewart Wagoner. Since mid 1982 Dr. Antoinette Eaton has chaired the committee and additional members have included Dr. Steve Barnett, Dr. Albert Gaskins, and Dr. David Kaplan.

A project advisory committee was further appointed which includes Dr. Stanley Fisch, Dr. Fernando Guerra, Dr. Doris Howell, Dr. Salvador Guerra-Jimenez, Dr. Bernard Portnoy, Dr. Clift Price, Dr. Earl Siegel, Dr. Ramiro Vega Valdez and myself.

The projects at the L.B.J. School have been directed by me and Professor Chandler Stolp. In addition, Dr. Bernard Portnoy, who is also the principal investigator for the American Academy of Pediatrics' portion of the grant, has served as a participating faculty member on the project. The project has also benefitted from the expertise of

Dr. Linda Chan, Dr. Portnoy's associate at U.S.C. Medical School - Los Angeles County Hospital. Roy McCandless has served as Project Coordinator and Project Consultant. Alfonso Ortiz-Nunez served as an intern in the summer of 1982, and Rose Renteria has tirelessly organized, typed, retyped, and xeroxed manuscripts, schedules and reports from the project.

In 1981-82 the students on the project included: Patrice Beauchemin, Jo Carcedo, Eloise Cohen, Andrew Feldman, Shelley Friend, David Garza, Lise Glancy, Ann Henry, Barbara King, Teresa Lewis, Margaret Mendez, Tess Nira, Alfonso Ortiz-Nunez, Guymon Phillips, Eve Powell, Jane Schneckenburger, Rachel Spector, Rachel Speltz, Mary Whiting, and Lynn Whitten. For 1982-83 the students include: Selma Cuellar, Judy Fitzgerald, Paul Goren, Carol Helliker, Susan Jones, Susan Krivacic, Tammy Linbeck, Susan Marshall, Melanie Miller, Christene Petry, David Sanders, Carlton Schwab, Janet Shellenberger, and Gary Watts.

Literally hundreds of persons have assisted in our research in the past two years and so I'll forebear from mentioning any for fear of offending those I have excluded. With regard to this working paper and the project as a whole, the cooperation and support of the Texas Department of Health has been absolutely crucial. It should be stressed that the authors are responsible for the accuracy of the data and the conclusions reached in these working papers and that neither the L.B.J. School nor the American Academy of Pediatrics necessarily endorses or guarantees the product.

David C. Warner
Professor

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January 2, 1925

Malone Duggan, M.D.
State Health Officer
Capital Station
Austin, Texas

Dear Sir:

.....

The conclusions, based on a study (of the midwife situation in Texas) and information gained by contact and correspondence during the past sixteen months, are:

1. That the midwives have practiced without restraint and have practically ignored state laws.

2. That the midwives have no training, not even in the simplest rudiments of surgical cleanliness.

3. That many of the midwives are not capable of being trained.

4. That many deaths and much disability both of mothers and babies, are directly traceable to the lack of proper care.

5. That despite the above enumerated conclusions, the midwife is still a necessity in some communities.

.....

Respectfully submitted,

H. Garst, M.D.
Director
Bureau of Child Hygiene

I. Introduction

The preceding letter--written 58 years ago--may well reflect a segment of the present paradoxical view that the medical and public health professions takes toward the practicing lay midwife, especially the partera.*

Midwifery, one of the oldest female professions, is the art and practice of attending women during childbirth and the practice has been recognized throughout the history of mankind. Midwife means "with women" and until the 17th century, midwives were women. Women have always been healers--passing on the skills and knowledge from one to the other (Forbes, 1966; Donegan, 1978). Female healers were called "wise women" by the populace--witches or charlatans by authorities (Ehrenreich and English, 1973). As the male physician ascended to power over the centuries, women were more and more excluded from the healing profession by, first, the suppression of "witches" in Medieval Europe, and later, by the rise of male medical professionals. In the United States, male physicians began to include the delivery of babies in their practice during the 18th century (Litoff, 1978). The number of hospital deliveries has rapidly increased over the years; the numbers of midwife deliveries have in turn decreased. It is only recently that a change has been seen in this trend and the demand for female attended births is increasing (Litoff, 1978).

In Mexico, too, there is a long history of the utilization of midwives--parteras. The practice of midwivery predates Cortes. The Goddess Tlazolteotl was the goddess of childbirth and the midwives were known as "Tlamatqui-Tuti". They, too, cared for the pregnant women, attended the delivery, and cared for the newborn (Kelly, 1965).

The purpose of this paper is to present a comprehensive overview of the partera--a description of her, of her practice, and her background, including education and experience. The parteras practicing in the Rio Grande Valley of South Texas deliver a significant percentage of the babies born in that region. Hence, they are the major focus of this paper. For, as one travels westward along the U.S. side of the border, from Brownsville, Texas to San Diego and Chula Vista, California, one becomes aware of an ever decreasing number of partera deliveries.

*The following definitions are presented to clarify terms:
Lay midwife, a person who practices lay midwifery.
Lay midwifery, assisting a childbirth for compensation (Uribe, 1981).
Partera, a Mexican-American or Mexican lay midwife who is a member of the indigenous health care system of the Mexican-American and Mexican communities (Trotter and Chavira, 1980).
Since the majority of lay midwives residing in the Texas border counties are Mexican-American, or Mexican, the term partera will be used in this paper. The only occasion for using the term midwife is with a discussion of state birth certificates. This is because there is no way of isolating the parteras from the midwife category. However, it is assumed that in the counties along the U.S.-Mexico border, the midwives are predominantly parteras.

In the combined Brownsville, Texas-rural Cameron County area, there were 3,782 live births in 1980. Of these births, 1,835--48.5%--were midwife delivered (Texas Department of Health Bureau of Vital Statistics, 1980). In New Mexico, Arizona, and California the practice of lay midwifery along the border is not common. In New Mexico, it was reported that there are no parteras and that the women who desire a partera delivery go to El Paso, Texas. Here a lay midwife must pass an examination in order to register (Lonsdale, 1982).

In Arizona there may be one or two parteras, but they are not licensed and difficult to trace. Parteras can not be paid to deliver babies because that would be "practicing medicine without a licence". Several instances of known or suspected partera deliveries were reported, but they were not recorded as such on birth certificates. Rather, they were attributed to "other"--such as "aunt" or "mother" (Bauerman, Bell, and Beman, 1982). In California, there are few, if any, partera deliveries. In Chula Vista, for example, there were three partera deliveries reported in the past ten years--"this practice is virtually non-existent" (Lampert, 1982).

In addition to the description of the partera, this report includes an analysis of data related to midwife deliveries, a discussion of the issues and problems related to partera deliveries, a description of existing regulations and proposed legislation in Texas, and the policy recommendations of the author.

Acknowledgements

I wish to thank Julian Castillo, Director of Health Sciences at Pan American University, Edinburg, Texas; Sister Patricia DeBlieck, R.N., C.N.M. of the Hidalgo County Health Department; and Leonel S. Castillo, former Commissioner of Immigration and Naturalization for their assistance in the preparation of this paper.

II. Parteras

Definition. The partera, midwife, is viewed as a healer by many members of the Mexican-American/Mexican communities. She is described as "an individual who is recognized in her community as having the ability to heal" (Trotter and Chavira, 1977). The partera is almost always female, and described as out-going, warm, gentle, caring and cooperative.

Function and role. Her duties include:

1. Giving advice to the pregnant women;
2. Giving physical aid, such as treating any illness the mother may experience during pregnancy;
3. Guiding the mother through her pregnancy, vis-a-vis nutrition or activities the mother can and can not do; and
4. To be in attendance during labor and delivery (Shutler, 1977; Kay, 1977 and 1978).

Profile. The following description of partera has been developed from the Philpott dissertation based on data collected in 1977 from parteras interviewed by Hurtado. The parteras practiced in the Rio Grande Valley of Texas, six in Cameron County, 25 in Hidalgo County, and 1 in Willacy County. Thirty-one of the parteras had Spanish surnames, 21 (65.6%) were U.S. citizens and 11 (34.4%) were Mexican citizens residing in the United States. Spanish was the primary language for 31 of the women; while 1, an Anglo, stated that English was her primary language. All had been married, 19 still were; all had given birth to children, the mean being 5.1 and the range 1-21. The average age of the parteras was 60.5 years, with the range of 38-80 years. The parteras had been residing in the United States an average of 35.4 years, with a range of 3-78. Most of the parteras themselves had been attended by parteras when they delivered their babies.

The homes of the parteras lived in were rated by Hurtado with the word "nice" and it connoted a clean, comfortable, although not necessarily modern, house. Of the homes visited by Hurtado, 5 were described as beautiful, 10 very nice, 5 as nice, 10 not nice, and 1 was an apartment.

Education. The educational background of the parteras was diverse. The numbers of years spent in school ranged from 0-17; 7 were found to be illiterate, 11 had no education, 10 had from 1-6 years of school, 7 had from 7-12 years, 4 women had 12 or more years. One women was a registered nurse, and one had attended 2 years of medical school in Mexico.

In terms of "training"--they all had many years of experience. Many of them began their practice as young women: three before the age of twenty, 15 between the ages of 20 and 30 years, eight during their thirties, and the remainder when they were over forty. The average number of years in practice was thirty. The empirical midwife has no "formal" training; rather, she learns her craft from a family

member or under the tutelage of an older midwife. One of the parteras reported that she was out on a delivery with another midwife. The other woman left her alone with the laboring woman while she ran an errand. While the "teacher" was gone, the woman delivered. The younger woman assisted in the birth and began her practice at that time.

Many of the parteras were from families where there had been 3-4 generations of parteras. "My mother, grandmother, aunt--all were midwives." Another claimed that as a child she knew that she would be a midwife. One woman reported that she has observed several deliveries and that she "just went out and did it". Several of the midwives did have formal nursing or practical nursing education. As mentioned, one was a nurse, another attended medical school for two years.

The Utilization of Parteras

Patients are most often referred to the parteras by their friends or relatives. "A partera with a good reputation is always busy." Several parteras claimed that they received referrals from the health department they were registered with, one advertised in the local newspaper, another in the telephone book, and several had signs on their homes.

The costs of a partera delivery have risen from an average of $175 in 1977. They now range between $185-300. The parteras purchase their own supplies, such as cotton and maternity pads; birth certificates are filed by them; and, they do have other expenses.

The parteras, in general, believed that the women come to them because they are poor and can not afford a hospital delivery. However, there are other reasons. For example, some parteras believed that the mothers have more confidence in them than in the doctors because they speak Spanish, understand modesty, and work within the mother's cultural and religious context.

Many of the parteras have birthing rooms in their own homes. In fact, eight of the parteras will only deliver in their homes, ten of the parteras will only deliver in the mother's home, and the remainder will deliver wherever the mother wants to deliver. Most of the parteras do have a contact with a doctor that they can call if they have a problem. In case of an emergency, 61% of the parteras send the mother to the hospital; 34% call a doctor first. Several reported that they felt "the doctors do not want to help. I guess they think that we are going to take their job away." All of the parteras that had been interviewed for the Philpott study were registered.

Practice. The parteras avoid delivering women with high blood pressure; anemia; a history of diabetes; multiple babies; transverse presentations; and some prefer to send women with breech presentations to the hospital. If a woman appears at their door in the middle of the night who is very poor and has no place to go, most claim they will take her in.

Seventy-five percent of the parteras keep records of their deliveries. Included in these records are such data as the name of the mother, date, time of admission, stage of labor, time in labor, contractions, time of delivery, presenting part, time of delivery and condition of placenta, and the condition of the mother and baby.

Several of the midwives reported that they did have still births. However, 18 reported that they had never had one. A study by Sanchez in 1971 reported that many midwives in South Texas had delivered defective children. A few of the midwives that he interviewed differentiated between physically defective children and mentally defective children. He reported that the parteras were "aware of the problems of defective children, and some felt that much more effort was needed in this area to eliminate the causes of defective children and to help those already born". He also reported that a majority of the parteras he interviewed had beliefs (folk) about the causes of birth defects that included eclipses, punishment from God, and so forth. Others expressed concern about blood problems and syphilis.

Prenatal Care. The amount of prenatal care that the parteras deliver ranges from "a lot to a little". In general, the mothers seek their help during their third or fourth month of pregnancy. If help is sought at this time, the mother is sent either to the health department or to a doctor for blood work.* The partera is able to follow the mother and gives her advice and massages. She may charge $1-3 for prenatal care. Sanchez found that a most important service that the midwife performed was the repositioning of the fetus in the womb through massaging.

Examples of the advice a partera may give are as follows:

- For women who are experiencing pica, it is recommended that she purchase solid milk of magnesia in Mexico. This tastes like clay, but is not harmful.
- The mother with food cravings is advised to satisfy them.
- No lifting of heavy objects.
- Take laxatives.
- Get plenty of exercise.
- Do not cross your legs because the baby can get into the breech position; also bathing in hot water can make the baby turn, and rest in this position.

If the partera knows the exact date of the mother's last period, she is able to tell exactly when she is going to deliver. She calculates eight lunar months and 27 days from the onset of the last period.

Labor and Delivery Care. With the onset of labor, the mother contacts the partera. She either goes to the home of the partera, or the partera comes to her home. The mother is examined vaginally to determine how far along in labor she is and the position of the baby. She is instructed to shower and empty her bowels, with an enema, if necessary. She is encouraged to walk and move around until the delivery is impending. Several of the parteras elect to shave the pubic hair,

*Blood work consists of C.B.C., Serology, Rh. and grouping, and measles titre.

others trim it, and others simply clean the area with a disinfectant.

The mother is helped to relax and is kept walking. Once she is ready to deliver, she is put to bed. Most of the mothers are delivered lying down in bed. However, if the mother chooses to do so, she is delivered in a squatting or sitting position.

Several home remedies are used during labor. Comino (cumin seed) tea or canela (cinnamon) tea may be used to stimulate labor. Occasionally, pitocin is given to speed labor and ergotrate is given to prevent hemorrhage after delivery. These medications are purchased in Mexico. However, dispensing them in Texas is illegal, and most of the parteras claimed not to use them. Olive oil is used to lubricate the abdomen during massage, and it is later massaged on the perineum to prevent tearing. It is believed that the gentle touch of the partera in massaging the abdomen and later the perineum helps the mother to relax during her labor.

Many of the parteras will deliver a woman who has had a previous Cesarean Section. Twelve of the parteras work alone and require no assistance during the delivery; six require assistance occasionally. Many state that they depend on "the Virgin and/or Saint Raymond, the parton saint of parteras" for help.

Equipment. The equipment that the partera uses consists of the following items: gloves (the majority use gloves while delivering the baby), umbilical cord ties, scissors, eye drops (they instill silver nitrate eye drops that are procured at the health department), a scale, alcohol, gauze and/or cotton, a bulb syringe (to suction mucus from the newborn's mouth), hemostats (to clamp the cord) and plastic bags for the placenta. The partera washes her hands and dons gloves for the delivery.

Care of the Baby and Mother. The baby is stimulated if needed and the mucus is removed from the mouth and nose as needed, with the use of a bulb syringe. The cord, after being clamped off in two places, is cut with scissors that are boiled and soaked in alcohol. It is then treated with mercurochrome, alcohol, or a combination of the two. The baby is weighed. Some time after delivery, it may be bathed. Most of the parteras bind both the mother and the baby. The baby may be fed oregano or cumin tea right after birth or later on to help it spit up the mucus. Other parteras give the baby sugar water, weak comino tea or boiled water. Eye drops are instilled, silver nitrate is most frequently used.

The partera stays at the mother's home for several hours after the delivery and then returns to check her and the baby the next day. If the mother delivers at the home of the partera, she generally stays 12-14 hours.

Disposal of the Placenta. There are several ways of disposing of the placenta. For example, it may just be placed in a plastic bag and thrown in the trash. Or, it may be buried in the yard. Some placentas

are buried with a religious or folk ceremony.

There were several folk reasons given for the burial of the placenta. The reason for not burning it was that it was the same thing as burning a person. It must be buried so that the animals will not eat it. If it is eaten by a dog, the mother will not be able to bear any more children. If it is thrown in the trash, the mother's womb may become "cold". Another reason for the burial is that it prevents the mother from having pain. If the baby is a girl, the placenta is buried near to the home so the daughter will not go far away. If it is a boy, it is thrown far away.

Folk Beliefs. Several of the parteras who were interviewed discussed the following folk beliefs:

The pregnant women is "hot" and she must avoid "hot" foods. There was also mention, primarily in Sanchez's study, of such folk beliefs as mal de ojo (evil eye), susto (shock or fright), eclipse (viewing the moon at the wrong time of the month, causing birth defects), empacho (food not passing through the stomach), latido (chronic lack of appetite causing emaciation), and bilis (caused by extreme anger, characterized by nervous tension and fatigue). Eleven of the parteras claimed that they practiced within a religious context, 11 claimed to be herbalists, and 18 used home remedies.

Partera Visit. In order to verify the findings of Philpott and Hurtado and to obtain answers to questions that were not addressed by them, a visit was made to a partera in Weslaco, Texas. The following is a description of that visit and the partera's answers to the questions that were discussed. This woman had been described by the public health nurse as a partera who loves her work, does the job well, and is one to whom people come back to because she is able to establish excellent rapport with her clients.

The visit was made to this partera shortly after 1:00 p.m. on a sunny December afternoon. We turned off the "super highway" onto a small unpaved road, and drove up to a yellow house that was surrounded by a neatly trimmed lawn, with flowers and statues. There was a small sign on the front of the house that had a stork painted on it, the word "partera", and a telephone number.

We were greeted at the door by a four-year-old boy who invited us in and said that his grandmother would help us in a moment. When the partera came, we explained the purpose of the visit, and we were invited to come in and sit down. The home was well furnished and decorated for Christmas, which was in two weeks. The woman was warm, friendly and receptive. She spoke no English but was willing to speak slowly and was able to understand the author's "Boston" accented Spanish.

She was 51 years old, studied some nursing in Mexico and had previously practiced for ten years in Victoria, three years in Reynosa, and had been practicing in Weslaco for four years. She had established a good relationship with the nurses in the county and also with the doctors.

Table 1--Profile Summary: 32 Parteras in the Lower Rio Grande Valley, Texas

Characteristics	Number	%	Range	Mean
Spanish Surname	31	97		
U.S. Citizen	21	66		
Mexican Citizen Residing in U.S.	11	34		
Spanish--Primary Language	31	97		
Number of Children			1-21	5.1
Age			38-50	60.5
Years Residing in U.S.			3-78	35.4
Living Conditions				
Beautiful	5	16		
Very Nice	10	31		
Nice	5	16		
Not Very Nice	10	31		
Apartment	1	3		
Missing	1	3		
Years in School			0-17	
No Education	11	34		
1-6 Years	10	31		
7-12 Years	7	22		
More Than 12 Years	4	13		
Years in Practice				30
Age Beginning Practice				
Before 20	3	9		
20-30	15	47		
30-40	8	25		
40+	6	19		
Cost of Delivery			$185-$300	
Place Where Delivery				
Mother's Home Only	10	31		
Partera's Home Only	8	25		
Choice of Location	14	44		
Emergency Action				
Refer to Hospital	21	65		
Call M.D. First	11	35		

Table 1 (Cont'd.)

Characteristics	Number	%	Range	Mean
Record Keeping	24	75		
Experienced Stillbirths	14	44		
Practice Within a Religious Context	11	34		
Herbalists	11	34		
Use Home Remedies	18	56		

The women who come to her are from Rio Grande, McAllen, San Juan, Weslaco, and Donna, Texas. Some also come from Mexico. She is very popular and delivers from 5-9 babies a month. She charges $185 a delivery. She sends her patients to the public health department for prenatal care. The ages of the women that she sees are 15-42. Most come to her during their fourth or fifth month of pregnancy. She will not accept as a patient a woman who is anemic or has high blood pressure, a history of diabetes, or other medical problems of a malpresentation. She feels that a major problem is that of the baby's presentation. If the baby is in a transverse presentation, she will not deliver it and sends the mother to a doctor. She is cautious with breech presentation and has delivered twins.

She then took us to her "birthing room" in the back of the house. The home appeared small from the outside. However, it went straight back for quite a distance and we passed several rooms, including a dining room, several bedrooms, and a kitchen on the way to the "birthing room". The home was extremely clean and well furnished and comfortable. The walls were adorned with family and religious pictures.

The "birthing room" consisted of two single beds, an examining table, an instrument table with a scale on it and the following equipment: hemostats and scissors (soaking in basins filled with alcohol), cotton, gauze, gloves, and eye medications. There was also a sphygnomanometer and stethoscope. In the back corner of the room there was a washing machine and dryer and a large carton of maternity pads. On the washing machine was a statue of the Virgin with a candle in front of Her and religious pictures adorned the walls. The room was clean and both beds were neatly made up. There was a separate entrance into the room from outside. There was also one small window covered with a colorful curtain.

The partera explained that she keeps the mothers active until they are ready to deliver. When the woman comes to her house, she examines her to determine how far along she is in labor. If this is her first baby and she has not started to dilate, and everything appears normal, she sends her home with instructions to return when the "labor" comes more often or if "her water breaks". If the mother is in more active labor, or if this is more than her first child, she keeps her at her home. But she keeps her active and maybe walking in the neighborhood until her labor is quite active. When the delivery appears imminent, that is, when the head begins to crown, she puts the mother to bed. If the baby's head is in a posterior position, she rests the mother's hips on rolled towels or a bed pan to elevate her hips and lower back. She massages the mother's abdomen and perineum with oil. The abdomen is massaged to relax the mother and the perineum is massaged to prevent tearing. She cleanses the perineum with soap, water, and then mercurochrome. If needed, she shaves the mother. She may also give the mother an enema earlier in labor, if it is needed. Before the baby is delivered, she washes her hands and puts on gloves. She does not wear a mask or special clothes, but does wear an apron. She works alone, but prays to the Virgin for assistance.

Once the baby is delivered, she suctions it with the bulb syringe to remove excess mucus. She clamps the cord with the hemostats, cuts

it with the scissors, and ties it with the cord ties. She instills silver nitrate in the baby's eyes. She wraps the baby and places it with the mother and waits for the placenta. She related that if she has difficulty delivering the placenta, she has the mother blow into a coke bottle and the placenta then "pops out". The placenta is disposed of in accordance with the patient's wishes.

She encourages the father of the baby to remain with the mother, or else has some other relative stay with the mother. She wants them to see what she does and to be aware of the "good job" that she does. She keeps the mother in her home for eight hours after the delivery.

She also assumes the responsibility for registering the baby's birth at the county courthouse.

III. Parteras in Mexico

Mexican health officials have been involved since 1926 in the training of midwives. It has been recognized by the health authorities that the traditional midwives are much a part of the social system and that they continue to play an important role in childbirth care. The women who are midwives are seen as skillful and knowledgeable about many aspects of pregnancy and childbirth. In addition, the United Nations has also been engaged in the training of traditional birth attendants in Mexico. The traditional birth attendant (TBA) is defined as a "person, usually a woman, who assists the mother at childbirth, who initially acquired her skills delivering babies by herself or by working with other traditional birth attendants", (W.H.O., 1979). In many cases, the TBA's work not only includes her attendance at childbirth, but the provision of basic prenatal care and the provision of neonatal care. The TBA may also perform such tasks as the identification of and referral of high-risk patients, the teaching of family planning, and other primary health care activities.

A study of the services provided during the first half of 1976 by 950 trained TBAs in 13 states of Mexico showed the following specified activities as presented in Table 2.

The parteras in northern Mexico tend to work in hospitals. There are four parteras that practice outside of the hospital in Nogales, Sonora. The parteras attend most births and call doctors only in an emergency. Parteras are now receiving at least one year of formal training (DeCorta, 1982). The program for training parteras began in 1978 and is one part of the Maternal and Child Health and Family Planning Program-Rural Programs. This program is clearly defined and contains a content outline and learning objectives. Thus far, the program has been available to 4,832 parteras (Secretaria de Salubridad y Asistencia, 1981).

Table 2--Traditional Birth Attendant Services in 13 States of Mexico, First Half of 1976

Births attended	12,489
Pregnancies attended	7,808
Postnatal cases attended	8,286
Other assistance given	1,345
Health promotion activities	2,808
Sanitation activities	4,621
Hygiene education provided	8,140
Cases referred for consultation	5,842
Collaboration in vaccination campaigns	1,251
Collaboration in other programs	1,291
Collaboration in mobile brigades	98
Notified cases	369
Married couples referred to family planning programs	2,614

Source: Dr. F. Garcia Sanchez, Instituto Mexicano del Seguro Social, Mexico City. (World Health Organization, 1979).

IV. Lay Midwife Deliveries in the Texas/Mexico Border Area

Lay midwives, or parteras, deliver a significant percent of babies along the Texas/Mexico border. In Texas, Cameron County has both the greatest number of registered parteras and the greatest number of parteras deliveries. In 1976, there were 39 lay midwives in Cameron County; 30 in Brownsville and 31 in Hidalgo County. This population tends to remain constant. However, in 1977, the city of Brownsville passed a strict city ordinance to control the lay midwives. An examination was given and passage was required to practice within the city limits. Several of the lay midwives were unable to pass the new requirements and moved outside of the city limits (Chavez, 1981).

As can be seen in Table 3, "Total Lay Midwife Delivered Births, by Occurrence , Rural Cameron County* and Brownsville, 1974-1980", 97% of the rural deliveries in 1974 were performed by lay midwives. From 1975-1977, the number of rural lay midwife deliveries declined to below 5%. In 1978, after the city of Brownsville passed the "Lay Midwife Ordinance", the number of rural area lay midwife deliveries rose to 43%. In 1980, 48% of the rural Cameron County babies were delivered by lay midwives. For the entire state of Texas, in 1980 there were 273,433 births; 8,558 , 3%, were lay midwife and other delivered.

In Brownsville, there were from 67%-80% of the live births delivered by lay midwives from 1974-1977. In 1978, after the passage and enforcement of the "Lay Midwife Ordinance", the number dropped to 43.5%; however, by 1980, it rose to 49%. Thus, although the total numbers of births delivered by lay midwives have generally decreased, they are still substantial. Further, the lay midwives have become very active in the rural area following enactment of the "Lay Midwife Ordinance".

Not only do the lay midwives in rural Cameron County and Brownsville deliver a significant percentage of babies overall; they also deliver a high percentage of the babies born to teenage mothers. Table 4, "A Cross-Tabulation of Live Births, by Occurrence to Teenage Mothers by Rural Cameron County/Brownsville Place of Birth, Year of Delivery, and Birth Attendant, 1974-1980" illustrates this. For example, in Brownsville, there were 718 births to teenaged mothers in 1974; 470, or 65% of these deliveries were performed by lay midwives. In that same year, there were thirteen teenagers delivered in the rural area; 100% of these were by lay midwives.

In 1977, 76% of the babies born to teenage mothers in Brownsville were delivered by lay midwives; in 1978, after passage of the ordinance, 46% were delivered by lay midwives. However, in 1978, 46% of the births in rural areas to teenagers were performed by lay midwives, up from only nine percent the year before. Services to many teenagers have apparently moved from urban to rural locations.

In 1980 there was a total of 3,782 births by occurrence in Rural Cameron County/Brownsville. Of these births, 497 babies (13%) were

*Rural Cameron County figures exclude Brownsville, Harlingen, San Benito, Port Isabel, and La Feria.

Table 3--Total Lay Midwife Delivered Births, by Occurrence, Rural Cameron County and Brownsville, Texas, 1974-1980

	Rural Cameron County			Brownsville		
Year	Total Births	Midwife Delivered	%	Total Births	Midwife* Delivered	%
1974	76	74	97	4921	3309	67
1975	702	34	5	4145	3162	76
1976	994	30	3	3716	2965	80
1977	920	47	5	2665	1893	71
1978	1469	627	43	1592	693	44
1979	1970	982	50	1696	745	44
1980	2101	1011	48	1681	824	49

Source: Texas Department of Health Bureau of Vital Statistics, 1974-1980

*In the creation of this table, the category "other" was added to the midwife category since a small number of births were in this particular category.

Table 4--Cross Tabulation of Live Births, by Occurrence, to Teenage Mothers by Rural Cameron County/Brownsville Place of Birth, Year of Delivery, and Birth Attendant, 1974-1980

Year	Location	Maternal Age	M.D. #	M.D. %	C.N.M. #	C.N.M. %	Midwife* #	Midwife* %	Total #	Total %
1974 Total Teenage Mother Births= 731	Rural Cameron County	12-15	0		0		1		1	100
		16-19	0		0		12	100	12	100
	Total	12-19	0		0		13		13	100
	Brownsville	12-15	18	51	0		17	49	35	100
		16-19	230	34	0		453	66	683	100
	Total	12-19	248	35	0		470	65	718	100
1975 Total Teenage Mother Births= 752	Rural Cameron County	12-15	2	100	0		0		2	100
		16-19	97	92	0		9	8	106	100
	Total	12-19	99	92	0		9	8	108	100
	Brownsville	12-15	11	32	0		23	68	34	100
		16-19	154	25	0		456	75	610	100
	Total	12-19	165	26	0		479	74	644	100
1976 Total Teenage Mother Births= 712	Rural Cameron County	12-15	9	100	0		0		9	100
		16-19	128	95	0		7	5	135	100
	Total	12-19	137	95	0		7	5	144	100
	Brownsville	12-15	11	30	0		26	70	37	100
		16-19	120	23	0		411	77	411	100
	Total	12-19	131	23	0		437	77	568	100
1977 Total Teenage Mother Births= 521	Rural Cameron County	12-15	5	83	0		1	16	6	100
		16-19	101	91	0		10	9	111	100
	Total	12-15	106	91	0		11	9	117	100
	Brownsville	12-15	8	26	0		23	74	31	100
		16-19	90	24	0		283	76	373	100
	Total	12-19	98	24	0		306	76	404	100

*In the creation of this table, the category "other" was added to the midwife category, since a small number of births were in this particular category.

Table 4 (Cont'd)

Year	Location	Maternal Age	M.D. #	%	C.N.M. #	%	Midwife* #	%	#	Total %
1978	Rural Cameron County	12-15	6	66	0		3	33	9	100
		16-19	79	53	0		70	47	149	100
Total Teenage Mother Births= 395	Total	12-19	85	54	0		73	46	158	100
	Brownsville	12-15	9	64	0		5	36	14	100
		16-19	105	47	0		118	53	223	100
	Total	12-19	114	48	0		123	52	237	100
1979	Rural Cameron County	12-15	2	29	0		5	71	7	100
		16-19	89	45	0		111	55	200	100
Total Teenage Mother Births= 477	Total	12-19	91	44	0		116	56	207	100
	Brownsville	12-15	10	53	2	11	7	36	19	100
		16-19	96	38	39	16	116	46	251	100
	Total	12-19	106	39	41	15	123	46	270	100
1980	Rural Cameron County	12-15	2	33	0		4	67	6	100
		16-19	118	50	0		117	50	235	100
Total Teenage Mother Births= 497	Total	12-19	120	50	0		121	50	241	100
	Brownsville	12-15	9	47	0		10	53	19	100
		16-19	111	47	0		126	53	237	100
	Total	12-19	120	47	0		136	53	256	100

Source: Texas Department of Health Bureau of Vital Statistics, 1974-1980.

*"Other" was added to Midwife category.

delivered to teenage mothers. Lay midwives delivered 50% of the babies born to teenage mothers in Rural Cameron County and 53% of the babies born to teenage mothers in Brownsville.

Table 5 and 6 demonstrate the numbers and percentages of lay midwife deliveries for selected Texas border counties, from east to west, Table 5 is presented by county of occurrence, and Table 6 is presented by county of mother's residence. Table 7 is a comparison of these two tables. Overall, deliveries by midwives as a percent of total births decline as one travels east to west. For example, the lay midwife deliveries comprised 31% of all 1980 births occuring in Cameron County, while the percentages in El Paso was 10%. In terms of residence, 19% of the births to Cameron County residents were delivered by lay midwives as were 8% of those in El Paso.

A striking difference is in the rate of lay midwife deliveries by occurrence versus lay midwife deliveries by residence. In 1980, there were 5,095 midwife deliveries that occurred in the selected six border counties, as compared to 2,813 lay midwife delivered residents of the six county area. One explanation of this is an in-migration to the lay midwives for delivery both from other counties and from Mexico. Powell-Grainer and Streck (1982) point out that a substantially high number of women from Mexico do deliver in Texas. It appears from these data that a high number of these "missing" births may be attributed to women from Mexico.

Total %
100
100
100
100
100
100
100
100
100
100
100
100
100
100
100
100
100
100

1980.

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#	Total %
9	100
149	100
158	100
14	100
223	100
237	100
7	100
200	100
207	100
19	100
251	100
270	100
6	100
35	100
41	100
19	100
37	100
56	100

74-1980.

Table 5--Percent Lay Midwife Deliveries in Selected Texas Border Counties East to West, 1979 and 1980 by Place of Occurrence

County	Total Births		Midwife Deliveries		% Midwife Deliveries	
	1979	1980	*1979	1980	1979	1980
Cameron	6387	6927	2035	2114	32	31
Willacy	236	259	34	57	14	22
Hidalgo	7881	8538	1042	1064	13	12
Zapata	1	0	1	0	100	0
Webb	3536	3621	876	658	25	18
El Paso	11629	11785	1276	1202	11	10
Total	29760	31130	5264	5095	18	16

Source: Texas Department of Health, Bureau of Vital Statistics, 1979-1980
*Includes "other".

Table 6--Percent Lay Midwife Deliveries in Selected Texas Border Counties, East to West, 1979 and 1980 by Place of Mother's Residence

County	Total Births		Midwife Deliveries		% Midwife Deliveries	
	1979	1980	1979	1980	1979	1980
Cameron	5094	5489	997	1016	20	19
Willacy	430	449	34	59	8	13
Hidalgo	6982	7614	780	776	11	10
Zapata	129	154	3	11	2	8
Webb	2445	2643	207	195	8	7
El Paso	9809	9915	865	756	9	8
Total	24889	26264	2886	2813	12	11

Source: Texas Department of Health, Bureau of Vital Statistics, 1979-1980
*Includes "other".

Table 7--Comparison: Lay Midwife Deliveries by Place of Occurrence and Mother's Place of Residence in Selected Texas Border Counties, East to West, 1979 and 1980

	Place of Occurrence				Place of Residence			
	Midwife Births		% all Births		Midwife Births		% all Births	
County	*1979	1980	1979	1980	*1979	1980	1979	1980
Cameron	2035	2114	32	31	997	1016	20	19
Willacy	34	57	14	22	34	59	8	13
Hidalgo	1042	1064	13	12	780	776	11	10
Zapata	1	0	100	0	3	11	2	8
Webb	876	658	25	18	207	195	8	7
El Paso	1276	1202	11	10	865	756	9	8
Total	5264	5095	18	16	2886	2813	12	11

Source: Texas Department of Health, Bureau of Vital Statistics, 1979-1980
*Includes "other".

V. Issues and Problems

The following are several examples of the multitude of issues and problems that have been raised surrounding the practice of lay midwifery:

Practice. Philpott reported that in 1973 McMahon found that:

1. Midwives often administered medication without consulting a physician.
2. Substandard sanitary conditions existed in midwives' clinics or homes.
3. Many of the midwives did not use silver nitrate in the baby's eyes, in violation of the law.
4. Many of the midwives did not know or practice sterile technique.
5. There was the wide utilization of folk medications and folk remedies in the midwife's care of the mother and baby.

The following incidents were reported in Hidalgo County:

Maternal Mortality. In 1980, Hidalgo County reported a maternal death. The mother, a 24-year-old gravida 1, was a Mexican national. She was delivered by a partera in Mission, Texas. The cause of death was found to be related to:

1. Severe shortness of breath on exertion during pregnancy causing limitation of activities.
2. Severe abdominal pain two hours after delivery.
3. A hemoglobin of 8 grams on admission to the hospital.

In 1981, there was another maternal death in Hidalgo County--this one was that of a 48-year-old gravida 4, para 3, woman. She, too, was a Mexican national. With her last pregnancy she had been advised to "have no more children". The family was very poor, and she had had no prenatal care. The mother arrived at the partera's home at the "last moment" with no records of blood tests or prenatal care. The partera attempted to refuse to take care of her; but was unable to refuse her because of the advanced stage of labor. The woman was pushing, and it was too late to send her elsewhere. The baby was delivered and the cord was greenish-yellow. The placenta did not deliver; after 20-30 minutes the woman began to bleed. The partera attempted to stop the bleeding and to get an ambulance to come to take the woman to the hospital. There were a number of delays and two hours passed before the lady got to the hospital. She was dead on arrival. The death was most likely due to a postpartum hemorrhage.

Infant morbidity. An infant developed tetanus of the cord in 1981. This baby was delivered by a partera who had been delivering babies since the early 50's. This particular partera had been defensive about visits by the public health nurses, and she was reluctant to allow them into her home. She was illiterate and visually impaired.

According to the mother, the partera had cut the baby's cord with scissors that she had removed from her instrument bag; and tied the cord with string that she cut from a ball of string. In other words, neither the scissors nor the cord ties were sterile. The baby was treated and

did recover. However, it did have some residual damage. The mother, who did not know if she had received tetanus immunization, was immunized. An additional case of infant tetanus was reported in May 1982.

Crossover Births. Crossover births, that is births to women from Mexico who cross over the border to deliver, represent a large share of the number of partera deliveries. These births have caused numerous problems in the communities along the border in several different areas. For example, many of the mothers do not receive adequate or any prenatal care. In addition, there are resulting problems with welfare and food stamps, as well as immigration practices and policies. In some areas along the U.S.-Mexico border there are a large number of these births, for example Cameron County, Texas. In other areas, the numbers are smaller, either because there are no parteras to deliver the mothers or because the U.S. hospitals are able to return the women to Mexico before they deliver. An example of this practice occurs in Nogales, Arizona (Bauerman, 1982).

The following describes the present status of the U.S. immigration policy towards crossovers:

1. All persons born in the United States are U.S. citizens.
2. A child born in the U.S. can attend public school at his/her U.S. place of residence.
3. When a U.S. born person reaches the age of 21 s/he can petition for a permanent resident status for the parents. Permanent residents are granted permament resident status, also known as "green cards" or "A numbers". Prior to 1977, parents of U.S. born children could apply for permanent resident status after the child was born. As of January 1982 permanent residents are no longer required to register yearly (Castillo, L. J., 1982 and Parons, 1982).
4. Alien--every person applying for entry to the U.S. other than a U.S. citizen or national.
5. Immigrant--an alien entering the U.S. for permanent (or indefinite) residence.
6. Resident alien--a lawfully admitted resident.
7. Nonimmigrant--there are several classes: foreign government officials; temporary visitors; crewmen; students, spouse, and children; and temporary workers. Nonimmigrants are required to have a valid passport (not required of Mexican nationals) and a valid nonimmigrant visa or border-crossing card. A "border-crossing identifcation card"--"local card" or "pink card"--is a document of identity issued for the purpose of crossing the border between the U.S. and Canada or Mexico (Weinberter, 1967). The local card is issued either along the border or in U.S. consulates within the country. The applicant must prove place of birth (Mexico or Canada) and employment. It is issued for the purpose of "walking across the border to visit and shop", and is not valid 25 miles beyond the border (Castillo, L. J., 1982).
8. Undocumented alien--a person of foreign origin who has entered the country unlawfully, by-passing inspection; or who, after legal entry, has violated the terms of their admission, generally by overstaying and/or accepting unauthorized employment (Vialet, 1980).

Other Problems. In addition to the aforementioned issues and problems, there are several tangential issues that surround partera deliveries. For example:

1. Poverty. There are large numbers of people residing along the border who are migrant workers and/or unemployed, living in extreme poverty.
2. Lack of Medicaid cards or other types of health insurance.
3. The refusal of some doctors to care for Medicaid patients; for example, it was reported that not one doctor in Edinburg, Texas, will accept Medicaid mothers.
4. The practice of hospitals not accepting patients without prepayment. Several hospitals were cited for turning away patients and in several places the practice of sending laboring women back to Mexico to deliver still exists.
5. False birth certificates. Some parteras are believed to issue false birth certificates for babies born in Mexico.
6. Abortions. It was asserted that some parteras perform abortions.
7. Lack of backup and followup care. Because it is often difficult to trace crossover mothers, the conduct of followup on PKUs and other well baby care practices, the statistical documentation of infant health problems are both inadequate (Powell-Griner and Streck, 1982).

These are but a sample of the problems and issues relating to partera deliveries. These problems have existed for many years. However, serious medical problems that have been reported to have occurred are few in number, considering the high numbers of partera deliveries (Chavez, DeBlieck, Fisch, Garcia, Garza, Leyva, Ruiz, Sanchez and Vinicelli, 1982).

VI. Regulation and Proposed Legislation

The control of midwives varies from state to state along the border. Since the greatest numbers of lay midwife deliveries occur in Texas, the discussion of controls and proposed legislation is mainly concerned with that state.

State Rules. An example of statewide rules in Texas related to midwifery are Vernon's Civil Statutes, Article 4477, rule 46a, which states: ". . . a birth certificate shall be filed with the local registrar of the district in which the birth occured within 5 days after the date of each birth and it shall be the duty of the informant to verify the information on the birth certificate by his/her signature" (Vernon, 1966).

There have not been many difficulties in having the parteras conform with this regulation. In fact, parteras tend to register the births on the same, or next, day as the birth. The parteras fill out the birth certificates (if illiterate, a neighbor assists) and file them. Most keep a supply of birth certificates in their homes. In some situations the partera must also notify the police or public health department when she delivers a baby. This practice has developed in order to prevent the filing of false birth certificates.

Vernon's Civil Statutes, Article 4477, Rule 49a states: "all midwives must register with the local registrar his/her name, address, and occupation". This is practiced and, for example, the number of midwives registered in Cameron County in 1977 was 39 and in Hidalgo County, 31.

Local Control. An example of local control is the action taken by Brownsville, Texas. In 1977, the city of Brownsville passed and enforced a "Lay Midwife Ordinance" requiring lay midwives to meet certain minimal standards and to register with the City Secretary. This had a dual effect of reducing the number of practicing lay midwives in Brownsville and driving some lay midwives who could not meet the minimal standards to practice just outside the city limits. They continue to practice here and the numbers of rural midwife births have risen.

Proposed Legislation. There is no single statute which defines the practice of lay midwifery in the State of Texas, in spite of the fact that the number of deliveries by lay midwives in Texas has been rising. No law establishes the minimum of educational preparation, the duties, the responsibilities, and the limitation of this practice. There do exist statutes that make references to lay midwives. Several examples have been cited (Vernon) and others include: test for syphilis (V.T.C.S. art. 4445a, section 1), report inflammation of the newborn's eyes (V.T.C.S. art. 4466, rule 22), and put drops in the infant's eyes (V.T.C.S. art. 4441).

The legal precedence that relates to the practice of lay midwifery

is that of Banti v. State, 298 S.W.2d 244,248 (Tex. Crim. App. 1956). It was in this case that the Texas Court of Criminal Appeals ruled that a lay midwife was not practicing medicine when she assisted a woman in a normal delivery. The court said the pregnancy was a "normal function of womanhood"--it is not a disease, deformity, or injury. Therefore, the lay midwife who assisted at normal childbirth was not practicing medicine.

During the 1981 Texas Legislative Session, Senator Hector Uribe introduced a bill (S.B. No. 1093) to be entitled "An Act Relating to the Regulation of Lay Midwives". The bill, which did not pass during that particular session, attempted to define the duties, responsibilities, and limitations of the practice of lay midwifery. The bill incorporated five main points.

1. It established a lay midwifery board located within the Texas Department of Health (TDH);
2. It established a standard, optional training course for lay midwifery;
3. It required lay midwives to identify themselves with the county clerk and allowed TDH to maintain a central roster on lay midwives;
4. It would have required that lay midwives disclose to prospective clients the nature and limitations of lay midwifery; and
5. Lastly, it would have prohibited lay midwives from administering prescription drugs, using surgical instruments (except to cut the umbilical cord), removing adherent placenta, or artificially advancing or retarding labor.

This particular bill appears to realistically assess and recognize the societal need for lay midwives. As designed, it would have protected both the mother and the midwife (Bill Analysis--S.B. 1093).

VII. Research and Policy Recommendations

The following recommendations are offered:

Community Survey. In addition to the training of TBAs, the United Nations has developed a program for surveying community people, including mothers, as to their needs for maternal and child health care. A survey such as this one ought to be implemented along the U.S./Mexico border primarily in the Texas area because there is such a strong prevalance of traditional midwives. In spite of the fact that most people state that poverty is the chief reason for electing to be delivered by parteras, this may not be the only reason. Only a survey of the mothers who choose either to go to the doctor or to utilize a partera will shed light on this situation.

Each society has its own customs, beliefs, values, and practices regarding childbirth and the care of mothers and children. These vary from society to society. Prior to making policy and laws, one must be aware of and sensitive to the practices within the society on which they focus. In an area as socially and culturally heterogeneous as the U.S./Mexico border area, it is important in designing legislation to be cognizant of the role the partera is playing in the community she serves.

It is important for the policy makers to:

1. Identify aspects of traditional practice that need to be changed;
2. Determine the extent to which the parteras would be willing to receive training;
3. Determine the incentives that may be needed to obtain their cooperation;
4. Be aware of the rituals and the techniques and procedures that they utilize in the management of labor and delivery--that is, the scope of their practice;
5. Determine the level to which they wish to be trained;
6. Determine how the people in the community feel about them; and,
7. Be sensitive to existing language barriers. The training programs must be in a language that the parteras understand, both the connotations and denotation of words. If the partera is illiterate, other forms of learning, beside the written word, must be devised. This also holds true for testing. The parteras ought to be tested in the language that they understand, be it spoken or written.

Language. Those who deliver health services to the Mexican and Mexican-American mothers must speak and understand Spanish. Health education materials--films, books, pamphlets, and posters--must be available in Spanish.

Collaboration. Close collaboration between public health nurses and parteras is vital. An example of this collaboration is found in Hidalgo County where the public health nurses recognize that the partera will not change their ways, but that they are able to work with them by insisting that they WILL do certain things, such as register the births

within the correct amount of time and instill eye drops in the baby's eyes. The nurses in the Hidalgo County Health Department have been able to upgrade the care that the indigent prenatal patients receive by ensuring that every woman has prenatal blood work done, regardless of when they seek the service; that each woman has a prenatal physical examination done by a nurse midwife; and that health education plays a predominant role in their maternal-child health program. It has been observed that women are seeking the services of the health department maternity nurses earlier in their pregnancy. That is in the first trimester, rather than in the final trimester.

A goal of the health policy must be to improve maternal/child health care by developing cooperative and collaborative relationships between the various parties--physicians, nurses, certifed nurse midwives and lay midwives--who deliver maternal/child health care.

VIII. Conclusions

This paper has focused primarily on the parteras who practice midwifery in Texas along the U.S./Mexico border. It has described their practice, the issues and problems related to their practice, present regulation and pending legislation, and has set forth certain recommendations.

In the formation of public policy, as well as the delivery of health care, it is important to understand the intricacies of such issues. The goal of health care has been to provide safe and adequate services to all recipients. Only with the mutual collaboration and respect of the health care providers and midwives can the prenatal and perinatal care of the indigent, and others desiring traditional birthing services, be sustained and upgraded.

The situation described by Dr. Garst in 1925 may also exist in 1982. Yet just as he recognized then that the "midwife is still a necessity in some communities", these words are also true today. Avenues of collaboration and mutual respect must be explored and followed.

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