

## Recovering after childbirth in the Mixtec highlands (Mexico)

KATZ Esther

ORSTOM (Institut Français de Recherche Scientifique pour le Développement en Coopération)

Département MAA (Milieu et Activités Agricoles)

213, rue Lafayette - 75480 PARIS Cedex 10 - FRANCE

Fax: 33-1-40351713

### RÉSUMÉ

Les Indiens du haut pays mixtèque, tout comme d'autres Indiens du Mexique, prennent particulièrement soin des jeunes accouchées. Un certain nombre de travaux portent sur la grossesse et l'accouchement au Mexique, mais le thème du post-partum a été peu étudié en profondeur, bien que les indigènes insistent sur le danger et l'importance des soins à cette période. Dans ce travail, la conception, la grossesse et l'accouchement sont décrits à titre introductif, tandis que les pratiques du post-partum sont analysées en détail : la période de repos de 20 ou 40 jours, le régime alimentaire particulier, l'abstinence sexuelle, les diverses précautions et prohibitions, les soins corporels, les tisanes, les bains de plantes et surtout, le bain de vapeur, à fonction à la fois thérapeutique et rituelle. L'article pose le problème de l'analyse des données touchant aux pratiques corporelles féminines, difficilement verbalisées. Il amorce également une comparaison avec les pratiques des pays industrialisés occidentaux et suggère de puiser dans les pratiques et les connaissances des sociétés dites « traditionnelles » pour remédier aux dépressions post-partum.

### INTRODUCTION

Like most of the indigenous peoples of Mexico, the Mixtec Indians view pregnancy as a disease. While pregnant, Mixtec women are seen as afflicted with an excess of heat, but are not thought to require special care. On the other hand, delivery and postpartum are considered life crisis moments, and great care is taken of women who have just given birth. The Mixtecs place a high importance on such care.

A number of authors have dealt with pregnancy and birth among Mexican Indians, either in monographs or in specific studies (e.g. GUTERAS HOLMES, 1965; VARGAS & MATOS

1973; ALVAREZ HEYDENREICH, 1976; COMINSKY, 1976 AND 1982; QUEZADA 1977; RITA, 1979; LÓPEZ AUSTIN, 1980; GARCÍA RUIZ AND PETRICH, 1983; IRETON, 1987; MELLADO *et al.*, 1989; MOTTE-FLORAC, 1992)<sup>1</sup>. In this paper we will describe the indigenous perception of conception, pregnancy and birth, emphasizing postnatal care, as do the Indians. The different postpartum practices, and in particular the curative and ritual aspects of the steambath, will be examined in detail. Finally, we will compare these data with modern Western practices and reflect upon what can be learned from these Mexican customs.

## I. LOCATION OF THE STUDY

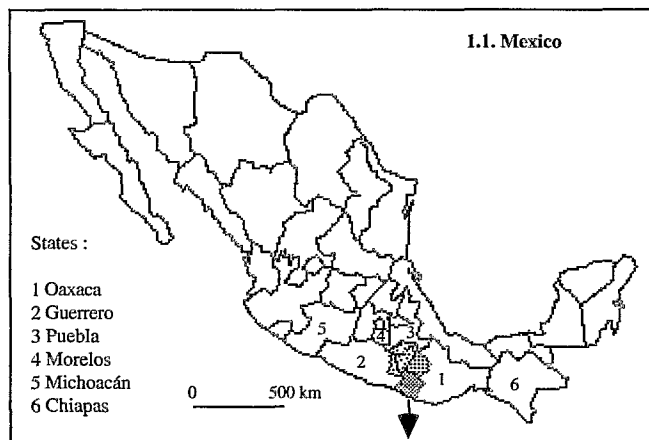
The Mixtec territory is a mountainous area in the south-east of Mexico covering the western part of the State of Oaxaca, the eastern fringe of Guerrero and the southern fringe of Puebla. It is divided into three areas: Mixteca Alta or the Mixtec Highlands (with altitudes around 2000 m), where this study was carried out, Mixteca Baja, at a slightly lower altitude, and Mixteca de la Costa, the lowlands facing the Pacific coast. The climate alternates between a rainy season (May to October) and a dry season (November to April), and varies from hot to temperate and from sub-humid to semi-arid according to altitude and orientation towards the ocean. In the Mixtec Highlands, the vegetation is characterized by *Pinus*, *Quercus*, *Pinus-Quercus* and *Juniperus* forests; cloud forests can be found in the sub-humid southern edge of the Highlands.

At present, the Mixtec area is populated by mestizos and indians, Mixtecs for the most part (325 000 Mixtec speakers in 1980), but also smaller groups, including the Triquis (8000 speakers in 1980), the Amuzgos and the Chocho-Popolucas. All of these groups speak Otomanguean languages (of central and southern Mexico) and are part of the Mesoamerican cultural area. Mixtec and Triqui languages belong to the Mixtecan branch and possess many significant dialectal variations. Our research was conducted in the southern part of the Mixtec Highlands (Mixteca Alta), in the Tlaxiaco district (Oaxaca State), and involved Mixtec Indians, as well as mestizos of Mixtec origin and Triqui Indians. As many Indians are bilingual, our working language was Spanish, though we collected Mixtec vocabulary. In the course of this report, we will also refer to data collected in the same area by JANSEN and PÉREZ (1980) and by MONAGHAN (1987)<sup>2</sup>.

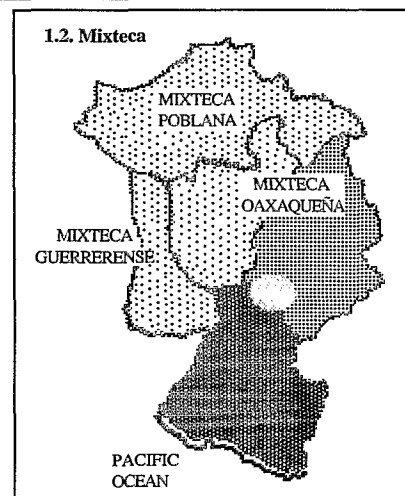
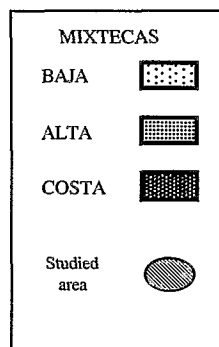
The main activity in the Mixtec Highlands is subsistence agriculture of maize, beans and squash. Because local crop yields are currently unable to provide peasants with a full year's sustenance, an important proportion of the population temporarily or permanently migrates to more prosperous agricultural areas, e.g. to Mexico City or to the United States. Coffee is also grown in the area under study. Women are in charge of heavy housework: grinding corn, cooking, washing, taking care of the home garden and of the animals (hens, pigs, sheep and goats) and looking after children. They also participate in a certain amount of agricultural work, generally in fields within a few hours' walk of the village houses.

## II. INDIGENOUS PERCEPTION OF CONCEPTION, PREGNANCY AND CHILDBIRTH

Mixtec Indians understand the life cycle in terms of categories of hot and cold, categories also applied to food and medicine<sup>3</sup>. According to their beliefs, the temperature of a living creature (human, animal or plant) varies throughout its life. The creature is cold (Spanish: *frío*, Mixtec: *vixi*) at birth, becomes progressively hotter (S: *caliente*, M: *'i'ni*) while grow-



Map 1:  
LOCATION  
OF  
MIXTECA



ing, and then gradually loses heat after reaching maturity. An individual's normal heat can be affected by disease or a state considered as disease, including, in the case of women, menstruation or pregnancy. The life cycle is described in the same terms as the lunar cycle: the moon is born (S: *nace la luna*), is young (S: *tierna*, M: *yute*), matures (S: *maciza*, M: *nixia*), gets old (S: *se acaba*, M: *vaxi ni'i yoo*) and dies (S: *muere*). The life of living creatures is always described as passing from a young to a mature phase: a young child is *muy tierno* (*yute*), and a mature person is *maciza* (*nixia*). There are also different Mixtec names for maize plants at each stage of growth: the young maize plant, called *milpa tierna* in Spanish, is called *biyu* in Mixtec, while the more mature maize plant (*milpa*) is called *'itu*.

### II.1. CONCEPTION

Men and women are fertile when they are in a "hot" period of their life cycle and are further "heated up" by sexual relations. These must not take place during the woman's menstrual period; if this taboo is transgressed, the woman will contract a disease called "*makashani*", and will become "pallid, thin, weak", and "her womb will dry out". In this condi-

tion, she may lose blood, may cease to menstruate, or may hemorrhage. "It is very hard to recover from. The woman can be cured with medicinal plants, but in any case, she remains weak afterwards and suffers easily from diarrhea" (a cold sickness)<sup>4</sup>. Dryness is considered to be hot, while moistness is cold. Menstruation (S: *regla*), called in Mixtec "the disease of the moon/month" ('*u'vi yoo*), is considered as being an "excessively hot" period, during which the woman is said to be dirty (S: *la mujer está sucia*). If sex occurs during this period, it is thought that the combination of sexual heat with menstrual heat produces dryness in the woman, resulting in sterility<sup>5</sup>. Contraceptive plants and pills are also seen as having a drying effect on the womb. A fertile woman has a moist womb. Sexual relations can occur when the woman is hot, but not too hot. To conceive, the woman must be hot and moist. She is then in the same condition as the earth when it is ready for sowing. Sowing occurs at the onset of the rainy season when the earth, warmed by the sun during the dry season, receives the first rains<sup>6</sup>. Before planting, the Mixtec men plow the ground with a digging stick (S: *palo*, M: *tundaxi*), a highly phallic tool, and "leave their seeds" in the holes they make<sup>7</sup>. Life is created in an environment of heat and moisture.

Mixtec Indians (and Mexican Indians in general) believe that a single sexual act is insufficient to create a child<sup>8</sup>. MONAGHAN (1987: 156-157) describing the Santiago Nuyoo Mixtecs' opinions on conception writes: "The fetus is produced by male *nute kuiji* "white liquid". *Nute kuiji* is male blood which flows from all over his body when he becomes "hot" during the sexual act. When *nute kuiji* enters a woman in sufficient quantities, it slowly clots (*nakujio ini*) and begins to grow. The sexual act must be repeated up to ten times for a woman to receive enough *nute kuiji* to allow her to become pregnant". Actually, like other Mesoamerican groups, Mixtecs seem to believe that both male and female liquids have a role in the creation of the fetus<sup>9</sup>. *Nute kuiji* or *nute kwixi*, as we have transcribed it, also means "pulque", a (white) fermented drink made out of agave sap (*Agave* spp.), often described as being "blood" (M: *niñi*) ("es pura sangre") or "milk" (M: *shukwi*) ("es como lechita"). *Pulque* is often drunk in rituals and is offered to the earth before planting<sup>10</sup>. According to MONAGHAN (*ibid.*), Mixtecs also say that "the fetus grows from his father's blood". Another Mesoamerican group, the Tzeltal, say that the man's sperm, becoming blood in the woman's body, mixes in the uterus with the woman's "blood" or "menstrual blood" (IRETON *ibid.*)<sup>11</sup>. Since Mixtec women notice they are pregnant when they no longer "see their menstrual blood" ("*una sabe que es embarazada cuando ya no ve su regla*") it is possible, as is the case with the Huave and the Tzeltal (IRETON *ibid.*; RITA, *ibid.*), that the menstrual blood is also thought to play a role in conception<sup>12</sup>.

## II.2. PREGNANCY

Pregnancy is viewed as a disease among the Mixtec<sup>13</sup>, as is menstruation. In Mixtec, to be pregnant is to be ill ('*u'vi*); in local Spanish, one is said [to be] "*está*", "*está en estado*", "*está embarazada*", "*está enferma*", "*encargó*". Women inform only their very close relatives about their pregnancy and are very discreet about it with other people. In general, neither the pregnancy nor the expected delivery date is discussed outside of close family<sup>14</sup>. Pregnant women are said to be "fragile" (S: *delicada*, M: *ki'mu*), "their body becomes young, tender" ("*se entiernece su cuerpo*"). In spite of this, they continue their usual activities, but avoid lifting heavy weights. Some people think pregnant women should not work as hard as usual, because they are "weak". With the exception of "twin" fruit such as bananas or "twin" ears of corn, discouraged because they are thought to favor the birth of twins, pregnant women do not generally change their dietary habits<sup>15</sup>. In fact, their food cravings (S: *antojos*) must be satisfied to avoid miscarriage<sup>16</sup>.

The woman's womb (S: *matríz*, M: *soko*) in its normal state is not only moist, but also cool. It is compared to the cold, moist subterranean world from which the Mixtec people originally emerged and to which they return after death<sup>17</sup>, and is described as a cave or a pot (pots are said to have a "cool belly"). By receiving the "male blood" (semen) to create the fetus, the womb is warmed up. It is also heated by sexual relations<sup>18</sup>. It then becomes like a pot cooking on a fire. Pregnancy is thought of as a cooking process. During pregnancy, the woman becomes excessively hot, making her dangerous for other people<sup>19</sup>. For example, if she looks at someone who is cooking, the food will turn bad. *Tamales* looked at by a pregnant woman while they are being prepared won't cook at all<sup>20</sup>. In the hearth, if the "feet" of the logs burn first, the baby will be born feet first. If a pot cooks without water or a griddle without *tortillas*<sup>21</sup>, the placenta will be expelled with difficulty during the next birth. While in its mother's womb, the foetus is relatively cold, but it is also undergoing a transformation, like a maturing fruit or like food being cooked<sup>22</sup>. During the last weeks of pregnancy, the midwife comes to visit the pregnant woman; if the fetus is not in the right position, she moves it with the help of a shawl tied around the woman<sup>23</sup>.

## II.3. DELIVERY

When labor begins, the woman "becomes ill" (S: *se enferma*) until she is delivered (S: *se alivia*). Most rural Mixtec women currently give birth at home, with the help of their husband (who holds them during labour), their mother or mother-in-law and often a midwife (S: *partera*). In the area studied, there exist "male midwives", something quite unusual in other regions of Mexico<sup>24</sup>. If labor seems too prolonged, the woman is given a tea brewed from *Montanoa tomentosa* (M: "*yuku yavi*" or "*yuku kava*"), an oxytocic plant commonly used

throughout Mexico<sup>25</sup>. When the baby enters the birth canal, the woman ties a belt (S: *ceñidor*) or a shawl (S: *rebozo*) above her belly, "so that pain does not go up". The woman delivers the baby in a kneeling position<sup>26</sup>. The birth is only announced to a close circle of relatives.

Mixtecs say that an infant carries his mother's heat with him when he is born ("al nacer, el niño se lleva el calor de la mama y ella queda como herida, enferma"). While he becomes warmer than when he was in his mother's womb, he remains cold (*frío*) compared to the outside world; he is "tender" (*tierno*) and "fragile" (*delicado*). The mother is in a similar condition, since she has lost her heat. She is seen as "tender", "fragile", "ill" (*enferma*) and "injured" (*herida*). Both the mother and child must recover heat to get healthy again (S: *sanar*). It is actually common for women to feel very cold right after delivery, as a consequence of the sudden interruption of strong physical effort (NADEL-CONSTANTIN, midwife, quoted by MOTTE-FLORAC 1992). The idea that the mother must subsequently recover heat is common in many societies. Cold is often associated with death, and thus must be avoided<sup>27</sup>.

### III. PRECAUTIONS TAKEN AFTER BIRTH

MCCORMACK, editor of an interdisciplinary work on the ethnography of fertility and birth (1982), found that childbirth in most cultures is followed by a "period of 30 to 40 days in which the mother rests, develops a social bond with the infant, eats special foods, is massaged and cared for [...]. Several authors [...] describe a final massage, washing or other ceremony that brings to an end the period of danger, separation and transition, followed by the woman's reincorporation into society with enhanced status of mother. [...] Babies also emerge from a period of social ambiguity, are given names, are "shown the town" and in other ways incorporated into social structure." As VAN GENNEP (1960: 46) pointed out, recovery from childbirth includes not only a physiological return to normalcy, but also a social return, a "rite of passage" from woman to mother, but also from a "liminal state, separate from the 'safe' categories of ordinary existence" to a normal state of social activity (HOMANS 1982: 254-257).

Mixtec postpartum practices follow this pattern and include rest, precautions and prohibitions, a special diet, massage and other body care, herb teas, and herbal and steam baths. Unlike the postpartum practices current in some other regions of Mesoamerica<sup>28</sup>, there are no rituals specifically dedicated to reintegration at the end of the danger period in the studied area. Instead, as described below, this is accomplished during the several visits the mother and child make to the steambath.

#### III.1. REST

After delivery, Mixtec women must rest for at least twenty days, a period of forty days being preferable, if possible<sup>29</sup>. This pe-

riod is passed in relative isolation from the outside world and its dangers. During this time, the new mother remains at home with the baby, avoids most forms of housework, such as sweeping and washing, and is cared for by her mother, mother-in-law or other female relative, who also takes over the housework. Twenty days is the basic count in indigenous Mexican systems, including the present Mixtec system. Prehispanic calendars have months of 20 days (JANSEN 1982). Extension of the period to forty days probably derives from Spanish influence (FOSTER 1960: 5). Ritual periods of 40 days are common in European systems, where women kept quarantine after childbirth (GÉLIS 1984: 292-93)<sup>30</sup>. Since it is twice twenty days, it is probable that the forty day period was easily adopted by Indians after the conquest. In some areas, there are rituals of reintegration after twenty days (COMINSKY, 1982; PAUL & PAUL, 1975). IRETON (1987: 41) notes that forty days corresponds approximately to the period of lochia expulsion. Both the necessity of rest and the risk of having a relapse (S: *recaida*) if the rest period is not respected are taken very seriously by the Mixtec<sup>31</sup>. Those women who have neither an elder daughter, a mother, a mother-in-law, nor any other close female relative to care for them often suffer from *recaida*.

#### III.2. SPECIAL DIET

The special diet is an important part of the Mixtec postpartum regimen. The standard Mixtec diet comprises both hot and cold foods. Normally, the meal as a whole must be warm, but not too hot; hot foods are balanced with cold and moist foods. The ideal main dish is warm and liquid—beans, greens and/or meat in a broth—and is eaten with warm, soft "tortillas" (*tortillas blandas*) (KATZ 1990; 1994). When the body suddenly becomes cold, e.g. following delivery, it is no longer necessary to moderate hot foods with cold foods. On the contrary, cold foods are prohibited, as well as raw and lightly cooked foods, which are also considered cold (KATZ 1992). Commonly prohibited cold foods include pork, beans, potatoes, avocado, "cold" greens, lemons, sour oranges (and sour fruit in general)<sup>32</sup>. The recently-delivered woman's stomach being cold, she is very likely to catch a cold disease, such as diarrhea (S: *diarrea*, M: *kwe'i ku'u*) or *empacho* (M: *ndi'i* = stuck), a stomach ailment associated with diarrhea and caused by food lodged in the intestines. "Entra el frío en el estomago" ... *Se avienta el estomago, después queda barrigona*". The new mother must also avoid becoming angry (S: *hacer coraje*, *amohinarse*, M: *kiti ini* = the belly is boiling), as anger is a "very hot" state. If she becomes angry and eats cold foods at the same time, "she can get pains and even die". Immediately following the delivery, the woman should eat very "hot" foods, such as grilled meat with toasted *tortillas* (*tortillas tostadas*) and boiled in tepid water. Then she is served chicken broth (also "hot") as often as possible. Chicken is a luxury food, usually only eaten once every other week or during festivals. It is thought to be a wholesome, nourishing food that helps the woman recover. Other

permitted foods include beef broth, grilled meat, eggs, "hot" greens, sweet foods. After two weeks, she is allowed to eat soft *tortillas*. This diet must be followed for forty days. After this period, the woman may once more eat beans, but tries to avoid excessive amounts of cold foods while she breast-feeds the infant. The baby is exclusively breast-fed for five to eight months, at which point he starts eating other foods while continuing to nurse for a year and a half. During this time, he is considered to be a cold creature with a fragile stomach, and is not fed cold foods that might cause diarrhea, such as pork meat, avocado and whole beans (the beans' skin is supposed to be hard to digest). A diet of thick *tortillas* ("memelas") in bean broth is considered best (KATZ 1992). While she nurses (S: *amamantar*, M: *titi*), the woman is advised to consume fluids that will give her milk (S: *leche*, M: *shukwi*): "atole", a thick white maize drink, considered as "hot", and "pulque", which in spite of being cold, is metaphorically compared to milk, blood and semen. It is believed that the woman's blood is transformed into milk<sup>33</sup>. If a woman finds out she is pregnant again, she immediately stops breast-feeding, "because her milk is not alone, it is with the fetus, it is very cold" and can harm the breast-feeding infant.

### III.3. SEXUAL PROHIBITIONS

The Mixtecs emphasize the importance of abstaining from sexual relations for a period of forty days to three months after delivery. Otherwise, the woman risks suffering from "makashani", as if she had had sex during her menstrual period. We have seen that sexual activity is hot, that the menstruating woman is hot, that after delivery she is cold, and that *makashani* results in dryness (of the womb) and cold (the woman may experience diarrhea). The danger is always cold and excess of heat (causing dryness). Sexual relations should not occur while the woman is in an unbalanced state, when they can produce an excess of cold and dryness. Sex, like gestation, death, and menstruation, is associated with the subterranean world (LÓPEZ AUSTIN 1988). A woman having sex during her period or too soon after delivery makes herself more vulnerable to the influence of the cold, subterranean world of gestation and death.

### III.4. PROHIBITION OF CONTACT WITH DEATH

Both newly-delivered women and newborn infants are barred from cemeteries, wakes and funerals. It is dangerous for them to approach the dead. They are thought to be very fragile and especially vulnerable to the "evil wind" (S: *mal aire*, M: *tachi shee*) said to emanate from the dead. Throughout the Mesoamerican area, winds are seen as the cause of many diseases and troubles. As they originate in the subterranean world, they are often thought of as "cold"<sup>34</sup>.

### III.5. PRECAUTIONS IN WASHING CLOTHES

Anyone washing the clothes of a recently-delivered woman or a newborn takes care not to wash them in running water such as a river, but instead uses a bucket. Once dirty, the water must be thrown on the earth, to prevent the mother or child from contracting a skin disease. No explanation is given for this prohibition, but it seems to be related to beliefs in water spirits, which like the winds, are dangerous because cold<sup>35</sup>.

### III.6. HOUSEWORK

A woman who has recently given birth is expected to refrain from tasks such as sweeping, washing dishes or clothes, ironing, sewing, grinding food in a mortar, and lifting heavy weights, all of which will produce pain in her thighs or back. While other household chores such as grinding on the grinding stone, making tortillas, or cooking and serving meals are permitted, it is thought better for her to refrain from any kind of exertion. Sweeping, in particular, is thought to provoke bleeding. There may be a relationship between sweeping and the "evil winds"<sup>36</sup>, the "cold" winds perhaps causing her to lose "hot" blood. Washing puts the woman in contact with water, a "cold" element, as does as sewing, since needles are probably also "cold".<sup>37</sup> The clothes iron, on the other hand, is "too hot". The mortar might be prohibited because it is used to grind chili pepper, a very "hot" and symbolically phallic food. But people say that a recently-delivered woman should not work at the mortar because "she does it only with one hand", whereas "she grinds on the grinding stone with both hands" and is thus more balanced. However, when grinding at the stone, the woman must kneel rather than stand, in order to "work with her whole body". If she stands, "she makes more effort and the body can get opened".

### III.7. BODY CARE

The special postpartum diet and the steambath were mentioned to us almost spontaneously over the first months of our fieldwork, whereas it took us several years before getting precise information about body care<sup>38</sup>. In the quoted literature (COMINSKY 1976, MELLADO *et al.* 1989, MOTTEFLORAC 1992), massages are mentioned but never described. As postpartum body care involves very intimate female knowledge and body practices, outside of its transmission from woman to woman, it is rarely spoken of by Mixtecs.

The Mixtec women we interviewed said they practise certain types of massage after birth. During these treatments, the woman lies down on her side while pressure is applied to her body (*le empujan encima*). She then turns over, and the process is repeated. For the same purpose, the woman also ties a shawl (S: *rebozo*) very tightly around her hips (lower than during the delivery), keeping it tied day and night (less tight during the night) for about three months, and tightening it as the abdomen be-

comes smaller. This is done to help the stomach regain its original flatness (“*así, no queda barrigona*”), and to “help replenish strength, which comes from the stomach” (“*ayuda a recuperar fuerzas, porque se agarra la fuerza del estomago*”) <sup>39</sup>. According to COMINSKY (1976: 289), “the use of the abdominal binder and massaging is universal in Mesoamerican communities. The massage is believed to encourage the ‘flow of blood’ and therefore cleanse the woman, to increase the flow of milk, to relieve postpartum pain, and to hold down the uterus. The binder is believed to ‘fix the *matriz*’ or prevent the stomach from sagging”. MOTTE-FLORAC (1992) mentions that P’urhepecha women wear a binder during pregnancy so that the hips “do not open too much”. She quotes NADEL-CONSTANTIN, midwife, who says that for multiparous women, a binder helps to keep the abdominal wall from collapsing, and thus prevents lumbago.

Some women also say that the fontanelle opens during delivery, letting cold into the body through the top of the head. To prevent this, a cloth is tied around the head to protect it in the same way as the hips<sup>40</sup>. To “close the body”, they also whip the fontanelle, the finger tips and the feet with a plant called “*chihuaxtle*” (not identified). Finally, recently-delivered women either take steambaths or “hot water baths”. In the latter treatment, the woman kneels in a large washtub —“if

she does not kneel, her body will not close”— while another person “burns” her, applying a cloth dipped in a plant decoction to the body from the fontanelle down to the feet.

### III.8. CURATIVE BATHS AND PLANTS

#### III.8.1. “hot water bath”

The “hot water bath” (S: *baño de agua caliente*, M: *kuchi nde ‘ini*; also called in Spanish “cooking bath” “*baño de cocimiento*”), described above, is filled with a plant decoction that is both bathed in and consumed. This plant bath can substitute for the steambath, if the woman is unable to tolerate the latter’s heat (some women become nauseous, faint or experience heart problems). While there are many descriptions of the steambath, the “hot water bath”, a more discreet activity, has rarely been described. Only MELLADO *et al.* (1989) mention it under the name of “*baño de tina*”.

We collected two recipes of this plant decoction in San Pedro Yosotato, one from a midwife, Doña Simona, the other from a woman who had a fairly wide knowledge of plants for home remedies, Doña Agustina. Eight of the twelve plants used in each recipe were identical<sup>41</sup>. Both decoctions are made from a mixture of “hot” and “cold” plants, the majority of them being *Asteraceae* and *Rutaceae*<sup>42</sup>. Some plants are spontaneous (“*gordolobo*”, “*mastranzo*”, “*chamizo*”, “*sauco*”,

**Table 1**  
Plants used in both recipes

altamisa	yuku altamisa	<i>Chrysanthemum parthenium</i>	<i>Asteraceae</i>	hot
gordolobo	?	<i>Gnaphalium</i> sp.	<i>Asteraceae</i>	cold
ventosidad	yuku ventosidad	<i>Piqueria trinervia</i>	<i>Asteraceae</i>	hot
mastranzo	yuku vishi	<i>Mentha rotundifolia</i>	<i>Lamiaceae</i>	hot
carrizo	tu yoo	<i>Panicum</i> sp.	<i>Poaceae</i>	cold
rosa de Castilla	’ita rosa	<i>Rosa</i> sp.	<i>Rosaceae</i>	cold
naranja de cuchi	tikwe’e ’iya	<i>Citrus aurantium</i> (leaves)	<i>Rutaceae</i>	cold
naranja dulce	tikwe’e vishi	<i>Citrus sinensis</i> (leaves)	<i>Rutaceae</i>	cold

**Table 2**  
Plants added in the first recipe (midwife’s recipe)

garañona	yuku karafiona	<i>Vernonia</i> sp.	<i>Asteraceae</i>	hot
malva	yuku tyoo kini	<i>Malva parviflora</i>	<i>Malvaceae</i>	hot
hierba santa	yuve noo	<i>Piper sanctum</i>	<i>Piperaceae</i>	hot
zapote blanco	moko chingo	<i>Casimiroa adulis</i> (leaves)	<i>Rutaceae</i>	cold

**Table 3**  
Plants added in the second recipe (home remedy)

flor de sauco	’ita tungati	<i>Sambucus mexicana</i>	<i>Sapriifoliaceae</i>	cold
rosa blanca	’ita rosa yaa	<i>Rosa</i> sp.	<i>Rosaceae</i>	cold
ruda	yuku ruda	<i>Ruta chalepensis</i>	<i>Rutaceae</i>	hot
chamizo de cohete	yuku tundavi cohete	?	<i>Asteraceae</i> ?	hot

"malva", "garañona"), others are cultivated, either for specific medicinal or magical use (e.g. respectively: "altamisa" and "ruda", rue), ornamental use ("rosa", rose), food ("naranjo", sweet and sour orange leaves, "zapote blanco", "hierba santa"), or for other uses (*carrizo*). Some of the plants are native to the Mixtec region ("zapote blanco", "hierba santa", etc.), while others have been introduced (*Rosa*, *Citrus*, *Ruta*, *Mentha*).

### III.8.2. Curative plants

In San Pedro Yosotato, other plants are consumed immediately following delivery, against pain ("calma los dolores intuerros") and in order to cleanse the woman from lochia ("se limpia adentro de la mujer"). Use of teas brewed from avocado leaves (*Persea americana*) (S: "aguacate," M: "tichi"), and sometimes combined with "laurel" leaves (S: "laurel") (probably another *Lauraceae*) was mentioned. The use of herbal teas is quite common in Mesoamerica (see for example COMINSKY 1982: 219, IRETON 1987: 40, MOTTE-FLORAC 1992), but the ingredients vary according to region; MELLADO *et al.* (1989) give a long list of different plants used in this way.

### III.8.3. Steambath

The steambath has both curative and ritual functions. It has been often been described in ethnographic studies (for instance, GARCÍA RUIZ & PETRICH 1983: 51, ICHON 1990, GALINIER 1990: 146-154, MONAGHAN 1987: 157) or ethnomedicine studies (COMINSKY 1976 & 1982, IRETON 1987: 39-40, MELLADO *et al.* 1989, MOTTE-FLORAC 1992) and has also been the subject of specific studies (MOEDANO 1983, JANSEN & PÉREZ 1980, SERVAIN 1983 & 1986, KATZ 1993). It has been a tradition among all Mesoamerican Indians since prehispanic times and continues to be used in the Mexican and Guatemalan Highlands (SERVAIN, *ibid.*), and perhaps in other areas as well. In the Mixtec Highlands, two types of structure are used for steambaths, a permanent structure of adobe or stones (S: *baño de pared* or *temazcal*) and a temporary one of branches (S: *baño de torito*) (both are called *ñi'i* in Mixtec). The first structure is "cool"; the second one, "very hot", is used in postpartum care (JANSEN & PÉREZ 1980). In San Pedro Yosotato, only the temporary structure is used. People also take steambaths to cure certain diseases (skin diseases, malaria, oedema, measles, etc.) (KATZ 1993). In some regions, the steambath is also used to bathe the dying, while in other areas, such as the Guatemalan Highlands, childbirth occurs inside the steambath. Its most common use, however, is for postpartum care (SERVAIN 1983)<sup>43</sup>.

In the Mixtec Highlands, the steambath is strongly identified with native customs, and is seen as somewhat primitive. While many men no longer use it, it is still seen as necessary for postpartum care. Even those Mixtec women who have migrated to Mexico City and delivered in a city hospital return

to their village to take steambaths. People say that it is necessary in order to make a full recovery from childbirth ("Si no se baña la mujer, queda palida, fea, no sana"). We observed only one case of a rejection of this custom, the young woman also choosing not to breast-feed her infant.

During the twenty to forty days following the delivery, both mother and new-born must take a steambath once every three days. While four to six visits are thought of as the minimum, ideally, the mother and child take from twelve to fifteen baths. As noted above, steambaths are also used for relaxation or to cure certain diseases and in addition, some people take steambaths for pleasure, accompanying a person who is bathing for other reasons. This is how we were able to participate in steambaths. Those participating in this manner bathe first in cold water. After the steambath, they must wait three days before bathing in cold water again, or before repeating another steambath. In contrast, recently-delivered women must first bathe with hot water. Bathers do not drink cold water; only beer and boiled water are permitted. The baths are not taken in the heat of day, but in the late afternoon, because a combination of hot sun and the heat of the steambath are thought to be excessive. To produce the steam, water is thrown on heated stones. A bather will remain in the bath for about ten minutes before exiting, and will then repeat the bath once or twice. Recently-delivered women or the sick lie down inside the bath while a person "who knows how to bathe" (*una mujer que sabe bañar*) whips her with leaves of "elite" (M: *tu nini*) (*Alnus glabrata*) (*Betulaceae*) or "chamizo blanco" (M: *yuku tundavi yaa*) (*Barkleyanthus salicifolius*) (*Asteraceae*) from head to toe, while the woman turns towards her left side. The baby is bathed for a short time, using less steam, but is also lightly whipped with leaves. When the person leaves the bath, she must cover herself, her head in particular (*tiene que taparse bien al salir, sobre todo la cabeza*). Mixtecs say the steam and plant baths "cook" the woman's body (S: *cocer*, M: *chi'yo*), "*chi'yo*" meaning at the same time "boil" and "steam", "cook while keeping moist". MONAGHAN (1987: 157) adds that the woman is "given a sweatbath to heat up her blood (*nasaa niñt*) and to "re-cook" her veins (*na chi'yo tuchi*). Heating the blood and 'cooking' the veins is thought to convert the mother's blood into milk for the child".

The steambath is protected by the earth divinities Santa Cristina and San Cristobal (Saint Christine and Saint Christopher), who protect also the cooking hearth. These saints came to replace prehispanic divinities found in many regions, who were goddesses of the earth, of the moon, of fertility and birth (SERVAIN 1983, JANSEN & PÉREZ *ibid.*). According to Mixtec and Triqui myths, the steambath protector was also the wife of a deer and the grandmother of the twins who became the sun and the moon after they killed the deer (JANSEN & PÉREZ *ibid.*, HOLLENBACH 1977)<sup>44</sup>. In this way childbirth is related to

cosmology: the womb resembles the moist earth and the rock caves where the first humans, the seeds and the clouds were created. When a woman takes a steambath, she identifies with the earth, and relates herself to the content of the culture's myths and cosmology. She may feel linked to the great vital movement of the universe. The bath is described as a human body, so when the woman is inside the steambath, it is as if she were inside a womb, in total darkness. She leaves the bath head first, as a baby does the womb. The steambath is thus a rite of passage, a ritual of purification, reintegration and socialization, both for the mother and the infant. The woman has been between life and death during the delivery, risking her life for giving life. In the steambath, she symbolically returns to the womb of the earth in a symbolic death, to recover life and fertility from the heat and humidity there, and finally, is reborn and reintegrated into normal life (KATZ 1993).

#### IV. THE EFFECTS OF THE TREATMENT: PHYSICAL, PSYCHOLOGICAL, SYMBOLICAL AND RITUAL

The treatment provided to recently-delivered women has not only physical, but also important psychological, symbolical and ritual dimensions.

Certain aspects of the treatment have definite physical and hygienic effects on the woman's body: resting, refraining from sex, tying the hips, protecting against cold, eating good food, drinking herb teas, taking plant baths and steambaths (which probably prevent infections)<sup>45</sup>. According to MELLADO *et al.* (1989: 124), these treatments are very important in such marginal rural societies where women work very hard in the home and in the fields. As MCCORMACK (1982: 6) points out, "this period of rest from exacting work, and the recognized right to eat special, often highly nutritious foods, helps also to protect women from a maternal depletion syndrome. Each pregnancy and period of lactation, accompanied by heavy work responsibilities, might otherwise leave the woman thinner and less healthy. It is a 'cultural strategy' for enhanced fertility, rather than one that moves a woman quickly towards weight loss, early menopause and the end of reproductive capacity"<sup>46</sup>.

In addition to its physical effects, the symbolic and ritual aspects of the treatment also have a psychological effect on the women who undergo it. We saw that pregnancy is considered as a state with an excess of heat lost at the moment of the delivery. Symbolically, the diet and the baths have the function of helping the woman to recover her vital heat, but also the moisture with which her fertility is associated<sup>47</sup>. "Not only must the balance be maintained between the hot and cold states, but also of emotional states and social relations. The centrality of emotions and the equilibrium of social relations, especially within the family, is another aspect of the indigenous holistic model". Mesoamerican

view of birth is not medicalized, it "is part of a holistic and personalistic system, involving moral values, social relations and the environment, as well as physical aspects. ... The midwife's visits, massages, advice, prayers and rituals provide the mother with social and emotional support, all of which can help reduce the anxieties associated with the life crisis of birth..." (COMINSKY 1982: 225-227). Through the steambath, the woman symbolically relives her child's and her own birth, overcomes her fears and places her motherhood in the context of her culture's cosmology and her lived environment<sup>48</sup>.

#### V. COMPARISON WITH WESTERN PRACTICES

Today, in the Western world, it seems that women suffer from a lack of assistance and rest after delivery. Many have difficulties recovering physically and are disturbed by the bodily changes accompanying pregnancy and delivery. Post-partum depression (the "baby blues") a common Western syndrome, does not seem to be experienced in Mixtec culture. According to MCCORMACK (1982: 5), "mood changes following birth are not purely hormonal in cause because they vary from culture to culture [...]. However, a sheltered time following birth may be quite adaptive in helping women deal with stress until normal hormonal balance is regained". Women in Western countries seem to be much more protected during pregnancy than Mixtec women, but after giving birth, they receive far less care. After delivery, more attention is given to the baby. HOMANS (1982: 261) recommends that in industrialized countries, "the transition through pregnancy to motherhood and its attendant uncertainties must be treated sensitively if there is any concern for the emotional well-being of the mother. The medical profession has assumed command of childbirth without recognizing that it is also a social event".

From the Mixtec example, and probably, from those of many other cultures in the world, we can perhaps draw a lesson. Physical actions on the body should probably be studied with more care and in an interdisciplinary perspective, in collaboration with, for example, doctors of allopathic and alternative medicines, practitioners who work on the body, or researchers with a double training<sup>49</sup>. As COMINSKY (1976) and MOTTE-FLORAC (1992) showed, some of the Indian practices were not understood and were fought by medical doctors of the national health system. Therefore, consulting alternative practitioners, as MOTTE-FLORAC did with an alternative midwife, opens interesting perspectives. The ritual and cosmological aspects of the care given among Mixtec Indians (and in other societies) is also an important aspect lacking in present-day Western society, and might prevent cases of depression. Female knowledge about the body and to very intimate practices, which are not easily observed or expressed have not until now received the attention they deserve. There is still a lot to be done, so that women who give birth can feel better.



## ANNEX: LIST OF PLANTS MENTIONED

## Asteraceæ

<i>Barkleyanthus salicifolius</i>	(EK36)	chamizo blanco
<i>Chrysanthemum parthenium</i> (L.) Bernh.	(EK68)	altamisa
<i>Gnaphalium sp.</i>	(EK33)	gordolobo
<i>Montanoa tomentosa</i> Cerv.	(EK140, EK189)	yuku kava*
<i>Piqueria trinervia</i> Cav.	(EK203)	ventosidad
<i>Vernonia sp.</i>	(EK34)	garañona
?		chamizo de cohete

## Betulaceæ

<i>Alnus glabrata</i> Fern.	(EK23, EK125)	elite
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## Caprifoliaceæ

<i>Sambucus mexicana</i> Presl.	(EK7)	flor de sauco
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## Lamiaceæ

<i>Mentha rotundifolia</i> (L.) Huds.	(EK35)	mastranzo
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## Lauraceæ

?		laurel
<i>Persea americana</i> Mill.	(EK42, EK95)	aguacate (leaves)

## Malvaceæ

<i>Malva parviflora</i> L.	(EK41)	malva
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## Piperaceæ

<i>Piper sanctum</i> (Miq.) Schl.	(EK205)	hierba santa
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## Poaceæ

<i>Panicum sp.</i>	(EK137)	carrizo
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## Rosaceæ

<i>Rosa sp.</i>		rosa de Castilla
<i>Rosa sp.</i>		rosa blanca

## Rutaceæ

<i>Casimiroa edulis</i> L. lave & Lex.		zapote blanco (leaves)
<i>Citrus aurantium</i> L.	(EK106)	naranja de cuchi (leaves)
<i>Citrus sinensis</i> (L.) Osbeck		naranja dulce (leaves)
<i>Ruta chalepensis</i> L.		ruda

\* known in other regions as "zoapatle".

Voucher specimens are deposited at Mexu (National Herbarium of Mexico). EK = Esther Katz

## ACKNOWLEDGMENTS

Thanks to all the Mixtec pregnant women, mothers and fathers who told us about their experience and to the women who invited us to share their steambath. Special thanks to Doña Simona, midwife, Doña Rutilia, steambath specialist, Doña Agustina and Doña Maura, of San Pedro Yosotato. Thanks also to Claudie Haxaire and Annie Hubert for suggestions on this paper. Thanks to Elizabeth Motte-Florac, Claudine Berthe-Friedberg, Annamaria Lammel, Luis Alberto Vargas, Martine Romero, Chantal de Dianous, Mireya Maeda, Manuella Poli for previous discussions on this material. Thanks to Suzanne Lallemand and to the seminar participants, for having invited us and discussed this material at the "Infancy" seminar (séminaire Petite-Enfance) in Paris in January 1995.

## NOTES.

1. Rita worked on the Huave of Oaxaca isthmus; López Austin and Vargas & Matos on prehispanic Nahuas of central Mexico; García Ruiz and Petrich on Mocho, a Maya group of Chiapas; Guiteras Holmes on Tzotzil, another Maya group of Chiapas, closely related to Tzeltal, studied by Ireton; Cominsky worked among Maya Quiché of Guatemala, but refers to different areas of Mexico and Guatemala; Mellado *et al.* present data of different regions but more specifically of Nahua Indians and mestizos of Morelos; Alvarez Heydenreich also worked in Morelos; Motte-Florac worked on the P'urhepecha of Michoacán (Refer to map 1.1 for location of the States mentioned above).

2. Our fieldwork took place within the Mexican-French project "Human biology and development" (IIA-UNAM/CNRS). It was financed between 1983 and 1987 by a grant from UNAM, obtained through the intermediary of Ministries of Foreign Affairs of France and Mexico, as well as a "young researcher" grant of the "Cultural Areas" service of French National Education Ministry; a mission in January of 1990 was financed by CEMCA (Centre d'Etudes du Mexique et de l'Amérique Centrale). We returned to the field for a few days in 1991 and 1992. We worked mainly in San Pedro Yosotato, but some of the data presented here was also collected in Santa Maria Yucuiti, Santo Tomás Ocoatepec, San Pedro Molinos and a Triqui village, San Andrés Chicahuaxtla. The dialect spoken in S.P. Yosotato is very close to the ones spoken in S. M. Yucuiti and Santiago Nuyoo (where Monaghan worked); the data are presented in this dialect. Jansen and Pérez mainly worked in Chalcatongo, located in the neighbouring valley (S.P. Molinos is in the same valley).

3. The hot and cold categories are found over all Mesoamerican cultures and in Latin America in general. Foster (1953, 1978) and Currier (1966) argued that these categories came from hippocratic medicine imported by the Spaniards in Latin America. López Austin (1980) criticized Foster's opinion and argued that these categories already existed in prehispanic cultures. Signorini (1989) suggested also that these categories were present in prehispanic cultures and mingled not with academic hippocratic medicine but with mediterranean popular categories and beliefs carried by the Spaniards who were in contact with the mexican indigenous population. As will be apparent in this article, we personally agree with López Austin and Signorini. Hot and cold categories are not only found in the Mediterranean but in many societies on all continents (Refer for example to Centlivres 1985, Mahias 1985, McGilvray 1982, Friedberg 1980, Hérítier 1978, Massard 1978). Moreover, Foster thinks that the dry and wet categories were lost in Mesoamerica. In fact, they are not mentioned by anthropologists, with the exception of Neuwander & Souder 1977. As we will show in this study, they are not explicit categories; dry corresponds to hot and humid to cold; they do not combine in the same way as in hippocratic medicine; we think they refer more specifically to the climate.
4. "*Makashani*" is not a Mixtec name, but very probably a Nahua name. We will see that it may also be contracted if a woman has sexual relations in the period immediately following childbirth. It seems to be the same disease described under the name of "*cachán*" (Mellado *et al.* 1989: 123-127) or "*kaxan*" (Hersch-Martinez 1993) in central Mexico. According to Mellado *et al.*, "*cachán*" is a "cold" disease that the woman catches from "winds" right after the delivery: cold enters into her body: "*cachán de hombre*" (man's *cachán*) is caused by sexual relationships during the quarantine.
5. Hérítier (1984) has shown how the association between dryness, aridity and sterility is common in many societies.
6. Friedberg (1980) describes similar representations with the Bunaq of Timor (Indonesia).
7. "*tundaxi*" comes from "*yutu*", stick, and "*taxi*", sow. "*Yutu*", in Spanish "*palo*", stick or tree, is a metaphor for the phallus.
8. Refer to Lopez Austin 1980, García Ruiz & Petrich 1983: 42, Ireton 1987: 29. This belief is found in different societies of the world - which generally promote parental sex during pregnancy — (Lallemand 1994), for instance the Samo of Burkina Faso (Hérítier 1984: 136) and the Gouro of Ivory Coast (Haxaire 1985).
9. This belief is shared by the Huave (Rita 1979: 271). The Mocho believe that the fetus is created from "the male seed and the female seed" (sperm and vaginal secretions) (García Ruiz & Petrich *ibid.*). The Gouro and the Samo of Africa also think the fetus is created from male and female sexual liquids (Haxaire *ibid.*, Hérítier *ibid.*), as well as the Tamil of Sri Lanka (McGilvray 1982: 53-55). According to contemporary Basque shepherds, the fetus is created from "white blood" (sperm) curdling the warm red blood of the uterus, the same way as cheese is made from rennet curdling warm milk, an analogy which was already mentioned by Aristotle in the IVth century B.C. (Ott 1979).
10. The Otomi also assimilate semen, blood and agave sap (Galinier 1984: 46). On ritual importance and symbolism of "*pulque*" in central Mexico, from prehispanic times to present, refer to Fournier 1983.
11. Sex must be repeated to assure conception, however. If conception results from both the man and woman mingling their heat during sex, the fetus must receive the heat continuously (Ireton *ibid.*).
12. This interpretation is not unique to Mesoamerican cultures; it also found, for example, in some African and Asian cultures (Hérítier 1978: 393, 1984: 136, Haxaire 1985, McGilvray *ibid.*).
13. It is the same among other Mexican Indians (López Austin 1980, García Ruiz & Petrich 1983: 44, Ireton 1987: 30, Mellado *et al.* 1989: 74, Motte-Florac 1992)
14. Ireton (1987: 31) noticed the same attitude among the Tzeltal.
15. The same belief has been noted by Rita (1979: 280), García Ruiz & Petrich (1983: 45), Ireton (1987: 31). Among Amazonian Indians giving birth to twins is a malediction (Grenand 1984: 14).
16. This belief is common in Mesoamerica (Cominsky 1976: 283, Ireton 1987: 32) and existed in Europe too (Gélis 1984: 122).
17. Santiago Nuyoo Mixtecs recount how their people were born from "*soko usha*", the "seven wells" or "seven wombs", a subterranean tunnel (Monaghan 1987: 161-163); this can be associated with the Aztec myth of the *Chicomoztoc*, the seven caves (Heyden, 1976). The ground where people are buried, or the tomb, are called by Mixtecs "our true house" (Monaghan 1987: 165, Katz 1988). For the Otomi, "dans le discours de la cosmologie, l'espace intérieur de la femme, son ventre, se présente comme une réplique du monde infrachtonien" and when she is pregnant it is said she 'carries the world' (Galinier 1986: 64).
18. The Otomi have the same perception (Galinier 1984: 46-47). Mixtec people we talked to either say that sex must go on during pregnancy for the reasons enumerated above— or that it can damage the fetus ("*puede machucar el niño*", ... "*hace daño al niño porque está tierno*"). We are not certain whether they mean that it can damage the fetus from the beginning of pregnancy or only at the end of pregnancy.
19. Other authors also mention that if a pregnant woman looks at a baby, she can give it the "evil eye" (S: *mal de ojo*) (Guiteras Holmes 1965: 96-104, Cominsky 1976: 283, García Ruiz & Petrich 1983: 45, Ireton 1987: 32).
20. *Tamales* are made of steamed corn dough wrapped in leaves. They are often eaten in rituals, especially death rituals. In Mixtec and in local Spanish they are a metaphor for the vagina.
21. *Tortillas* are corn griddle cakes. They are the staple of the daily diet.
22. This perception is common to many societies (see for instance Verdier 1979: 320, Gélis 1984: 130, Centlivres 1985: 49, Hérítier 1978: 391). For the Otomi, the woman's body is a "site of transformations" (Galinier 1986: 65)
23. Other authors mention direct massages (Guiteras Holmes *ibid.*, García Ruiz & Petrich 1983: 48, Motte-Florac 1992).
24. We do not know whether this is often the case among Mixtecs or if it occurs only in the studied area, since Monaghan, who worked in the same area and brought the fact to our attention was the only other person to observe it (Monaghan, *com. pers.*). It might be related to shamanistic functions.

25. Cominsky 1976: 285, Mellado *et al* 1989, Motte-Florac 1992. *Montanoa* is generally known under the common name of “zoapatle”, from Nahuatl *cihuapactli*, “woman’s remedy”.
26. According to Rodriguez (1993 and pers. com.), in colonial Mexico, obstetrics was not in the charge of Spanish-trained doctors who, distaining this field, left it to Mestizo and Indian midwives. Actually, however, XVIIth century indigenous obstetrics were more highly developed and responded better to women’s needs than Spanish obstetrics.
27. After childbirth, French midwives of the XVIth-XVIIIth century used to clean the mother’s genitals with tepid water and leave a sponge in front of them to avoid “le coup de froid” (Gélis 1984: 255); Turkish, Afghan, Jaina Indian and Tamil women must eat “hot” foods (Sauner-Leroy 1993: 199, Centlivres 1985: 49-50, Mahias 1985: 222-224, McGilvray 1982: 59); Bunaq women of Timor must be “boiled”: they lie close to a fire while covered with wet cloths (Friedberg 1980); live charcoal is put under the Malaysian women’s bed (Massard 1978); Throughout South-East Asia, women are “warmed up” after childbirth (A. Hubert, pers. com.). Samo women of Burkina Faso lie close to a fire and take very hot baths (Héritier 1978: 395). P’urhepecha Indians say the woman becomes cold because she loses a large amount of (warm) blood and because the (warm) fetus has been expelled (Motte-Florac 1992).
28. Paul (1975) and Cominsky (1976) describe reintegration rituals in Guatemala, D. Gréco (com. pers.) and A. Lammel (com. pers.) have observed ceremonies given for the baby, respectively among the Nahua of the Huasteca and the Totonac Indians.
29. Quarantine (S: *cuarentena*) is common in rural Mexico (Mellado *et al.* 1989).
30. Quarantine is associated with Candlemas. This festival celebrates the Virgin’s churching, on the second of February, forty days after Christmas. In France, quarantine was very much respected during the Middle Ages —women had a complete rest for forty days— but tended to be shortened to about twenty days from the XVIth century on (Gélis 1984). Quarantine is also practised, in North Africa, India and in other regions (Ruspoli 1995, Mahias 1985: 226). Malaysian women rest for forty-four days (Massard 1978).
31. *Recaída* is mentioned in several parts of rural Mexico (Mellado *et al.* 1989).
32. The prohibition of cold foods is general in Mexico (Cominsky 1976: 289, García Ruiz & Petrich 1983: 52, Ireton 1987: 40, Motte-Florac 1992). Not all the same foods are seen as cold, but pork and sour fruit are usually considered as such.
33. A Mixtec man told us the veins apparent on the breasts are the ones from which blood turns into milk. In the Middle Ages, milk was thought to be whitened menstrual blood (Gélis 1984: 33). Other populations also think blood turns into milk (for example, in Africa, Héritier 1978: 395, Haxaire 1985: 341).
34. According to the P’urhepecha, the recently-delivered woman is very sensitive to “winds”, which cause “cold” diseases with symptoms such as fever and pain (Motte-Florac 1992).
35. The Mocho do not leave the infant’s diapers drying outside overnight; they say the “*pukuh*” (demons) penetrate into the cloths (García Ruiz & Petrich 1983: 52).
36. It is considered dangerous to sweep when the sun is at zenith. We once happened to see someone briefly interrupt their sweeping at that moment. Midday and midnight are dangerous times when people are especially vulnerable to “evil winds”, particularly in dangerous places such as crossroads or cave entrances.
37. Needles are “cold” among the Quiché (Neuenschwander & Souder, 1977).
38. Mixtec women had told us for a long time that the woman’s hips become ‘opened’ as a result of pregnancy and birth, and that they must be closed again. Until we discussed postnatal care with Chantal de Dianous, a tai-chi teacher, we had never thought of asking how they get the hips to close. She suggested that Mixtecs probably practised some sort of physical therapy in order to help the women to recover at an energetic level. In 1991 and 1992, during short stays in the field, we asked more precise questions and received some answers. But we think now that there might be more to discover on this subject.
39. In the Congo, where we did fieldwork, women also tie a sash around their hips after birth. In France, women used to tie a binder around their stomach in order to stabilize the uterus and, from the XVIth century on, in order to have a flat stomach, but this practice was rejected by physicians from the XVIIIth century on (Gélis 1984: 256).
40. In Guatemala, Mayan Quiché Indians say that “the mother’s head should be covered with a scarf for 10-15 days and her shoulders covered with a shawl or sweater to prevent getting *aire* (air) and turning the milk cold” (Cominsky 1982: 219). According to a Mexican-Japanese acupuncturist of Mexico City, Mireya Maeda, there is a correspondence between this part of the head and of the hips and in Chinese medicine, it is thought that the head of the recently-delivered woman must be constantly covered to be protected from the cold.
41. All the plants we collected were deposited at the National Herbarium of Mexico (MEXU) and were identified by botanists of the Biology Institute of UNAM (R. Bye, A. Campus, A. Delgado, A. García, H. Hernández, D. Lorence, C. Mapes, M.A. Martínez A., T.P. Ramamoorthy, M. Sousa). We thank them here. Concerning plant names in Mixtec, “*yuku*” means “grass” or “herb”, “*ita*” “flower”, “*tu*” “tree”, “trunk” or “stem”.
42. Motte-Florac (1992) mentions that right after the delivery, P’urhepecha women are rubbed with “hot” plants and are given a “hot” herb tea. Among the Mixtecs, it seems as if the ideal is a balance, avoiding an excess of either “cold” or “heat”.
43. Nadel Constantin, quoted by Motte-Florac (1992) suggests that a steambath taken at the beginning of labor has a significant relaxing effect.
44. In Chicahuaxtla, we heard a version of this story close to that collected by Hollenbach in another Triqui village, Copala. In a Mocho version of this myth, the grandmother is married to a tapir and she is the one who becomes the moon (García Ruiz & Petrich 1983).
45. We haven’t looked for pharmacological information about the plants used, but it would be an interesting direction for research. According to Dr. L.A. Vargas (pers. com.), in Mexican villages where

the steambath is used, puerperal fever is less common than in other rural areas with comparable hygiene conditions.

46. In a biological anthropology study among the Ntomba of Zaire, Pagézy (1990) has shown that eating a rich diet and resting in the postnatal period allows the body to build up fat stores. This has a favourable effect on the health and nutritional state of both the lactating mother and the baby, especially in societies where food availability follows marked seasonal variations (which is the case in the Mixtec Highlands) (Mixtec women, however, do not eat well and rest as long as the Ntomba women do).

47. Sterile women are said to have a dry womb.

48. According to a French midwife, Martine Romero, postpartum women need to be mothered in order to be reassured and begin their role as mother positively. She thinks the steambath must have a very strong psychological effect, in the sense that it reactualizes the woman's own birth and her fears regarding life and death.

49. Most anthropologists have collected descriptions of these practices, but could not observe them directly, as in our case, whereas anthropologists who are also the same time doctors, nurses or midwives (for example, Ireton who is a nurse) could attend deliveries.

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