



Maternal Health in Timor-Leste: Representations and Practices during Pregnancy, Birth and the Postnatal Period

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Abstract

Culture has a strong influence on the representations and health behaviour of individuals and groups. This is reflected in the reproductive health of the Timorese women, intervention in this field being of a priority nature in Timor-Leste in view of its high fertility and maternal mortality rates. The purpose of this ethnographic study is to analyse beliefs, representations and practices associated with pregnancy, birth and the postnatal period. It was conducted in Timor-Leste and involved the participation of health professionals, traditional midwives, women and couples, all of them selected through a snowball chain sampling procedure. Data was collected by means of exploratory semi-structured interviews and observation, and its content was duly analysed. The results show the existence of various recommendations, taboos and restrictions which aim at protecting the health of both mother and child, making use of traditional care practices which may vary among ethnolinguistic groups, communities or families.

Keywords: *Behaviour; culture; development; maternal health; Timor-Leste*

Maternal Health in Timor-Leste: Representations and Practices during Pregnancy, Birth and the Postnatal Period

H. B. Manuel; N. Ramos

I. Introduction

Timor-Leste is located in the Southeast Asia region, occupying the eastern part of the island of Timor. After four centuries of Portuguese colonisation, in 1975 it was invaded and subsequently annexed by Indonesia. In 1999, a referendum was held, where the majority of Timorese people voted in favour of independence, which caused an outbreak of violence and destruction carried out by pro-integration militias and Indonesian soldiers, forcing the displacement of a large part of the population. A large-scale humanitarian operation was established, followed by a period of transitional administration led by the United Nations. On 20th May 2002, Timor-Leste became an independent country and since then the Government, supported by its partners, has been making an effort to improve the living conditions of the population, which is predominantly rural, characterised by widespread poverty and low levels of literacy and health (Ministry of Health Timor-Leste, 2008).

The situation of reproductive health is a cause for concern and a priority intervention area. The country has a fertility rate of 5.7 children per woman, associated with a rate of contraceptive use of 22.4% and a maternal mortality rate of 557 deaths per 100,000 live births (National Statistics Directorate [NSD], Ministry of Finance Timor-Leste, & ICF Macro, 2010). Maternal mortality derives mainly from obstetric complications, such as prolonged labour and haemorrhaging, and also from the aggravation, due to pregnancy, of pre-existing situations such as anaemia, malaria and malnutrition. In order to improve the quality of health services some measures were taken, namely the implementation of the National Strategy for Reproductive Health (Ministry of Health Timor-Leste, United Nations Population Fund [UNFPA], and World Health Organization [WHO] 2004) and of the National Policy for Family Planning (Ministry of Health Timor-Leste, 2004), the training of healthcare providers in the field of hygienic and safe childbirth and emergency obstetric care, and the equipment of health facilities. However, the Millennium Development Goal (MDG) of reducing maternal mortality to 252 deaths per 100,000 live births by 2015 is still far from being achieved (Government of the Democratic Republic of Timor-Leste & United Nations Development Programme [UNDP], 2009).

The access of women to quality healthcare during pregnancy and childbirth is a critical issue as regards health protection and the safety of mother and child. The Demographic and Health Survey of 2009-10 (NSD, Ministry of Finance Timor-Leste & ICF Macro 2010) reveals that 87.5% of Timorese women received pre-natal care, 80.3% of which was provided by nurses or midwives, 4.1% by doctors, 1.6% by nursing assistants and 1% by traditional midwives. However, only 55% attended at least four pre-natal medical appointments. The majority of births (78%) take place at home, 49% of them being assisted by family members or friends, 30% by health professionals and 18% by traditional midwives, and 3% of them have no assistance at all. Postnatal care is also very important for the health of mothers and newborns; however, no postnatal care was provided to 68% of women.

Culture strongly influences behaviours, representations and practices and there is an interactive relationship between individuals and their social and cultural background (Berry, Dasen, & Saraswathi, 1987; Cole, 1998; Super & Harkness, 1986; Valsiner, 1989). When browsing literary works related to the Portuguese colonial era, it is possible to find descriptions of traditional beliefs and practices associated with birth in several regions of Timor-Leste (Carmo, 1965; Corrêa, 1935; Duarte, 1984; Friedberg, 1982; Gomes, 1972; Hicks, 1976; Martinho, 1943; Renard-Clamagirand, 1982). The Indonesian occupation caused profound changes in Timorese society; nevertheless, some reports and

studies carried out during the post-independence period revealed that beliefs and practices of the same type were maintained (Health Alliance International [HAI], 2004, 2005; Thomas, 2005; Van Schoor, 2003). The influence that culture has on the reproductive health behaviour of Timorese families and communities being evident, a research study wide in scope was conducted and some of its findings are presented herein. The objective of this paper is to analyse representations and practices associated with pregnancy, birth and the postnatal period of Timorese people belonging to several ethnolinguistic groups.

II. Methodology

This study was of an ethnographic nature carried out with a qualitative methodology between October 2005 and June 2007 in rural and urban areas of ten districts of Timor-Leste (Aileu, Baucau, Bobonaro, Covalima, Díli, Ermera, Lautém, Liquiça, Manatuto and Oecusse), covering eleven ethnolinguistic groups (*baikenu, bunak, fataluku, galolen, kemak, makalero, makasae, mambae, tetun, tokodede* and *uaima'a*). The participants in the study were selected through a snowball chain sampling procedure, which included 73 key informants, 55 health professionals, 70 traditional midwives and 114 women and couples with children.

In an attempt to integrate different perspectives which, in conjunction, would be able to provide a more thorough and expressive analysis of the phenomenon being studied, a triangulation of methods was used upon collecting the data, which included exploratory semi-structured interviews, individual and collective, and direct, participating, photographic and filming observation. The diversity of languages made it necessary to have the assistance of local interpreters. Consent for participation in the study was obtained verbally, after providing an explanation as to its scope and content. The majority of interviewees could not read or write, thus it was not viable to request their consent in writing.

The research was approved by an official communication issued by the Ministry of Health of the Democratic Republic of Timor-Leste.

The data were compiled into the computer programme Nvivo 8 and a content analysis was carried out. After selecting and encoding the material collected, a procedure of data analysis and systematisation was carried out to establish categories and subcategories. In this text, the categories “Pregnancy”, “Childbirth” and “Postnatal period” are briefly analysed.

III. Results

Pregnancy

In Tetum, pregnancy is designated as *isin rua*, which means “two bodies”. When a woman becomes pregnant, rituals are performed in the traditional house of some families. Among the *fataluku*, when a woman becomes pregnant traditional rituals are habitually carried out for presenting the future new member of the family, thanking and guaranteeing protection and “spiritual observation” of the pregnancy, which usually takes place next to the sacred fireplace (*aca kaka*) of the house:

When a young woman after being married becomes pregnant, her parents are very happy and take her to the *aca kaka*. (...) This is habitual in the area of Lautém, presenting at the *aca kaka*. They both go, the woman and her husband. It is a ceremony inside that place, upstairs in the house. The *katuas* [old man] is going to speak, to say that the child in the womb belongs to this house. (...) Some people kill an animal, they are happy because they are going to have a child. (...) Often the family is rich and so they throw a party. They are happy with this child, it is still in the womb but it already belongs to our family (*Fataluku* informant, Tutuala, April 2007).

Among the *bunak* of Fatululik, the ritual consists of addressing to their ancestors a request for protection, so that the pregnancy and birth will have no problems:

They go to this *hadat* [traditional] house, to ask for the help of their grandparents and great-grandparents, so that they will give her a good path, good health, so that she may give birth to the child in normal conditions. The woman may go there alone, or she may go with the old people, her elders, to set an example. All families have a *hadat* house. They do not live in the house, but when the time comes to fulfil the *hadat*, everybody goes there to hold a meeting. There is always a person, whom they name the old woman of the house, who stays there to take care of it. If there is no woman, it may be a man. They carry out a kind of election among all the women of the house. She has to be a good woman, who can welcome everybody and is not nervous (...). When she arrives, if the request is to be made to a grandmother, then she takes this bracelet, she stores it with the *tais* [traditional cloth] (*Bunak* informant from Fatululik, residing in Suai Vila, September 2006).

Some *fataluku* make use of divinatory methods, one of which consists of analysing the liver or spleen of a chicken or pig; should any unfavourable situation be predicted as regards the health condition of the unborn child, a new ritual is performed. Another method that can be used in conjunction with the preceding one, aiming at resolving questions addressed to God and their ancestors, is slicing the stalk of a banana tree and reading the shape formed when the slices fall to the ground.

Many women maintain their normal working pattern. Some are aware that they should rest more and avoid strenuous effort, especially during the first trimester, for fear of bleeding or miscarriage. They often perform heavy work during the final months of pregnancy, believing that this facilitates childbirth.

When they go out, especially at night, pregnant women habitually carry a sharp object (knife, scissors, nail, comb), a rosary, a black ribbon or special plants, to protect the baby from evil spirits.

Some women do not wear necklaces when they are pregnant, for they fear that the child will be born with the umbilical cord wrapped around its neck. Some also do not cut their hair, fearing that this may cause a miscarriage, preterm birth, the cutting of the umbilical cord or a congenital cleft lip.

There is a wide variety of food taboos and restrictions deriving from beliefs related to the consumption of certain foodstuffs during pregnancy, associating them with problems that may arise (see table 1).

The purpose of prenatal monitoring is to prevent health problems which may interfere with the health of mother and child. In East Timor it is intended that every woman be seen by a qualified assistant at least four times during pregnancy. Although the number of pregnant women attending prenatal consultations has increased in the last years, the first consultation often takes place only during the third trimester. The lack of attendance may be due to difficult access to medical facilities related to factors of a geographic or economic nature, because they have to cooperate in agricultural or household activities, or because they have no one to look after their children during their absence. Some of them feel confident without prenatal assistance, particularly those who had no problems during previous pregnancies and births. Others are ashamed to show their bodies to strangers.

Some women, of all the ethnolinguistic groups, consult traditional midwives (*daia*) during pregnancy and have great confidence in them, for they belong to their own community, usually live nearby and have assisted other women whom they know. It is frequent for them to perform an abdominal massage with coconut oil, *kamii* (*Aleurites moluccana*), *bua malus* (a mixture of betel, areca and lime) or other substances, verifying the position of the foetus. If it is not favourable, they may correct it by means of external manipulation.

Some traditional midwives accompany these massages with special prayers. They also may give to the woman traditional medicines, the composition of which is frequently kept secret:

During pregnancy (...) take traditional medicine, the root, *ai abut*, of a tree. It is forbidden to say its name, it is *lulik*; if you say the name the owner of the medicine, who is now a spirit, will be angry and the medicine will not work. The medicine is for the baby to have good conditions during the pregnancy and to avoid temptations. (...) When the baby is in a bad position, she may turn it. This is done between the fourth and the ninth month

of pregnancy. Use the same traditional medicine, *ai abut*, which is chewed, and the body is massaged (*Bunak* traditional midwife [interpreter], Maliana, November 2005).

Problems During pregnancy	Associated foodstuffs
Miscarriage	Pineapple (especially green) Alcoholic beverages Lemon Green papaya Cucumber Chilli <i>Sinkomase (Pachyrhizus erosus)</i> Tamarind Vinegar
Back pain	Papaya leaf Chilli
Abdominal disorders	Papaya leaf Cooked corn, whole Chilli
Frequent urination	Papaya leaf
During childbirth	
High foetus growth, which makes childbirth difficult	Milk Iron supplement
Difficulties due to newborn being covered with fat (<i>vernix caseosa</i>)	Fatty foodstuffs Peanuts
Haemorrhaging	Green coconut Papaya
Obstruction of the birth canal	Eggs <i>Hudi dubun</i> (banana “core”)
Retained placenta	Eggs
For the child	
Abundant saliva	Crab
Skin problems	Horse and kid meat <i>Kumbili/Uhi</i> (tubers) Fish
Lack of eyelashes, eyebrows or hair	Chilli
Swollen eyelids and “wide” mouth	<i>Kaliku</i> (type of chestnut)
Crawling child (like a turtle)	Eggs and turtle meat

Table 1: Problems associated with food consumption during pregnancy

Birth

Although Timorese women are advised to give birth in health facilities (especially when it is their first child, they are more than 35 years old or have had more than four pregnancies), the majority prefer giving birth at home and consider this as a natural event, which only requires hospital care when complications arise. Assistance is on most occasions provided by relatives or a traditional midwife. Some women give birth alone, thus being considered as very brave or having great experience in giving birth, or because they are shy. Matters related to tradition, namely non-

compliance with traditional rituals and social transgression of the husband, wife or their relatives, are frequently considered as the causes of a difficult birth. In these cases, the family may perform a ritual to establish the cause and take steps for resolving the problem, or request the services of a traditional healer (*matan-dook*):

When there is a problem during pregnancy or birth they call the *manane*, *matan-dook* in *baikenu*. It has to do with the culture of the husband or wife. He does nothing, only uses his hand. He has to chew something, put it in his hand (...). He usually asks for money. They trust him. Before going to the hospital, in the Timorese culture we have to call this *matan-dook* to see (*Baikenu* traditional midwife [interpreter], Oecusse, October 2006).

Some of the barriers to qualified assistance during childbirth are difficult geographic access during the rainy season and at night, lack of means of transportation and communication, financial difficulties, fear, shame to expose the body, lack of authorisation of the family, lack of trust in the midwife and healthcare services and the preference for traditional midwives or relatives.

When birth takes place at home, women feel more secure and confident and may follow traditional practices. The positions of the parturient vary among sitting, kneeling, squatting or lying down. When seated, the woman may lean against a wall or be supported by her husband or another relative. The traditional midwife may be in front of or behind the woman. Some women grab a rope when they need to push:

If you go to hospital you have to lie down, but not here, you just sit and give birth. You sit, put a flat stone on the *lanten* [traditional bed], and then we tie the rope. (...) If you want you may grab the rope, if you do not and have the strength you may just grab your legs. The woman who conducts the birth has to stay behind you and then with her hands help you push (*Makasae* traditional midwife [interpreter], Baucau, October 2006).

In Timor-Leste, the umbilical cord is traditionally cut with a sharp piece of bamboo. Although it is still used in home births, especially in remote areas, it is frequently replaced by a knife, razorblade or scissors. These objects are generally everyday material and not sterilised. The cut is made after the delivery of the placenta, given that if they make it beforehand, they fear that it will “go up” and cause harm to the woman, including death. The ends of the cord may be tied or remain loose, sometimes after squeezing the blood towards the newborn:

Cut the cord when the placenta comes out. Do not cut the cord before because I fear the placenta will go up. When the placenta is difficult to come out, then I cut the umbilical cord but I always put a heavy thing on the end to prevent it from going up. Scissors are in modern times, in old times we only used bamboo. We still used it in Portuguese times and also in Indonesian times, and at the moment it may still be used, depending on whether the object is close and sharp to be able to cut (*Fataluku* traditional midwife [interpreter], Lautém, September 2006).

There is a wide diversity of traditional medicines to both facilitate a normal labour and prevent and treat complications such as prolonged labour, retained placenta, prolapse and haemorrhaging. Traditional midwives frequently make use of abdominal massages to the parturient with coconut oil or *kamii* to facilitate the delivery of the baby and/or the placenta. Sometimes, the woman is advised to induce vomiting or blow into a bottle.

When problems occur during labour, many Timorese attribute them to family problems or to the non-observance of customs related to the traditional house (*uma hadat*). Should they not be resolved, these situations may lead to the death of mother and child.

It is the tradition of traditional houses, we must follow everything that our grandparents left us. We always have to visit the house, everybody has to follow a traditional ritual. (...) We have to take there *bua malus*,

animals... everything that we promise. For example: I am pregnant, I don't do everything that my *uma hadat* says, then I have difficulties during childbirth. So, I have to take there *bua malus*, if they ask for a buffalo head I have to take it. In *tetun* this is '*halo tuir ne'be mak lia na'in husu*'. This is what the *lia na'ins* [Lords of the word] ask, I must fulfil it all (...). If there are no difficulties, the birth is normal but one of them has to die, the mother or the child. It is something that has already been decided by the ancestors (Traditional midwife *tetun/bekais* [Interpreter], Balibo, February 2007).

Sometimes a healer (*matan-dook*) is called, to carry out traditional practices, such as analysing the entrails of an animal to find out the cause of the problem, say a prayer to the ancestors (*hamulak*) or use a traditional medicine for the labour to have a good outcome.

Postnatal period

In Timor-Leste the postnatal period involves a series of traditional practices. It is considered that during this period both mother and newborn are vulnerable to cold and disease. The woman must protect herself from cold and the application of heat in various forms is habitual, being considered as fundamental for preventing breast milk from “cooling” and favouring the discharge of lochia. Lochia is designated in Tetum as *ran mate*, which means “dead blood” or “clotted blood”, or *ran foer*, which means “dirty blood”, and its retention is deemed harmful. The consumption of warm water is a frequent and widespread practice:

After the birth, drinking warm water is good for increasing breast milk, helping the removal of clotted blood remains and preventing vaginal discharges from going to the head, *ran mutin sae ulun* (*Bunak* women [interpreter], Maliana, November 2005).

Many women also drink alcoholic beverages after giving birth, for the purpose of “heating”, “giving strength” and facilitating the discharge of lochia. Some are aware that this habit is harmful for the newborn and thus tighten their clothes around their breasts when they drink, believing that in this way alcohol will not pass to the baby when they breast feed it:

After the birth she has to drink *tua arak*, strong *tua sabu*, to clean the bowel. She has to tighten the breast with a *lipa*, two hours time and drink the wine, so as not to go to the breast and for the baby not to drink it, because the baby is still very delicate, it may harm the bowel and harm the baby. Just a little, a small glass twice; in the morning, after bathing in warm water, and in the afternoon, for forty days (*Uaima'a* traditional midwife [interpreter], Baucau, October 2006).

Bathing with warm water is another way for applying heat, the woman who gave birth usually being helped by another woman, who uses a cloth soaked in warm water to apply pressure on the abdomen and other parts of the body. The hair cannot be washed during the first days after childbirth:

Ladies say that after giving birth they feel cold and have to take a bath with warm water, *haris be manas*, some up to six months, others up to a year. After giving birth they only wash their hair with warm water after three days, one week. They fear the blood will ascend to the head, *ran sa'e ulun*, and the woman will become very pale (*Kemak* informant, Atabae, February 2007).

Another traditional practice which remains in certain areas, with identical purposes, is keeping a fire alight near to the mother and newborn child (*tuur ahi*), who stay enclosed in this heated environment during the postnatal period.

After childbirth, Timorese women usually follow a special diet with several prescriptions and restrictions, whether due to body issues or because they believe that what they eat may affect the baby. *Sasoro* (chicken soup) and *kaldu* (chicken soup with chicken bits) are the most recommended foods during the first days after childbirth, to which ginger or *ai manas ai leten* (*Piper subpeltatum*) may be added, because they “warm” and facilitate the delivery of

lochia, as well as onion, garlic, saffron or leaves of certain plants. Cooked ground corn is also consumed in some regions, being considered as beneficial for breastfeeding.

Several foodstuffs are not recommended during the postnatal period, for they may cause health problems to the woman or baby being breast fed.

Problems	Associated foods
For the new mother	
“Cooling”	Mango, papaya and other “cold” fruits
Infection and other uterus problems	Beef/pork/kid Sardines/other small fish Chilli
Vaginal infection	Sardines/other small fish
Urinary infection; back pain	Chilli
Itching	Mango, papaya and other “cold” fruits Sardines/other small fish
Coughing	Sardines/other small fish
Dizziness	Beef, pork
Breast milk drying up	<i>Uhi/sinkomase</i> (tubers)
For the newborn	
Constant crying	Papaya leaf or flower
Abdominal pain	Beef, pork Cooked corn, whole Chilli Green vegetables Papaya leaf or flower Tamarind <i>Balimbe</i>
Infection/delayed fall of the umbilical cord stump and umbilical healing	Salt Pumpkin leaf
Diarrhoea	Green vegetables Mango, papaya and other “cold” fruits Cooked corn, whole
Coughing	Chilli Tomato <i>Uhi/sinkomase</i> (tubers) Mango, papaya and other “cold” fruits Salt
Itching	Mango, papaya and other “cold” fruits
Dizziness; convulsions	Kid meat

Table 2: Problems associated with foods consumed during the postnatal period

The majority of Timorese women who recently gave birth do not receive any postnatal care. This is partially caused by the isolation period during which they stay at home, to protect themselves from the cold. Health facilities are sometimes far away and travelling is difficult.

IV. Discussion

In addition to the emotional meaning for all the people involved, the birth of a child also has a spiritual meaning. When the veneration of ancestors constitutes the basis for a religion, they are said to be intimately involved in conception and pregnancy, thus pregnancy may be considered as a “ritual stage”, where traditions and customs passed from generation to generation are to be constantly observed. Ceremonies associated with pregnancy thus play an important integration role, linking present to past, human to divine, earth to heaven (Kitzinger, 1992).

In Timor-Leste, when a woman becomes pregnant rituals are performed in the traditional house of some families. The fataluku carry out divinatory practices by analysing the liver or spleen of a chicken or a pig to predict the gender and health of the child to be born. This type of divination is based on the interpretation of divine signs in the entrails of animals, being designated as hepatoscopy when it is carried out on the liver. It was developed and used by various ancient people and continues to be practised in some regions of Africa and Southeast Asia (Cavendish, 1970).

Furthermore, West Timor, which is Indonesian territory, the services of a shaman are sometimes requested for carrying out rituals intended for guaranteeing a healthy pregnancy and a successful delivery. This is the case of the tetun of Wehali, a place that is historically considered as the “ritual centre of the island of Timor” (Therik, 2004).

In various countries of Asia, Africa and Latin America, especially in the rural areas and in situations of limited access to health services, use of traditional midwives is frequently made for the provision of antenatal healthcare. This may consist of oral administration of traditional herbal medicines with various purposes, for treating abdominal pain, preventing miscarriage, guaranteeing a safe pregnancy, encouraging the observance of food taboos or other taboos, strengthening the woman and her baby, preventing maternal oedema, expanding the birth canal and preventing the newborn from being affected by vernix caseosa, and determining its gender. Abdominal massages are frequently carried out, making it possible to detect the foetal position and correct it if necessary. These practices are common in the whole of Indonesia and in other countries of Southeast Asia (Coughlin, 1965; Grace, 1996; Hart, 1965; Jirojwong, 1996; Laderman, 1983; Lefèber, 1994; McWilliam, 1998, 2002; Therik, 2004; Townsend & Rice, 1996; Vincent-Priya, 1991).

Also in Timor-Leste, many pregnant women frequently consult traditional midwives, especially in rural and remote areas, and have great confidence in them, given that they belong to the woman’s own community, usually live nearby and have often assisted other women with whom they are acquainted. However, in the light of the modern medical system, they are not adequately trained and some of their practices are debatable.

Although the assistance of a traditional midwife is favourable, she may not detect complications and emergency situations, or be able to decide that the women should be medically assisted. Furthermore, the composition of traditional medicines is frequently unknown. As regards external manipulation for repositioning the foetus, it may be beneficial if done safely and timely, but it may also involve risks (Yancey, 2002).

Presently, traditional midwives are intended to work as community facilitators and liaison elements, encouraging women to give birth in health facilities and be assisted by qualified midwives, who are duly trained and have the necessary means to prevent or detect complications, acting efficiently. However, the number of qualified midwives is insufficient for the needs of the population, especially in rural areas, and traditional midwives continue to be available and sought by the population.

According to Helman (1990), all cultures share beliefs regarding the vulnerability of the mother and foetus during pregnancy, which is generally extensive, in a variable way, to the post-natal period. It is frequent for these people to believe that the conduct of the mother – her diet, physical activity, mental status, moral behaviour, consumption of certain substances – may directly affect the physiology of reproduction and cause harm to the unborn child. Therefore, some taboos and restrictions applied to a pregnant woman can be explained as intended for protecting the mother and the foetus from physical harm. Some women feel that they need to take more care and undertake special protective measures.

In Timor-Leste there is a wide diversity of beliefs and practices associated with pregnancy. It is habitual for pregnant women to carry a sharp object when they go outside their house, especially at night. They point out that this is intended for protecting the baby from evil spirits, which they frequently designate as *pontiana* and associate with the spirit of a woman who died when giving birth and is looking for vengeance. This is a legend present in Malaysia (Laderman, 1983), among the *laujé* in Sulawesi (Nourse, 1999) and in other regions of Indonesia (McWilliam, 1998), where they share the same belief.

Taboos and food restrictions are also very diverse among the Timorese. Some prohibited food products, such as pineapple, papaya, eggs, chilli pepper and alcoholic drinks, are common to several ethnolinguistic groups. The belief in the abortifacient properties of pineapple when ingested in isolation or mixed with other substances is also shared by cultural groups from countries such as Indonesia and Malaysia (Beers, 2001; Laderman, 1983; Wiart, 2000).

Although the consumption of a wide variety of food products is very important to guarantee that the nutritional needs of pregnant women are met, in every ethnolinguistic group various beliefs are mentioned as being the origin of food restrictions. In a country where many women suffer from anaemia and malnutrition and usually do not have access to a diversified diet, avoiding certain foods may harm their health and foetal growth.

Within this scope, it is possible to identify the presence of meanings starting from two types of logic: sociocultural logic and scientific knowledge. Although they are surrounded by technical and scientific rationality, especially through their contact with biomedical assertions during prenatal care, beliefs, values, limitations and food restrictions are important for many Timorese women. Therefore, scientific knowledge, which is translated into dietary prescription, and cultural practice may be in opposition, leading pregnant women to face two distinct systems of logic. The scientific principles become impotent in view of some restraints and prescriptions, which are particularly associated with cultural values and the symbolism of foods. Therefore, foodstuffs considered to be dangerous for the health of mother and child are removed from the diet and the principle of analogy also favours the exclusion of foodstuffs (Baião & Deslandes, 2006).

Traditionally, in the various societies the place of birth has always been a woman's place, whether it is her own home or a specific building for this purpose within her community (Kitzinger, 1992). A person who wishes to give birth at home believes that pregnancy is a normal physiological process, not an illness. Women who choose this option believe that the body has the capability of giving birth to a child without technical intervention and that the childbirth process is facilitated by carers in a familiar, intimate atmosphere (Anderson & Bauwens, 1982). The Timorese share this belief and in most cases birth takes place at home, where women may follow traditional practices.

Over time, women have tried all possible positions for facilitating the birth of their children. In ancient times, parturients preferred vertical positions due to the idea that they facilitated childbirth (Gélis, 1984). As from the 18th century, the supine position imposed by obstetricians became the rule in the majority of western countries. Although less efficient than the vertical position for accelerating labour, it is deemed to be more practical for assistants to better control the progress of labour (Bartoli, 1998). However, in traditional societies women normally give birth in an upright position either standing, sitting, kneeling or squatting, and sometimes they hang onto a rope (Dundes, 2003; Helman, 1990; Kitzinger, 1992; Lefèber, 1994; McWilliam, 1998; Priya, 1992; Whittaker, 2002).

The positions of Timorese parturients vary among sitting, kneeling, squatting or lying down, and some women grab a rope when they need to push.

Childbirth positions have been widely examined and compared and vertical positions, as well as the lateral slanted position, are more advantageous than the supine position. During labour, the woman must be encouraged to adopt the position which is most comfortable for her and to change position whenever she so wishes (WHO, 2006), whether to relieve her discomfort or speed up the process: the uterus contracts more effectively, pain decreases, the blood flow from the placenta to the baby increases and the labour is thus quicker (Kitzinger, 1992).

In some regions of Latin America, Africa and Southeast Asia, the umbilical cord is traditionally cut after the delivery of the placenta (Brisbois & Douvier, 1980; Hart, 1965; Laderman, 1982; Lefèber, 1994; Nourse, 1999; Nydegger & Nydegger, 1963; Priya, 1992; Sims, 1991; Teljeur, 1994).

In Timor-Leste the cut is also made after the delivery of the placenta, given that if they make it beforehand, they fear that it will cause harm to the woman. Although the early cutting of the umbilical cord is frequent in hospital facilities, various studies show that cutting the cord at a later stage, because it helps to drain the blood from the placenta to the newborn, adds a reasonable amount of iron to its reserves, thus preventing anaemia (McDonald & Middleton, 2009).

The use of a sharp piece of bamboo for cutting the umbilical cord is a traditional practice among various peoples in countries of Southeast Asia, including Indonesia (Hunter, 2002; McWilliam, 1998, 2002; Therik, 2004; Vincent-Priya, 1991), the Philippines (Hart, 1965; Nydegger & Nydegger, 1963), Malaysia (Laderman, 1982; Vincent-Priya, 1991), Thailand (Hanks, 1963; Poulsen, 2007; Rajadhon, 1965; Vincent-Priya, 1991; Whittaker, 2002) and Vietnam (Coughlin 1965). In addition to being easily available, sometimes there are reasons of a symbolic nature which justify its use. The tetun of Wehali, in West Timor, say that “a straight sliver of bamboo or sorghum stalk gives the child a strong body, a soft heart and a just, straightforward mind” (Therik, 2004: 191).

The development of healthcare services, contact with people trained in accordance with the principles of modern obstetrics and access to other instruments, namely scissors, have led to the progressive decline of the use of bamboo. However, some Timorese still use a piece of bamboo in home births, especially in remote areas, although it is frequently replaced by a knife, razorblade or scissors. These objects are generally everyday material and not sterilised, which may cause infections.

In Timor-Leste, when difficulties arise during childbirth, a frequent practice is the administration of traditional medicines. When the placenta is retained, a traditional midwife may perform an abdominal massage and to help the procedure the parturient may blow strongly into a bottle, or induce vomiting. These practices are also followed in other regions of Southeast Asia (Laderman, 1983; Lefèber, 1994; Nydegger & Nydegger, 1963; Priya, 1992).

Similarly to what was found in this study, references are also made in literature on Timor-Leste and West Timor to the existence of the belief that difficulties during labour derive from a failure in social relations, or from the displeasure of ancestors due to the non-fulfilment of traditions. In situations of this kind it is habitual to call a shaman, so that he will perform certain rituals (Renard-Clamagirand, 1982; Therik, 2004).

The postnatal period begins when labour is concluded, after the delivery of the placenta, and lasts approximately six weeks. In many societies which have a “humoral” medical tradition, restrictions in behaviour and food consumption are followed in order to protect the health of the woman during childbirth, when she is in a situation of vulnerability which is not only physical but also spiritually “magical”. The main aspect of this tradition is the classification of the body and foodstuffs as hot or cold, health being maintained through their balance. Giving birth to a child changes this humoral balance, taking away heat from the woman’s body and leaving her especially vulnerable to cold. This cold may obstruct blood circulation, make it difficult for the lochia to be expelled, delay the recovery of the woman who gave birth, or cause her illness or even death. Restrictive measures are thus taken and the woman remains confined to her home and frequently to a closed room for four to six weeks. During this period she is kept warm, bath water is prepared with herbs and hot spices, and her diet only includes foods, beverages, medicines and herbs classified as clearly hot. It is frequent, in the societies of Southeast Asia, to supply heat from an external source

by keeping a wood fire close to the woman who just gave birth. (Coughlin, 1965; Hanks, 1963; Hart, 1965; Laderman, 1982, 1983; Manderson, 2003; McWilliam, 2002; Nydegger & Nydegger, 1963; Poulsen, 2007; Rajadhon, 1965; Teljeur, 1994; Therik, 2004; Townsend and Rice, 1996; Whittaker, 1996).

In Timor-Leste, heat is also an essential element after childbirth, for it is considered that during this period both mother and newborn are vulnerable to cold and disease. Traditional practices for the application of heat during the postnatal period include the ingestion of warm beverages, bathing the woman who gave birth with warm water and keeping a wood fire next to her (*tuur ahi*). One of the purposes of the application of heat is the expulsion of the lochia. The condition designated by Timorese as “white blood ascending to the head” (*ran mutin sa'e ulun*) is described as a form of madness or delirium and probably refers to a condition of puerperal infection, when lochia becomes purulent. If untreated, it may evolve to septicaemia, a serious condition where the woman may feel chills, seem confused or delirious, show symptoms of shock and the final consequence may be death. Poor social and financial conditions associated with the unsanitary hygiene conditions of many home births, prolonged birth, lack of postnatal care and increased vulnerability of some Timorese women, including those suffering from anaemia and/or malnutrition, are factors which favour infections.

The postnatal diet is of paramount importance to the Timorese. There is a wide variety of food recommendations and restrictions, which contradict the advice of health professionals. Women should have a normally balanced or even reinforced diet during the postnatal period, for promoting their recovery and facilitating the production of milk, it generally not being necessary to avoid specific foods while breastfeeding. Severe restrictions in diet may thus cause nutritional deficiencies for mother or child.

Postnatal care is important, both for detecting childbirth-related complications and for providing the mother with advice on how to care for herself and her baby. However, the majority of Timorese women who recently gave birth do not receive any. In addition to the isolation period during which they stay at home, health facilities are sometimes far away and travelling is difficult. In situations of this kind, mobile clinics may perform an important role, providing healthcare at home for mothers and newborns.

Some strategies have been developed for trying to meet the need for improved mother and child healthcare services in Timor-Leste. One of them is providing shelters for expectant mothers (*Uma Hein Tur Ahi*), intended for housing pregnant women who live in remote rural areas and their families, who wait there until they are ready to deliver at the health centre nearby (Wild, 2009). Another is creating childbirth establishments (*Uma partu*), which consist of facilities specifically intended for childbirth equipped as a house, located near a community health centre. The goal is to provide culturally adequate premises which take into account several important traditional practices associated with childbirth and at the same time provide qualified assistance during childbirth (HAI, 2008).

V. Conclusion

Upon undertaking to achieve the MDG, the Government of Timor-Leste faces considerable challenges. Although health indicators present some overall improvement, maternal fertility and mortality rates remain high. In view of this situation, several policies and strategies have been developed; however, many limitations and deficiencies persist and the extent of efficient maternal healthcare remains low, especially as regards essential obstetric care.

The low level of knowledge on health and disease prevention, the maintenance of certain cultural-related health logics and traditional beliefs and practices, the absence of adequate communication in health and intercultural competences, the distrust in the quality of official healthcare available and the geographic difficulty in visiting healthcare centres contribute to the current situation. The existence of numerous constraints limits the options of the Timorese people, leading them to choose the practices with which they are familiar and which better fit in with their social and cultural system. For many of them, the biomedical model is not the dominant method of treatment, given that health representations and practices respond to a specific cultural logic (Ramos, 2004), which is deeply rooted in

Timorese culture and identity. Similarly to what happens in other countries in Southeast Asia, there are several recommendations, taboos and restrictions surrounding pregnancy, childbirth and the postnatal period, which aim at protecting the mother and baby from disease and physical and psychological damage and may vary within each community, ethnolinguistic group or family.

One strategic approach in maternal health is strengthening the relationship of trust and communication between the community and the healthcare system, and establishing mechanisms to guarantee involvement and cooperation between qualified professionals and informal healthcare providers, such as midwives and traditional healers. These people are familiar with difficult territory, understand the cultural barriers and background, and can be used to favour contact with and acceptance of public health services. Furthermore, it is also necessary to increase the general level of knowledge of the population on matters related to health and prevention and the training of professionals in the field of cultural capability. Including these aspects in health programmes will contribute to the development of a culturally adapted healthcare system, which will take into account socially competent communication in health and the participation of communities in the taking of decisions (Ramos, 2012).

Knowledge of culture, tradition, beliefs, representations and patterns of family interaction is fundamental for the efficacy of programmes and actions for the prevention of health and wellbeing, thus we hope that the results of this investigation will contribute favourably for establishing reproductive health programmes in Timor-Leste and particularly for improving the health of the Timorese women.

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