SITTING FIRE

A community-based study of home births and postpartum care in East Timor

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Finally, this work is dedicated to five women: my grandmother who gave birth to my mother in a farmhouse, my mother who raised her two girls on the other side of the world, my sister who overcame her fear of blood to become an excellent nurse, and her two girls, Brooke and Jade who kept me smiling. These five women are the strength behind my work and the drive to make a difference.
SUMMARY

With 830 deaths per 100,000 live births, East Timor posts one of the highest maternal mortality ratios in Southeast Asia. In real terms this is 275 women expected to die each year, despite extensive international support. Almost 80% of women are delivering at home without the assistance of a medical attendant, so there is a limited understanding about factors that may be contributing to morbidity and mortality.

This is one of the first exploratory studies into the beliefs and practices of Timorese women during pregnancy, delivery and postpartum care. It has found that while increasing numbers of women are using ANC services, most choose to deliver at home because they do not feel sick enough to need hospital care. At home women are assisted by family members or Traditional Birth Attendants, some of whom use dangerous techniques and unhygienic tools, others who have years of experience. Decades of poor health and malnutrition are contributing factors to even minor complications.

After delivery, women spend on average 40 days beside a fire in a back kitchen drinking hot water and applying warm compresses. This application of heat is a common practice in Southeast Asia, Latin America and parts of Africa, yet there is almost no medical literature on its harms or benefits.

Most maternal deaths occur during the postpartum stage, yet programmes for information or follow-up visits have been slow to start. Families want more information, but it has to be targeted for various group needs and cognisant of the fact that while some women are well educated, another 64% are illiterate. A number of final recommendations have been made for improving maternal health.
# ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ANC</td>
<td>Ante Natal Care</td>
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<tr>
<td>CHC</td>
<td>Community Health Centre</td>
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<td>INTERFET</td>
<td>INTERnational Forces in East Timor</td>
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<td>KB</td>
<td>Keluarga Berencana (Family Planning)</td>
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<td>MCH</td>
<td>Mother Child Health</td>
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<td>MSF</td>
<td>Médecins Sans Frontières</td>
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<td>MICS</td>
<td>Multiple Indicator Cluster Survey (UNICEF)</td>
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<td>MoH</td>
<td>Ministry of Health</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<tr>
<td>ObGyn</td>
<td>Obstetrics and Gynecology</td>
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<td>OMT</td>
<td>Organização de Mulheres Timor (Fretlin)</td>
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<td>OPMT</td>
<td>Organização Populaire de Mulheres Timorense (CNRT)</td>
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<tr>
<td>STI</td>
<td>Sexually Transmitted Infection</td>
</tr>
<tr>
<td>TBA</td>
<td>Traditional Birth Attendant</td>
</tr>
<tr>
<td>UNAMET</td>
<td>United Nations Assistance Mission in East Timor</td>
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<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<td>UNFPA</td>
<td>United Nations Fund for Population Assistance</td>
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<td>WHO</td>
<td>World Health Organisation</td>
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I. INTRODUCTION

Odette

With sirens blaring, the ambulance pulled in to the Baucau hospital. Despite having radioed in the emergency, there was no one to meet the ambulance. Odette was carried to the maternity ward and lifted on to a narrow delivery table. While the midwife on-duty was trying to take her blood pressure, Odette began retching dark green vomit all over the bed and floor. Her family was ordered to wipe up the mess. With no extra cloths and her only spare sarong having been used for motion sickness in the ambulance, Odette’s family struggled to clean and comfort Odette while caring for the wet newborn.

...It had been dark, about 4am on 27 June 2003, when Odette de Carvalho gave birth to her first child in a small house in Bibileo. When after more than an hour the placenta was still not out, the liman badain decided to cut the umbilical cord, tying off the dangling end with a strip torn off a corn husk. One of the men was sent to call for an ambulance. After a 45-minute walk he reached the nearest health centre in Buikarin. Neither the nurse nor the midwife lived in town, so he had to wait until 8am for the clinic to open so the nurse could radio for an ambulance.

Fortunately for Odette, she had not delivered a week earlier otherwise the ambulance would never have made it through the muddy coconut plantation trail to get to her village. The ambulance reached Odette at 9:30am. The corn husk was replaced with a sterile surgical clamp and an intravenous bag of Ringers Lactate was run into her left hand. She was transported along with her newborn baby and four family members to the Viqueque Community Health Centre (CHC).

At 10:30am, the ambulance arrived in Viqueque. The midwife left her patients at the clinic to quickly come and help. Odette was bleeding heavily as they transferred her from the ambulance stretcher to the delivery table. The midwife was stern with Odette’s family about not getting her to the hospital for her first delivery, especially with her apparent anaemia and oedema of the face and legs. Oxytocin was administered intravenously, but did nothing to prompt delivery of the placenta. After more than an hour, the midwife knew there was little else she could do. The bright red fluid continued to drip into the baby bassinette beneath the bed, and Odette’s blood pressure was dropping. She had to be referred to the hospital in Baucau where an obstetrician or surgeon might be able to assist.
After having dropped Odette off at the hospital, the ambulance team went for lunch. They knew they might be needed to go to Baucau. By the time they returned to the hospital, the midwife was upset with them for having taken so long and quickly organised for the transfer. Odette’s blood-soaked sarong was changed by her two female companions and wrapped in plastic to be washed later. Odette’s husband and brother helped the nurse lift Odette up and across the room back to the ambulance stretcher. The midwife took care not to dislodge the IV. Odette was strapped into the ambulance. The family clambered in behind along with the baby, a few extra clothes and their cooking pots. A quick detour was made for the ambulance to refuel. Departure from Viqueque was at 1:07pm.

Being on the road was no guarantee of a rapid transfer. Simply driving out of Viqueque had been impossible the previous week as heavy rains had caused the only road out of the district to collapse in four different places. The first slip was only a few kilometres outside of the main town where the river had cut in under the tarmac sweeping out a 25m² bite.

It was going to take time to get engineers in for the repair, so the local infrastructure officer struck a deal with a farmer to rent a portion of his land to build a provisional path for traffic to pass. Temporary measures were also taken for the other three slips allowing the ambulance to get out of Viqueque.

Once mobile, the nurse was busy monitoring the patient and replacing her IV bags, in-between counselling the family on how to avoid vomiting in the back of the ambulance or to at least stick their heads out the window. At a point near the top of the mountain, the ambulance had to stop for the nurse to check Odette’s blood pressure. The Brazilian doctor posted in Viqueque happened to pass by on her way to a medical conference in the capital. She continued on after being reassured that it was only a routine stop. As the doctor pulled away, the ambulance nurse discovered that Odette’s blood pressure had dropped to 60 over 30. The race to Baucau began.
The 25km road had to be negotiated over a mountain, around hairpin curves and through deep potholes. Even though the ambulance driver knew the road well, he was rarely able to get out of 3rd gear or to go faster than 40km/hour. On the few open stretches where 4th gear was possible, great care had to be taken to avoid the obstacle course of children, chickens, dogs, goats, pigs, horses and water buffaloes.

The ambulance pulled into Baucau hospital at 2:40pm. After getting Odette into the maternity ward, the midwife found Odette’s blood pressure beginning to stabilise. She confirmed the delivery details with the ambulance nurse, took Odette’s temperature and used a removable catheter to drain her bladder. Odette vomited. Once the retching stopped, the midwife started trying to get the placenta out by pushing down on Odette’s stomach and pulling on the dangling umbilical cord. After a few unsuccessful attempts, she called the doctor. With very few East Timorese specialists and no doctors trained in obstetrics and gynecology (ObGyn), the hospital has to rely on foreign support. This doctor, a Filipina, had only been in the country for a few months when she had to take leave following a robbery at her house. She was one of only 4 ObGyn’s in East Timor, all sponsored by the United Nations and fortunately she was back on-duty the day Odette arrived.

The ObGyn entered the maternity ward. She glanced at Odette, but said nothing to her as she prepared. The delivery tray was ready, but there was not enough cotton or antiseptic. The midwife was sent for more supplies and a gown. The ObGyn did not speak Tetum or Indonesian and had no translator, so she worked through the Timorese midwife who spoke some English. Odette was ordered to move to the bottom edge of the table. Odette, barely conscious and in great pain, shifted down. Precariously balanced on the edge of the table, she was swabbed down before the doctor attempted a manual removal, alternating between pulling on the cord and reaching up into Odette’s uterus to dislodge the placenta. Following on the instructions of the ObGyn, the midwife sternly gave orders to Odette about when to breathe and when to relax. No one explained to Odette about what was happening. The placenta was eventually extracted and Odette was moved to the maternity ward to recover.

Odette’s story, why is it important? She is a woman who fought the odds to survive a complicated delivery. She did this despite poverty, distance, the hazards of nature and delays in the referral system. Odette is also from a family that survived the 1983 Kraras Massacre (Joliffe 1978) and forced relocation by Indonesian authorities seeking to gain greater control over remote populations.
Odette is one of the 35-40,000 women (Mercer 2002) who will deliver in East Timor each year. Despite extensive international assistance since regaining independence in 1999, East Timor still posts one of the highest maternal mortality ratios in Southeast Asia and the Pacific. This is significant not only for women and their families, but also for the new Timorese medical corps as they use limited resources to re-establish a health service that is expected to meet the demands of a newly liberated and mobile population. With 200,000 women or a quarter of the population of childbearing age and more than 80% of women delivering at home, medical workers have to gain an understanding of the needs of their patients.
II. BACKGROUND

East Timor

The Democratic Republic of East Timor is located at the eastern end of the Indonesian archipelago, just below the Equator and 500km north of Australia. It is a territory of only 15,000km², but it sits in the path of many political agendas.

Recent archaeological findings indicate that the first human inhabitants came to the island from Ceylon in 40-20,000BC (ANU 2001). They were followed in the early 13th century, by Chinese and Javanese traders looking for sandalwood and beeswax (Lonely Planet 2003). The Portuguese landed in the early 1500s, but did not establish a government base until the 1700s (Taylor 1994). Dominican friars also established a base in the mid-1500s, followed by Salesian and Claretian orders seeking to establish schools and clinics to win over Catholic converts. The western side of the island remained under Dutch colonial authority.

During World War II, East Timor tried to remain neutral, but was unable to deter Australian and Dutch efforts to establish a buffer zone or to stop a Japanese invasion. By the end of the war, approximately 50-60,000 East Timorese were dead and the country was in ruins (UNDP 2002, Lonely Planet 2002, Taylor 1994).

After the war, Portugal resumed administration of East Timor, but development efforts remained minimal (UNDP 2002) due to limited national reserves depleted by wars in Angola and Mozambique. In 1974, a military coup brought about the fall of the government in Lisbon and prompted the release of
all foreign territories, including the 680,000 East Timorese (Timor Aid 2001). Five new political parties vied for power, with FREITILIN claiming independence for 10 days.

The Indonesians, prompted by international fears of a Communist base developing in East Timor, were encouraged to annex the territory. In the first months of the occupation, more than 60,000 people died due to injury, starvation and disease (Joliffe 1978, 2001, Dunn 1996). Draconian controls and aerial bombardments in the mountains in 1978, forced survivors to relocate to villages in lowland areas. Regular famines and oppression would result in a further estimated 140,000 deaths.

Once the Indonesian government had military control over the full territory, they implemented a five-tiered development plan for their new province, including agriculture, health, education, communications and governance (Lundry 1996). According to the Indonesian government,

East Timor is still seriously under-populated — with many of its residents living in villages of just a few families, scattered and isolated in remote and mountainous areas in conditions of almost total neglect. This poses a serious obstacle to promoting social and economic development of the region. In recognition of this problem, the government has focused on rural development and on strengthening village infrastructure. The result of the above efforts is very obvious. (IDFA 1996)

Prior to the invasion, the Bishop of Timor had been an early and active voice against pending Communism and threats to separate Church and State. It was not until after the annexation and the isolation of the Church in the early years of the occupation that clergy began to identify with the persecuted Timorese, win over converts and become more socially engaged (Lundry 1996). With its direct links to the Vatican, the Church became the main distributor of foreign aid and the main source of information for the outside world. In 1996, the efforts of the Bishop in Timor were recognised with a Nobel Peace Prize.

Despite intensive Indonesian efforts to win over the Timorese with subsidies, development projects and educational opportunities, the majority could not be pacified (IDFA 1996*, UNDP 2002).

**Independence**

Internal pressure from the democracy movement inside Indonesia and lobbying by western governments eventually prompted the interim Prime Minister of Indonesia to settle the Timor question once and for all. On 5 May 1999, an agreement was signed in New York allowing for a United Nations-sponsored referendum on increased autonomy within Indonesia or an eventual move towards East Timorese independence. Indonesia did not expect to lose.
Despite violence and intimidation leading up to the referendum, the majority of East Timorese made it to the polls on 30 August 1999. Five days later, UN Secretary General, Kofi Annan announced that 78.5% had turned down the Government of Indonesia’s offer. East Timorese were elated, but quickly tempered their celebrations due to a well-conditioned sense of foreboding about Indonesian troops.

The Indonesian military and militias responded to the rejection by launching an organised and systematic plan of destruction and deportations that would lead to more than a thousand civilian deaths. Television audiences around the world were captivated by images of Timorese taking refuge in the UN compound and UN staff refusing to leave without their local counterparts. With the exception of a small team holed up in the Australian embassy, all foreign observers, including medical staff, were expelled at gunpoint. More than 200,000 civil servants, clergy and frightened villagers were taken in military trucks, ships and planes to other parts of Indonesia. Those who dared to remain took cover in the mountains. Timorese guerrilla forces showed incredible restraint and held their cantonment positions so as not to be accused of provoking civil war and justifying the harsh Indonesian retaliation.

Under the May 5th Agreement at the UN, Indonesian troops had been given full responsibility for security in East Timor, but were doing little to stop the violence. Intense shuttle diplomacy went on with Indonesian and American governments to muster support for the deployment of an international peacekeeping mission under mandate of the UN Security Council.

My call to go to East Timor came less than a week after the referendum results were announced and before international troops gained access. Amnesty International reports had captured my attention for years and this was my chance to act. Médecins Sans Frontières (MSF) gave me 48 hours to get to Jakarta to help with the negotiations to get medical teams back into Timor. I was also monitoring developments in Indonesia, waiting to see if East Timor would really be granted its independence.

On 20 September 1999, an Australian-led coalition, INTERFET (INTERNational Forces for East Timor), was allowed to enter East Timor. They found the country’s infrastructure destroyed with telephone exchanges flooded, equipment looted and vehicles destroyed. In some areas, more than 70% of houses and offices had been burned (OCHA 1999). The first Non Governmental Organisations (NGOs), including MSF, regained entry on 22 September. A two-month emergency contract has since turned into a 4-year commitment to the people of East Timor.
Health Care

In the early years, the Portuguese did little to address local development or indigenous health needs (Lonely Planet 2002, Timor Aid 2001, Lundry 1996).

The Indonesians moved in to build a relatively modern health infrastructure. They increased the number of hospitals from 2 to 11, clinics from 14 to 332, and practitioners from 3 doctors and 2 dentists to 221 physicians, 172 general practitioners, 5 specialists, 40 dentists and 1500 paramedics (IDFA 1996). The Indonesians also worked on malaria eradication, sanitation programmes and increasing water reservoirs. Most qualified health professionals and administrators were Indonesians and many of them did not want to be around in case the referendum did not go in Indonesia’s favour.

The international emergency response in September 1999 was a well-coordinated effort, with strong experienced leadership and unprecedented cooperation between UN agencies, NGOs and the military. Committed donors placed their representatives on the ground to allow for rapid funding decisions. In the health sector, internationals immediately organised with the remaining Timorese health professionals to set-up a national Health Forum to coordinate emergency services and start setting the foundations for a brand new health system. A lead NGO was assigned to each of the 13 districts. Resources varied, but all health staff adhered to national protocols while adapting to local needs. Epidemiological data collection and pharmacy stores were re-established, and skills training was quickly organised for the remaining Timorese health staff.

The quality of hospital and clinic care has improved, medical supplies are more readily available and staff absenteeism has reduced with regular payment and supervision. Increased security, one of the most important benefits of independence, has allowed people to have better access to health facilities, but has also meant that some people have moved into more remote areas where government medical services cannot reach. Despite intentions to review and improve upon the prior health system, the drive to get services established quickly and the recognition of the limits of future resourcing have translated into a system that is essentially a scaled-down version of the Indonesian structure.

Infectious diseases, complicated by malaria and malnutrition, are the main cause of morbidity and mortality. One of the most alarming indicators is the high level of maternal deaths. Despite the offer of free health care, poor transport networks and household demands make it difficult for much of the
rural population to reach government health facilities. Supplementary care continues to be provided by Catholic, Protestant and private clinics, as well as the long established tradition of local healers.

The health system of East Timor is organised into 13 District health teams. Only three of the country’s hospitals are staffed with obstetricians. While 135 doctors worked in East Timor before 1999 (ETO 2001), in 2003 only 29 East Timorese doctors are working in the country assisted by varying numbers of expatriates. Many of the Timorese doctors have had to move away from clinical duties to take on administrative responsibilities. Of the 800 nurses and 380 trained midwives, 642 and 221 respectively, work for the Ministry of Health (MoH). Hospitals are open 24 hours, while most clinics are only open weekdays. People in rural areas may face up to several hours walk to reach clinics and even longer delays in getting to hospital emergency wards. Ambulance services are limited to 1 per district.

Viqueque
My first trip to the district of Viqueque was in December 1999. I travelled by military catamaran with a group of refugees returning to their homes at the southeastern edge of the island. On a number of occasions, I returned to monitor the reintegration and local human rights conditions. From May 2001-2002, I accepted a one year posting to work for the UN transitional administration in Viqueque. As one of the most remote districts and having had a long history of land disputes and military crackdowns, Viqueque has acquired the reputation as one of the most volatile districts in the country. I found strong-minded individuals who had suffered tremendously, yet who were committed to rebuilding.

In May 2003, when I had to do the field research component for my Masters, returning to Viqueque seemed a logical choice. I knew the people, spoke the local language relatively well and Viqueque still remained a district often forgotten by the central government and avoided by international agencies.
To reach Viqueque requires a four-wheel drive vehicle. The route is about 100km from the capital, Dili, but due to poor road conditions takes at least four hours to drive. Over the Central East Timor Mountain Range, the car descends through the highlands of Viqueque into coastal plains and eventually reaches the southern beaches along the Timor Sea. The district encompasses 1850km² of forest and farmland. Six major river systems capture most of the run-off during Viqueque’s two rainy seasons, but flash flooding is common. Along the way, most of the houses bordering the road are made of grass and bamboo set on dirt floors; it is only once one gets into one of the five sub-district capitals that some houses are built with cement or zinc sheeting.

The majority of houses have neither running water nor electricity. Even the district capital only has power scheduled from 6pm to midnight, although it is frequently interrupted due to fuel shortages or mechanical breakdowns.

Most people in Viqueque get by with subsistence agriculture (rice, corn, vegetables), animal husbandry (buffalo, cattle, pigs, chickens, goats) or fishing (UNDP 2002).
While some larger tractors are available, most farmers use small hand tools coupled with slash-and-burn clearance of smallholdings averaging 1-2 hectares per family. Lack of quality seeds, pests, broken irrigation systems and lack of technical expertise are major constraints. Teak, coconuts, candle nuts and rice paddy could potentially be marketed along with produce, but due to poor transport systems and limited economic organisation, outside markets have not been established (Viqueque District 2002).

Tourism is limited by the tenuous road networks subject to frequent geological shifting. Viqueque is not likely to benefit directly from oil and gas exploration in the Timor Gap. Many international organisations have come to repair roads and water systems or to set up development initiatives, but have left in frustration due to difficulties in collaborating with local workers. Some of the most skilled and talented local Timorese have been promoted and transferred to the capital.

Women

While the constant threat of military violence has passed for Viqueque women, economic hardship and domestic violence have increased. Despite the emphasis on providing equal rights for men and women and the presence of established women's networks, most households, villages, government and commerce remain dominated by men. Only three Viqueque civil service administration posts are held by women. Women have been hired into the police force, but most nursing and teaching positions are filled by men. Market vending is the only sector where women dominate. OMT and OPMT, the main women's organisations are active throughout the District coordinating small-scale projects, childcare initiatives and projects to address the 64% female illiteracy rate. Women tend to marry young, with a bride price exchanged in many areas and children expected soon after marriage. Both the traditional leaders and the Catholic Church maintain systems of hierarchical separation and the notion of women as virgins or mothers in the service of others. The greatest potential in rebuilding the nation rests with its women.
III. METHODOLOGY

While 80% of births in East Timor take place without the assistance of a trained medical attendant, there are no studies and very little documentation about household childbirth practices. Quantitative and clinical data are limited, providing a narrow basis for assessing or improving health programmes. A host of organisations have stated their intentions to undertake qualitative studies, but according to the MoH, World Health Organisation (WHO), UNICEF and UNFPA, this is the first study of its kind. The three main questions to be explored in this study are: What happens during home births and post-partum care? What are factors for women to decide to deliver at home? Are there elements of home birth and post-partum care that negatively contribute to maternal morbidity or mortality?

Theoretical Approach

The starting point is in producing a ‘thick description’ (Geertz 1973) of local beliefs and practices or an ethnography of birth (Davis-Floyd&Sargent 1997) to bring forward the voices of women and their families.

“Thick description” is a term coined by Gilbert Ryle but expanded upon by Clifford Geertz (1973). The approach begins with the collection of raw data through establishing rapport with a community, conducting interviews, transcribing texts and observing rituals. A “thick” or detailed description of what people say and do allows outsiders to gain an understanding of what needs to be known to operate within that environment. While never reaching the level of knowledge and understanding of someone who has grown up in the community, unfamiliar beliefs and practices can be clarified.

The next step is analysis. Generalisations are made within cases and the most significant structures and hierarchies are highlighted. This interpretation can be accepted, rejected or further tested as the raw data remains available. This type of approach not only allows for descriptions of remote beliefs and practices, but aims at enlarging human discourse.

In bringing out the voices of women and their communities, a shift is made away from the notion of birth as a medical process to birth as a natural activity (Davis Floyd 1987, Kaufert&O’Neil:49). The ‘culture of birth’ also informs its members about the nature of conception, the proper conditions for
procreation and childbearing, the workings of pregnancy and labour and the rules and rationales for pre- and postnatal behaviour (Hahn and Muecke 1987).

This study will also look behind social marketing and political economy to consider taxonomies, factors influencing behaviour, community response and local alternatives (Nichter 1993).

The impetus for this research has come from the medical establishment and reports of high maternal mortality, but a participatory research approach has been used with informants helping to define priorities, data collection techniques and final conclusions.

Timing & Location
The Amsterdam Masters in Medical Anthropology allows for a 6-week field research component. This study was undertaken from May to July 2003 in Viqueque, East Timor.

Offset by the central mountain chain and series of large rivers, and with only one of three access roads open, Viqueque is recognised as one of the most remote districts in the country. The district capital has a population base large enough to ensure sufficient numbers of pregnant women available for the study. The site choice also allows for most informants to be reached by foot even if rainy conditions prevail.

All attempts were made to minimise research bias (Chambers 1993) by going to a remote district, questioning people from all its sub-villages, undertaking research during the rainy season and finding informants from all classes and both sexes. Additional data was collected in the neighbouring but more remote villages of Buikarin and Bibileo. Microlet minibuses and motorcycles were used to reach these sites. Travel to and from Viqueque District was done with NGO assistance.

Midway through this research, heavy rains did prevail and resulted in the main access road falling away in four places, leaving the capital and four of the five sub-districts cut-off for a week. Electricity was also interrupted for several days in the beginning of the study due to fuel and oil shortages, and then again for the last three weeks due to mechanical problems. The researcher also suffered a dog bite, but was assured that rabies was not present in Timor as she was stitched up by an informant’s husband.

Sample
As practices were found to vary significantly between communities, a series of facilitators were used to gain access and information. Introductions from key informants, language skills and prior residence in
the district allowed for trust to be established quickly. The communities’ needs to speak about maternal health problems and their desire for knowledge provided for frank and open discussions despite the foreign nationality of the researcher.

Informants were mainly from Viqueque with a population of 11,377, Buikarin 3,148 and Bibileo 1,904. Interviews were done with people from all Viqueque sub-villages: Beloi, Beobe, Boromatan, Caraubalo, Lamaclaran, Monumento and Olobai. While interviews were conducted primarily with Tetum informants, additional data was collected from couples of mixed or Makasae and Naweti backgrounds. There were 120 persons interviewed or consulted, including 55 parents, 13 traditional birth attendants, 5 midwives and a host of community and Church leaders. Informants came from a range of age brackets, men and women, those formally part of the government health system, unemployed professionals and less formally educated citizens in the rural subsistence economy.

TOOLS

A Literature Review was undertaken prior to undertaking field research and additional documents were added in the process of writing the final thesis. Key documents were obtained from the United Nations missions in East Timor, UNICEF, UNFPA, WHO and the World Bank, as well as studies by Hicks (1976, 1984), Sissons (1997), Lao Hamutuk (2000, 2001), Rogers (2001), van der Wal (2001), Livermore (2002) and Povey&Mercer (2002). All documents are included in the Bibliography.

Briefings and De-briefings were done with staff of the Ministry of Health, World Health Organisation, UNFPA and UNICEF. Early presentations were also made to the Viqueque District Administrator, Sub-District Administrator, Sub-District Coordinator, Village Chiefs and Church officials.

Focus Group Discussions were held with female leaders from the two main women’s organisations, OMT (6 persons) and OPMT (10 persons). These initial meetings were held to discuss research intentions, elaborate on the taxonomy and establish the best techniques and approaches with informants. At the end of the field research component, follow-up meetings were held with key members of these groups to confirm findings and analysis.

In Boromatan, the chief organised a meeting with TBAs and traditional healers (6 persons) to discuss their experiences. In Buikarin, the Sub-District Administrator and Village Secretary organised a
community meeting with local Traditional Birth Attendants (TBAs), a shaman, bonesetters, experts in traditional medicine, pregnant women and couples who had dealt with infertility problems (15 persons). In Bibileo/Klalerec Mutin, key informants organised a meeting with the village chief, TBAs, a teacher, a shaman, and family members who had either recently given birth or knew details of recent maternal deaths (7 persons). Smaller informally organised discussions were organised with groups in Lamaclaran (10 persons), the Viqueque market (4+3 +4 persons), Olobai (5+8 persons) and Beloi (12 persons). Almost all discussions were tape recorded for later verification of details. The groups were predominantly female, although a number of men were invited or joined in to give input.

**Home Visits** were conducted in all Viqueque sub-villages, Buikarin and Bibileo. They focused on households where women were either preparing to deliver or were already postpartum. Additional random interviews were done with men and women to compare their retrospective experiences. Most conversations were recorded and transcribed.

Despite intentions to live with a woman preparing to deliver, the researcher was unable to find a family with both a woman near enough to her delivery date and room for a lodger. In hindsight, the most effective alternative might have been to have stayed with a TBA. In lieu, extensive home visiting was done with a key informant in her 7th/8th month of pregnancy and her pregnant neighbours.

**Clinical Observation** was allowed at 4 Ante Natal Care (ANC) consultations as well as Family Planning and Child Immunisation sessions. Systematic and random interviewing was done with women at the clinic. The women ranged from 1st pregnancy to 13th pregnancy to menopause. Visits were made to the Community Health Centre and Catholic Clinic. Permission was given to examine the reports of the Ministry of Health, the Community Health Centre, the Viqueque Clinic, the Ambulance Log and Catholic Clinic records. The Ambulance team allowed the researcher to accompany a referral to Baucau Hospital where the Maternal Ward staff allowed the researcher to observe treatment.

**Workshop** participation was possible twice. The first was on Malaria Control in Viqueque and the second was the evaluation of the national Integrated Management of Childhood Illnesses (IMCI) programme held in Dili. An invitation was extended to attend the National Family Planning Policy Consultation, but had to be declined as it was scheduled after departure. Participation in the workshops allowed for official presentation of the research purpose, credentials and findings, as well as an opportunity to network with health and community officials.
Taxonomy Lists were prepared in Tetum Dili, Tetum Terik, Makasae and Naweti. The process of producing these lists allowed for an easy initial rapport to be established as community members assumed a teaching role in helping the researcher to establish the correct terms for use in interviews. Clarification of the vocabulary also opened neutral ground for discussing sensitive topics, helped in exploration of the authoritative knowledge of the communities, and allowed informants to add notions not previously considered by the researcher. The Birthing Vocabulary is attached (Annex 1).

Flash Cards were developed using images from the ANC consultation card and canvassing women on what the images represented to them. The flash cards also helped to prompt discussions about both major themes and the health establishment’s interpretation of and representation to women in the community. These same images are being adapted for use in a pocket-voting exercise already field-tested by staff from an NGO promoting community hygiene and water use. While PRA and RRA researchers have developed innovative flash cards for use on water and agricultural assessments, no similar sets exist for health. The images used are attached (Annex 2).

Images and silhouettes from other sources including family photos of hospital deliveries, images from books on TBAs and the Indonesian version of Where Women Have No Doctor, were used to open discussions. Drawing body images was not an option as the only persons confident enough or willing to undertake the exercise were those who were highly educated or medically trained. In hindsight, bringing along a book with photos of the stages of life from conception through to birth could have been useful in generating further discussion. New concepts like birthing tanks and vasectomies generated great interest and discussion among Timorese women and men. Education materials from UNICEF were collected, with one set remaining in Viqueque for health education and one brought back to the University of Amsterdam Medical Anthropology Unit.

Photographs were taken of research participants for reference and use in this thesis. Photos are difficult to obtain in East Timor so prints were also sent back to the communities to thank them for their participation.

Listing and Ranking of community health priorities for new levels of assistance (new hospital, additional staff, maternal waiting homes, etc) was done with the 2 main women’s groups. This task was difficult as groups were unsure or hesitant about ranking. They preferred to defer the selection of priorities to community leaders or health experts.
**Preliminary Findings** were presented at the Ministry of Health. A 5-page report has been distributed in English and Tetum to health authorities and sent to Viqueque. Copies of the final thesis have been requested by the Viqueque District Health Management Team, the MoH, WHO, UNFPA and UNICEF in East Timor, as well as Health Alliance International, the Mary Stapes Foundation and the Alola Foundation.

**Medical References** were provided by a number of friends and colleagues as well as information from maternal health texts and articles.

**Problem Diagrams**
ETHICAL CONSIDERATION
With an earlier anthropological study already published, many Viqueque residents were aware of the potential implications of a new study. Support and official authorisation were obtained from Director of Health Services Delivery and the Head of sub-division for Basic Packages including MCH at the MoH. Credentials were presented to the Viqueque District Administration and the Church. The nature of the study was explained to all potential informants and verbal consent was given for use of their information and pictures. Tape recordings have been held for the researcher’s reference only. Two women declined to be interviewed. Access and permission to use clinic data was given by the District Health Team and has been voluntarily restricted to use of women’s ages and places of residence.

RESEARCHER’S CREDENTIALS
In addition to speaking Tetum and having worked in East Timor since October 1999 with Médecins Sans Frontières, the Jesuit Refugee Service and UNTAET, the researcher has worked with MSF since 1992 in Burma, Mozambique, Côte d’Ivoire, Liberia, Burundi, Belgium and Canada. She also holds a BA Honours in Social Cultural Anthropology from the University of Toronto, Trinity College.

OUTLINE
The body of the paper begins with a review of existing and available quantitative data, showing the need for a qualitative assessment. Chapters follow on beliefs and practices regarding pregnancy, delivery and post-partum care. The paper concludes with a summary of the key findings and considers how they may be used for future health programming. All relevant reference materials are included in the bibliography and annexes.
IV. MATERNAL MORTALITY: THE STATISTICAL ARGUMENT

Every day I find 2-3 ladies in the OPD (Out-Patient Department) with severe complications from which they can die (severe pre-eclampsia, intrauterine deaths...). We want to admit them, but they all want to go home to inform the family and promise to come in the afternoon. About 80% of them I don’t see anymore. (Obstetrician working in Baucau Hospital, 2003)

Mortality

According to the Ministry of Health (MoH) and the World Health Organisation (WHO) the maternal mortality ratio in East Timor is one of the highest in the world at 830 deaths per 100,000 live births. This is twice as high as neighbouring Indonesia and fifty-five times greater than Australia, the nearest developed country.

<table>
<thead>
<tr>
<th></th>
<th>East Timor</th>
<th>Indonesia</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Expectancy</td>
<td>57-61</td>
<td>64.25</td>
<td>78.8</td>
</tr>
<tr>
<td>Maternal Mortality per 100,000</td>
<td>450-850</td>
<td>373-470</td>
<td>15</td>
</tr>
<tr>
<td>Infant Mortality per 1000</td>
<td>70-95</td>
<td>35-41</td>
<td>5</td>
</tr>
<tr>
<td>Mortality in children &lt;5y per 1000</td>
<td>99-124</td>
<td>75</td>
<td>7</td>
</tr>
</tbody>
</table>

Despite renewed security, freedom of movement, the waiving of health service fees and extensive international assistance efforts, maternal mortality has reportedly doubled since independence. To come to terms with this number and establish an understanding of the current conditions, the basis of the statistics needs to be examined.

In circumstances where women are in good health but do not have access to emergency obstetric services, the maternal mortality rate is anticipated to be at around 250/100,000. The 300-500/100,000 reported by the Indonesians for East Timor was based on deaths reported at hospitals and clinics. The Indonesian authorities even sent out audit teams to assess the causes of maternal deaths. While there were more clinics and health personnel operating under the Indonesian administration, over-staffing, absenteeism and supply shortages affected clinic operations and patient confidence. Accounts of forced contraception and sterilisation, as well as incidents of health staff complicity in military crackdowns scared people away from seeking treatment in state-run facilities (Sissons 1997, OMT 1998). Statistical accuracy was questioned as clinic staff were pushed to meet quotas and reported to have adjusted numbers to placate supervisors. Staff also did not actively seek information about deaths occurring in home births or data related to complicated abortions. While the Indonesian system had a superior infrastructure, it was autocratic, bureaucratic and fostered a culture of dependency and corruption.
The new mortality numbers for East Timor are estimates that come from an extrapolation of the Indonesian statistics, modified to include errors in reporting and unreported deaths (ETO 2001). In real terms with a population base of 800,000, this translates into 275 mothers expected to die in Timor each year, 18-26 of them in Viqueque District.

\[
\text{Viq. Pop. } 69,227 \times 2.93\% \times 1.1 = 2231 \text{ annual deliveries} \\
2231 \times 830/100,000 = 18.5 \text{ deaths}
\]

\[
\text{or} \\
69,227 \text{ with TFR 7 and CBR 45,000} = 3150 \text{ annual deliveries} \\
3150 \times 830/100,000 = 26 \text{ deaths}
\]

Can these numbers be accurate or are they based on underestimated baseline denominators, overly pessimistic medical experiences, or are health administrators looking for shocking figures that will draw international sympathy and support?

In reviewing the new East Timorese data collection system, a number of weaknesses were identified. First, the formulas used for calculating estimates may be low for the East Timorese context. Second, the data that is registered in the clinic ledgers is not always transferred correctly – this may be due to miscommunication between clinic staff and supervisors or weaknesses in doing mathematical equations. Third, there is still no active case-seeking.

Maternal deaths are not listed in clinic, district or national reports. If a woman dies in delivery at a hospital or clinic, it is recorded in the register, but there is no space for the cause of death. Autopsies are rare and death certificates are not issued. With only one person at the national level responsible for all Mother Child Health (MCH) programmes, no one is available for audits. Midwives claimed that there have been no post-independence maternal deaths in the Viqueque CHC. One woman in her 7th month of pregnancy did die in the ambulance on her way to the CHC, but deaths in transit or following transfer to other hospitals are not included in District statistics.

If a woman dies days or weeks after delivery, the direct cause of death may be entered into the statistics without mention of the woman’s post-partum status. There are no statistics compiled on miscarriages, the stage of the pregnancy when miscarried or abortions.

If a woman dies at home, the village chief will usually find out; if she lives in a remote area, it may take some time for the information to reach the authorities. Village Chiefs interviewed said they did
not systematically record deaths or their causes, but compiled population numbers through censuses. While some chiefs say it is not uncommon for either a mother or child to die in childbirth (Lao Hamutuk 2001), other leaders interviewed said that one or two maternal deaths in their communities each year is not considered alarming. As village chiefs will soon be elected and draw state salaries, there may be scope for increasing their monitoring responsibilities.

The government’s Civil Registration Service is currently trying to get all births and marriages recorded. A general census is also being planned. Baseline figures currently come from a 2001 Electoral Census and a 2002 Suco Survey. Civil Registration has not yet established a system for recording deaths or issuing death certificates.

The Catholic Church used to be one of the main organisations to collect names, dates and the circumstances of deaths. This was an essential service during the Indonesian occupation, but urgency and rigour have diminished since independence.

Attempts at conducting verbal autopsies were largely unsuccessful. This was due in part to problems in finding people present when a woman died and due to difficulties in eliciting clear information. All TBAs who were interviewed denied ever having lost a woman in their care and mentioned fears of being implicated if a woman did die. Hearsay information does not make it into the statistics.

When family members of women who have died in childbirth can be found and questioned, answers are restricted due to both the limits of their medical knowledge and the limits of vocabulary.

A member of my family died in 2000. She died a few months after giving birth. She went to the market and carried back heavy items. Her husband warned her. A few days later she was weak and stopped eating or drinking. She even refused to take traditional medicine. Blood came out and she died.

Common causes of death include:

- **Maromak decide** (Will of God)
- **Lia fuan at husi inan no aman** (‘Bad words’ from disapproving parents)
- **Mane dehan labarik la’os nian** (Stress due to the man’s refusal to accept paternity)
- **Raan fakar barak ka makas** (Major blood loss)
- **Ka’an la sai** (Placenta not coming out)
- **Labarik la sai** (Baby not coming out)
- **Feto fraku** (Woman weak or wasted)
- **Inan fors a lae iha** (Mother had no force to push)
TBAs and Midwives also mentioned convulsions, transverse positioning of the baby and complications from other attendants forcing a woman to push before she was ready.

Surveys and studies from other districts confirm that many births and deaths in remote mountain villages go unrecorded (Livermore 2002). In Liquisa District, a Community-Based Birth Survey reported that there were no maternal deaths since independence. The research team also found few of the women delivering to be in the traditional high risk categories of being younger than 18 years or having multiparity (van der Wal 2001). While there were fewer deaths in prior years, 9 deaths in Aileu District in 2001 do correspond to a maternal mortality rate of 830/100,000. Deaths were attributed to postpartum haemorrhaging, obstructed labour, meningitis, renal problems, sudden collapse and one suicide (Livermore 2002). No corresponding data has been found for other districts. In Viqueque District, in the towns of Viqueque, Bibileo and Buikarin combined, 830/100,000 equates to 4 deaths each year. Anecdotal information does support this estimate.

The last general survey on maternal health in East Timor was done by the Indonesian government in 1997. UNFPA has abandoned ideas to do a Sisterhood Method Survey due to the tremendous upheavals and populations shifts over the past 10 years. For countries without a reliable statistic base, UNICEF has created a Multiple Indicator Cluster Survey (MICS) to address planning needs. In 2002 UNICEF sponsored a MICS of 4000 households across the country. They found a total fertility rate of 7.5 children per woman and almost a third of women aged 20-34 delivering one child each year. Maternal mortality was not included in their questions.

**Morbidity**

*Mortality is preceded by ill health* (Kusin 1998). While it may be difficult to confirm the numbers or clinical causes of deaths, there are health conditions that may be significant contributing factors. In East Timor, statistics show that most consultations are for acute respiratory infections, diarrhoeal diseases and malaria (WHO 2002). Tuberculosis affects 15-20,000, with only a few thousand receiving treatment. Less than 10 HIV cases have been reported, but prevention efforts are already underway due to the prior history of STIs and the presence of both large foreign military contingents and prostitutes. Infections are also exacerbated by malnutrition. Based on a series of anthropometric measures, 12% of children <5 years are moderately to severely wasted, 47% are moderately to severely stunted and 43% are moderately or severely underweight (UNICEF 2003). This has ramifications, not only for children, but also for girls growing up to be mothers.
For pregnant women, specific conditions include anaemia, hypertension, renal disease, uterine atony, parasites, chronic sickness during pregnancy, cephalopelvic disproportion and previous obstetric complications (Howson et al 1996). Sepsis can also result from premature or prolonged rupture of the amniotic sac, unhygienic vaginal exams or intrapartum interventions that can lead to pelvic inflammatory disease or maternal tetanus (Olds et al 1988, Wong et al 2002). Fistulae, while common in some developing countries could not be ascertained through verbal interviews.

Anaemia leaves pregnant women more susceptible to infection, increases their risk of post-partum haemorrhage and may lower tolerance to even minimal blood loss during delivery (Kusin 1998, Olds et al 1988). Cardiac failure, still births and low birth weight of newborns may also be associated (ACF 2002, Olds et al 1988). While Viqueque midwives say they only see a few cases of anaemia, the expatriate doctor confirms a high prevalence. The neighbouring Baucau District Health Office reported that 35 of their 91 anaemic patients in 2002 were females of reproductive age. Anaemia in East Timor is exacerbated by frequent *Vivax* or *Falciparum* malarial infections.

For pregnant women who do attend ANC clinics in Viqueque, midwives rely on the women to raise health concerns. Most women are then treated symptomatically based on the description of the problem rather than a physical exam. There is no systematic testing of blood or urine and few vaginal exams. Problems are noted on an ANC card kept in the pregnant woman's possession, but not put into the register. With the exception of the number of deliveries and miscarriages, previous maternal histories are not carried over when new ANC cards are started.

Poor nutrition is often a combination of food shortage, improper diet or a conscious decision on the part of the woman to eat less so as to have a smaller baby at delivery.

*The lack of preventative services leads to the late identification of nutritional problems and the increased risk of micronutrient deficiencies. Then with the lack of appropriate treatments for malnutrition this increases the severity and duration of the disease and increases the mortality amongst the malnourished."* (ACF Timor 2002:18)

Poverty is rife and most regions of East Timor experience a 'lean period' twice a year (ACF 2002). Most Timorese women say they increase their food consumption during pregnancy, but this usually refers to staples rather than vegetables, fruits or proteins. The increase is also unlikely to reach the recommended 2300 Kcal per day recommended for pregnant women (ACF 2002). Milk is rarely consumed and milk products are not readily available. The small stature of most East Timorese women may be a result of childhood malnutrition posing further recognised risk for obstructed labour (Kusin
Body Mass Index (BMI) can also produce a rough measure of adult nutrition with a BMI of <18.5 suggesting Chronic Energy Depletion (CED). Of Timorese women surveyed in the MICS, 26% were under 18.5 and 7% suffered from severe CED. Disease and poor nutrition are concerns in and of themselves, even if they do not lead directly to mortality.

**Qualitative Validation**

With the Timorese health and data collection systems in the early stages, there is an opportunity to more clearly define the context, quantify the problems and address the risks as perceived by the target population. With the gaps in the collection and analysis of the statistical data, qualitative information is needed to complement the epidemiological numbers. Medical anthropology can be used to identify barriers to acceptance of biomedical interventions and to help work out the patterns of behaviour of patients, caretakers and medical staff (Nichter & Nichter 1996, Gove & Pelto 1994, Inhorn & Brown 1990, Nájera et al 1993). By becoming familiar with the language and priorities, data collection and analysis can be enhanced while producing reports that have clearly applicable results and direction for future research (Farmer 1999, Koss-Chioino 1997: A16, Bentley et al 1988, Gove & Pelto 1988).

East Timor is experiencing a post-conflict ‘baby boom’, but there is no data on how many of these pregnancies are planned or the number that are simply the result of a limited availability of contraception. The Catholic Church’s strong position against abortion and prior opposition to artificial contraception have restricted discussions on these topics. Seventy to eighty percent of women in East Timor are delivering at home. Are these women aware or do they recognise danger signs in pregnancy or delivery? What information do the women and their families want or need for more successful delivery results? Are there aspects of clinic or hospital services keeping families from seeking professional medical assistance? Facilities are available and affordable, but are they accessible or acceptable? With the shortage of doctors and midwives and state budgets limiting the hiring of additional staff, can support be given to TBAs or other family members who are assisting the majority of births?

Health is not simply an indicator, but a means to addressing poverty and inequity (Sen 1999). The statistics need to be considered jointly with women’s priorities, cultural sensitivities and the roles of other players if programmes and resources are to have a significant impact (Kusin 1998:111).
V. PREGNANCY: TWO BODIES

How many children do I want? God will decide.
(Answer repeatedly given by couples in Viqueque, 2003)

Is this fatalism, religious conviction or a realistic explanatory model? There is an extensive body of literature in medical anthropology that examines the language and the logic of “lesser developed” or less cosmopolitan societies (Evans-Pritchard 1927, Colson 1966, Harris 1974, Good 1977, Scott 1985). When an East Timorese woman or man responds that “God will decide”, this line of reasoning may be not so far off the statistical probability of an egg being fertilised by a healthy sperm, implanted in a uterine wall and successfully carried to term in an environment where malnutrition, disease and violence have been rife. Even some of the most educated parents reason that with the high infant mortality rate, a woman must carry at least seven pregnancies to term to end up with four or five children. As we move beyond the numbers and start to get into people’s beliefs and practices, their statements and actions become clearer. We begin to see why people believe what they do, why they think certain events happen to them and how their choices are made.

Olimpia

At 27 years, Olimpia is pregnant for the third time. While she lives in Viqueque, she is originally from another sub-district and so has a very limited local support network. Her house is located up on a hill at the southern edge of town in the sub-village of Lamaclaran. On rainy days it is precarious climbing up the steep embankment to her home. Going down to the river to bathe is also out of the question on these days; instead she takes her turn with her neighbours lining up at a single spout to lather and rinse over a cotton sarong. Even during the rainy season, daytime temperatures can rise above 30°C, so most people wash two to three times a day.

Although far from both her and her husband’s families, Olimpia does have the benefits of a regular job. She works for the East Timorese Commission for Truth and Reconciliation. Her husband Flavio trained as a nurse, but is still waiting to be selected in the next round of health staff recruitment. Sixteen year-old Felisberta is from the extended family and helps to take care of Olimpia’s 4½ and 2 year old children. Their house is built of coconut, bamboo, wood and thatch. They have been fortunate
enough to find funds to pour a concrete floor. Posters from previous elections, the Truth Commission and international rock stars cover the walls – partly decorative, partly to keep out drafts. There are three small bedrooms, each with a mosquito net. A front sitting areas is arranged with a wooden table and six pink and green stackable plastic chairs. In the backroom there is a long table for meals, a bench, a metal rack for dishes and a small Catholic shrine in one corner. The kitchen and latrine are outside. Behind the house there is a small fenced-off vegetable garden as dogs, pigs and chickens roam freely. This home is typical for a Viqueque family with some means.

Since her 1st month, Olimpia has been going for Ante ANC visits at the Viqueque Clinic. Together with the midwife, they worked out her due date from the date of her last menstruation. She received an ANC card and her name has been entered into the register. Every month she lines up with other expectant mothers to have her blood pressure, pallor and weight checked. This last month, the midwife started to check her tummy growth and the position of the baby. Each woman has a scheduled day, but is told to come consult quickly if experiencing any problems.

Nausea started at the beginning of Olimpia’s 2nd month, plus she had a real aversion to sugar cane. Otherwise, she was eating normally – rice, vegetables, meat and a little bit of palm wine. During her first pregnancy, Olimpia liked to stand, but not with the second or this third one. When she was carrying her first child, a daughter, her body felt heavy and she was tired all the time. With her second, a son, she felt light and had very little pain in her stomach, bottom or back. With the boy, she did not really need extra sleep and she remembers craving coconut water. Delivery was also more painful with the girl than with the boy. Judging from the pains with this baby, Olimpia thinks she may be carrying another boy. This pregnancy, though, has brought new problems:

I went [to the clinic] already on the twenty-eighth of my 6th month. They told me my next appointment was on the twenty-third and I should come back. It did not even reach that day, I was sick so had to come quickly. A week earlier I had bleeding. On the twenty-eighth, I went to consult. I had bleeding, so I went to see the midwife Armando. I got Buscopan and SF [ferrous sulphate], took them and drank them. I consulted and she said, sister, you should have a check and asked me to go to Baucau. I was scared, but it was what I had to do. On the twenty-eighth, I went to see the doctor there. The doctor said my pressure had gone down down down. He said my baby place was closed tightly and not a problem. Sometimes it is because of our tiredness and it can happen again. After I consulted there, I returned and have no problems now. When they tested my blood pressure, it was low, 100/70. The midwife said it was not good and asked me to rest a lot and to drink medicine.

Olimpia initially denied consulting anyone else other than the midwife or doctor, stating that she was afraid of the TBAs (liman badain) and shamans (matan dook). When pressed further, she admitted:
When I am really sick, I go to the hospital quickly. But the TBA is close, so sometimes I go to see her. She massages the baby. She fixes my thigh so I walk right. (laughs) The thigh causes problems when I walk. I did not really feel sick, so I called the TBA. She felt and said, “Oh, the child is not lying right.” I am telling you, she can put it right. A long time I went to the TBA. I said, Auntie, I have this and she massaged, and now I am walking right. When I went to the hospital, I was afraid to tell the midwife, “This morning I was not feeling like I was walking right and could not get to the hospital quickly, so I called the TBA to massage my belly.”

Olimpia explained that modern people, like herself, do not consult shamans or fortune tellers. Other people may go to see them when they are in their 3rd, 7th or 8th month, taking along a chicken to check the state of its liver and whether the Devil is trying to harm their unborn child. When it is a problem with the ancestors, the couple is often sent to put candles or flowers on their graves. When problems are tied to the family, the traditional prayer basket (hamulak) may have to be brought out. The shaman or someone who knows about traditional medicines will sometimes provide herbal treatments.

While Olimpia continues to work, she takes things more easily and goes to the clinic at the first sign of a problem. Her first child was born at the hospital. Her second, because of fighting in the area, was born in a house with only her husband present. She plans to deliver her third child at the hospital. A bin has already been prepared with clothes, cloth diapers, soaps and sarongs, all purchased locally.

Beliefs
Anthropologist David Hicks (1976) did research in East Timor from 1966-67, prior to the Indonesian occupation. During his time in Viqueque, he documented an elaborate myth of origin interwoven with strong beliefs in a sacred underworld dominated by women and a secular earthly world dominated by men. In the beginning, there was a hole in the ground, a crevice resembling a womb, from which one woman and two men climbed out to establish the princedoms (liurai). They were followed out by the commoners (reno) who became the tenant class. The womb association was extended to the layout of Timorese homes and regularly reinforced through the ritual re-enactment of ‘creation’ each time a child was born and presented to the community. Hicks provided rich detail in the description of marriages, including the exchange of bridewealth (barlake). He found that even when a woman was pregnant, there was the possibility that the marriage would not take place if either the lovers refused to marry or their descent groups were unwilling to agree to the union. His informants indicated that there was no stigma attached to children born out of wedlock. Beyond reference to life beginning when a soul took up residence in the body inside a mother’s womb, there were no other references to pregnancy.
Thirty years on, when people are asked about a myth of origin or creation, very few people can recall
the version recorded by Hicks. Tales vary from family to family and their transmission has often been
interrupted by either the strict limits on cultural practices enforced by the Indonesians or the influential
dogma of the Catholic Church that is supplanting animistic accounts.

My inquiries about how Viqueque was first populated were referred to elders of liurai families. There
are two main stories. The first involves a golden bracelet having been found at the elbow or source of
the main rivers running through the town – We (water) and Keke (bracelet), with the spelling corrupted
by Portuguese colonial authorities to Viqueque.

The second version brings together tales of the warriors of Caraubalo and the notoriously vicious liurai
queen of Luka. At the request of the Luka people to be freed from their fierce ruler, the Caraubalo
warriors organised to visit her on a day when everyone was away in the fields. Disguised as travellers
they came to her house and requested a cup of water. The queen, finding herself without any servants,
agreed to serve the travellers. As she moved to pour the water, the travellers objected saying that they
were commoners and could not be served from the right hand of a queen. As she shifted the jug to her
left hand, the warriors pulled out their swords and severed her arm with the golden bracelet. The limb
and bracelet were quickly scooped up and carried back to Caraubalo where they were placed in a tree.
Henceforth the place was called Wekeke. To this day, the golden bracelet remains in the possession of
the local liurai family.

The most popular legends are now about Falintil fighters in the resistance against the Indonesians.
Tales involve accounts of those who survived the aerial bombardments, massacres and forced
displacements, as well as those who died in battle. Leaders and ancestors continue to be recognised,
but homage is most often paid to God, Christ and the Virgin Mary. Every month, there are prayers or
commemorations for one or a series of Saints in the Catholic pantheon.
Life today is considered a gift from God. Through the Church’s teachings about birth spacing, many people have been introduced to the notions of conception and periods of fertility. While conception begins with a man and a woman lying together, informants give two explanations for what follows. The first involves the mixing of blood. If the blood of a man and woman are not of the same temperature, a baby will not be formed. Either the woman or the man can have hot or cold blood. Royal liurai families are hot and cannot conceive children in a union with a person from a cold common reno family. When the blood can combine successfully a child is formed. In the second version, the woman is likened to an empty basket wherein the man places his kretik and leaves a baby to grow. Individuals who have studied about reproduction in textbooks know about the fertilisation of an egg by sperm, but this version is not familiar to the general population. For them, life begins when the spirit enters through the head of the baby. The infant is nourished by the blood of the mother with food and vitamins entering through the opening at the top of the head – the fontanel (juhur).

Sex is not openly discussed and especially not with young men or women who have not yet entered into a marriage contract. If families do not agree to a union but the woman is pregnant or if the bridewealth has not been paid in full, then the couple must ask for forgiveness (monu ain). They must visit their parents before the child is born or the lives of either the mother or child may be at risk at delivery. A shaman (matan dook) may be asked to intervene and help arrange for the exchange of traditional cloth (tais), sacrifice of animals or to organise a common meal. A mother can take a small rock, pass it around her body seven times and then wrap it in special leaves – this can counter any bad words (lia Juan aat) often considered to be the cause of many maternal deaths.

Reproductive organs are referred to as sacred parts (sasan lulik). People rarely talk about conception in any detail. A baby is made and grows inside the woman’s baby place (oan fatin) coming out of the door (odamatan) when ready. Tetum vocabulary does not provide further detail, so additional terms used by medical staff are adopted from Portuguese or Indonesian. Life stages are as follows:

<table>
<thead>
<tr>
<th>Female (Feto)</th>
<th>Male (Mane)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foetus or Baby</td>
<td>Bebe/Oan</td>
</tr>
<tr>
<td>Child</td>
<td>Oan Feto/Labarik Feto</td>
</tr>
<tr>
<td>Adolescent</td>
<td>Feto ruan</td>
</tr>
<tr>
<td>Married</td>
<td>Kaben/Feen/Ferik-oan</td>
</tr>
<tr>
<td>Parent</td>
<td>Inan</td>
</tr>
<tr>
<td>Grandparent</td>
<td>Avo</td>
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<tr>
<td>Elder</td>
<td>Ferik</td>
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<td></td>
<td>Bebe/Oan</td>
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<td>OanMane/Labarik Mane</td>
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<tr>
<td></td>
<td>Mane klosan</td>
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<td></td>
<td>Kaben/La’en/Katuas-oan</td>
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<td>Aman</td>
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<td>Abo</td>
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<td></td>
<td>Katuas</td>
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</tbody>
</table>
Infertility is discussed openly, although mainly by couples who have overcome the problem. There is some knowledge of sperm with insufficient quantity or strength hindering impregnation, but it is most often the woman who is sent for testing if there are problems with getting pregnant. There are some concerns about women not being able to conceive if they wash with cold water or if they use artificial contraception before delivering a first child. One man indicated that if a woman used contraceptives for too long, then her husband’s sperm would become ineffective. TBAs may attempt to treat infertility by massaging a soft or poorly positioned uterus. Special leaves may be provided by either TBAs or shamans. Assistance from both these practitioners can also be sought for help in determining or influencing the sex of a child. One couple asked for help from a shaman to prevent subsequent children from being born feet-first. Other than marriages or births, no special rites of transition were acknowledged. With the possible exception of Mary, no Saints are dedicated to women or birthing.

Blood is a very significant element, although no blood taboos were found. A girl becomes a blood woman (*feto raan*) as her breasts develop and menstrual blood (*raan foer*) begins to flow. Women do not wash their hair when menstruating, afraid that white blood may go to the head (*raan mutin sa’e ulun*). Men are allowed to be present at births and to help in washing the soiled cloths. Parents have an interest in producing female children, especially if they are of Makasae or Naweti ethnic groups, as bridewealth (*barlake*) comes to them when their daughters marry. Daughters carry the same value as was given for their mothers and it is most often paid in buffalos, horses and cash. Couples are first married traditionally (*kaben adat*) and then in the Church (*kaben igreja*).

Almost all Viqueque women carry a pair of scissors or tuck a nail into the bun in their hair. A number of inquiries led to the discovery that this was a precaution for keeping evil spirits away from the unborn child. The main perpetrator was Pontiana, a tall white female spirit with long flowing hair and white robes. While she is known to come out mainly at night, people swear they have seen her out during the day. Pregnant women do not cut their hair so their children will be born with hair. Some women stop wearing necklaces when pregnant due to fears that the baby may be born with the umbilical cord around its neck. Dog bites are feared because they can cause the baby to be born with hair all over its arms. *Nikat* is a sickness that eats an unborn child. Twins are common and carry no sign or stigma.
Practices

Most girls begin menstruating when 12 to 15 years old. They can already marry and become pregnant, but are not encouraged to do so until the girl is 18 and the boy 20 years old. Younger marriages were more common during Indonesian times. Informants say this was done to protect girls from the advances of Indonesian soldiers. Few couples wait until their late 20s or early 30s to wed. Marriages are not allowed between people of the same grandfather. A Christian is only allowed one partner. If a spouse dies, re-marriage is acceptable after the compulsory one year of mourning. Some couples have been separated during the struggle for independence; currently some are apart due to difficulties in finding work in the same place or sending children off to school. There is no set rule for patri- or matrilocality. There are problems with affairs.

Pre-marital sex is frowned upon, although parents acknowledge that it does happen. Young men say they must “promise the moon and the stars” to a girl before being allowed any physical intimacy. Still, some parents find themselves having to organise unions quickly. If the boy refuses to acknowledge paternity of a child, problems may arise between the families or result in tremendous stress for the girl during delivery. If a couple chooses to marry against the will of their parents, they may find themselves struggling to get by and begging for acceptance before the delivery of their child.

East Timorese adults are hesitant to speak about sexual organs or acts. Although discussion groups can be of mixed sex, younger unwed children are quickly chased away as voices drop to hushed tones. People were unwilling to attempt drawings of the human anatomy, but both men and women were interested in textbook drawings and explanations, treating them as educational materials. Pornography although prohibited, is not policed and readily available from young video street hawkers in the capital. There are some homosexual relationships, but there is only open practice of it in the capital.

Couples first marry through traditional means with parents sitting together to exchange gifts or negotiate a bride price. Months or years may pass before enough money has been accumulated for a Church wedding and the corresponding feast. As children are expected in the first years of marriage, many couples already have children before they are married in a Church. The Church, registration fee is 5USD or 15USD if the couple requests a private mass. The Catholic Church also organises three-month pre-marital courses for couples. Topics range from partner compatibility to family planning. Outside experts, including midwives, have been invited to come and make presentations.
Family Planning

Family planning is encouraged by the State and, recently, the Church (Bishop’s Letter March 2003). Couples are encouraged to space births at least two years apart and to try and limit numbers to 2 or 3 children so they can all receive proper care and education. During Indonesian times, there was a two child policy, especially for police, military and civil servants. Some coercive means were reported (Sissons 1997). During this research, Viqueque women were in a safe environment to openly discuss problems, but almost all women denied the use of any force. A midwife said there had been sterilisation programmes in Baucau, Dili and Suai, but not in Viqueque. Only one woman said she had been threatened with the loss of her husband’s job if she did not participate in the Indonesian Family Planning programme. Other women suggested that there may have been some miscommunication or women who were not made aware of all the options or side effects. One woman was said to have died in Viqueque from complications arising from the use of an IUD.

In 2002, only 7% of non-pregnant married women in East Timor were found to be using contraception (UNICEF 2003). The number of women seeking contraception in Viqueque is increasing. The midwives say that women talk of concerns about the poor economy and having no help to look after children when they go out to work in the fields. During the Indonesian administration, women needed written consent from their husbands to receive contraceptives, but this is no longer the case. There are also no reports of men coming to check at the clinic if their wives are using birth control secretly. A few couples have sought assistance from midwives outside of clinic hours because they do not want the community to know that they are using artificial means. The Ministry of Health has set a target of reaching 70% of women with Family Planning information through weekly talks to waiting women. To reach their target, health workers may need to get outside of the clinics.

Most women request Depo Provera as they consider the 3-monthly injections easier than remembering to take the oral Pill daily. In addition, Depo Provera can be used while breastfeeding and is promoted for use three months after delivery. Condoms are expensive in the capital, not available in the local market and not popular at the local clinic due to the need to register for use. The condom stocks at the Viqueque clinic were recently robbed and, strangely enough, nothing else was taken. Women say they are interested in resuming use of Norplants and IUDs and UNFPA has indicated that supplies may soon be available. Women attending the Family Planning Clinics range in age from 18 to 48 years with parity of 1 to 10 children. Younger women say they use contraception for birth spacing, while older women use it prophylactically. The Catholic Clinic only promotes the use of the natural calendar
method for birth spacing. None of the women attending were unmarried or had not already had at least one child.

During the research period, the wife of a teacher in Buikarin delivered her 13th child. While she estimated her age to be about 50, she knows she was married in 1984 and looked to be in her early 40s. Due to extreme fatigue during the last pregnancy and her inability to produce enough milk for this infant, she is afraid that she will not survive another delivery. Both she and a female family member asked for assistance in getting contraception for her. Even though she lives less than 100 metres from the Buikarin health post she had no idea whether contraceptives were available there.

Abortions or infanticide are considered rare events. Almost everyone interviewed said that an abortion could be provoked with a combination of whiskey and small unripe pineapple pulp or by using massage or herbal concoctions. Surgical options only exist in the cities of Baucau or Dili, but are not considered ethical practices by Timorese health staff.

**Isin rua, Ko'os, Kabai, Kabuk, Mata atu isi, Nai oli**

...these are all ways in Viqueque to indicate that a woman is pregnant. The most common, Isin rua, literally means ‘two bodies’. Most pregnancies are welcomed with special care taken of a woman when she is carrying a child. A woman usually recognises that she is pregnant when her monthly menstruation does not come. Advice is usually sought from mothers or close female family members.

Many of the women questioned said they experienced nausea in the first months of pregnancy. Three women were nauseous throughout with two requiring hospitalisation. The only food restrictions mentioned were small pineapples and whiskey. One woman mentioned a taboo on eating peanuts after the 7th month. Cravings most often included mangoes, tamarind and citrus fruits. While a nutritional survey recorded no food taboos in the eastern districts, it did list avoidance of chicken, eggs, meat, papaya, some fruits and some staples in various other Timorese districts (ACF 2002). With two growing seasons, Viqueque District has an added advantage of having staples and produce available throughout the year. Pregnant women observed in their homes ate the same food as the rest of the family and meals were similar to non-pregnant households. Women ate meat, vegetables and staples; they also drank coffee, tea and the occasional cup of palm wine. Many pregnant women in Viqueque chew betel nut throughout their pregnancies, although it is unclear whether it has antiseptic properties or simply a mild narcotic effect. Few women smoke, although many of their husbands do.
Pregnant women are told to avoid heavy work and to rest. While this is possible for women like Olimpia, women like Odette who live in more remote areas may not have the choice as meeting family subsistence needs may outweigh personal health concerns. In the six months leading up to and including this study, the Viqueque hospital/health centre records indicated a miscarriage rate of 10% (12/118). Carrying heavy loads is commonly cited by men and women as a primary cause for spontaneous miscarriages. Domestic violence often goes unreported, but midwives, Church officials and local leaders confirm its prevalence. Cases are no longer systematically reported or investigated by police. Victims are hesitant to complain about their husbands and risk the temporary incarceration of the family’s main provider. Cases that do make it to the courts take months to process with limited support or protection available for the woman or her children.

**Ante Natal Care**

Increasing numbers of women are attending ANC clinics in Viqueque, even if they do not deliver at the CHC. First visits are often not until the 4th or 5th month, with women saying the delay is due to hospital policy. Midwives denied this claim showing women listed in the register who had already begun coming in their 2nd and 3rd months.

Six months of records were reviewed for the busiest day of ANC visits (*Annex 3*). Thursdays have the highest attendance as this is also the day for maternal tetanus and children’s vaccinations. Attempts are made to give at least two tetanus injections to all pregnant women before each delivery. Maternal tetanus has not been reported in Viqueque, but there have been 3 cases in Baucau. Women at the Thursday consultations ranged in age from 14 to 40. First time pregnancies accounted for 27% of visits. On average women were in their 3rd pregnancy, although one woman was in for her 11th and another her 14th.

The flow is constant from 8:30am to 12:30pm. Only one midwife is assigned to do the administration, examinations and immunisations.
Each pregnant woman is given an international ANC card adapted to East Timor. They are entered into the clinic register, assigned a day and given a reference number. No follow-up was done if a woman missed her scheduled day, but women were reprimanded for missing appointments if they came for a subsequent visit. One woman who was scolded for not coming on schedule pointed out to the midwife that she had been there, but that it was the midwife who was absent. The midwife checked the date and realised she had been home with a sick child that day and apologised.

Mothers’ blood pressure, pallor, oedema and weight are checked. If a woman mentions any additional problems, she is given a prescription to be filled at the clinic pharmacy. Starting in the 7th or 8th month, the position of the baby, the foetal heartbeat and the fundal height are checked. Ultrasound facilities are only available in the capital.

Vaginal exams are rare, even in cases where a woman complains of pain or discharge. STIs were common in Indonesian times, but few are reported in the registers of the Viqueque clinic. Two women complaining of vaginal itching had nothing noted in the register. Both were prescribed Nystatin vaginal suppositories – one returned immediately to request an oral antibiotic. When an ObGyn visits
from Baucau, internal exams may be done. The midwife says women are shy about the check, but confident in the expertise of the doctor. A woman in a focus group discussion said that when word gets around that vaginal exams are being done, clinic attendance drops off quickly. Modesty is very important to East Timorese women.

Midwives encourage women to deliver at the clinics, especially if it is their first child, if the woman has had more than 4 pregnancies or if she is older than 35 years. On average, women attend two consultations before delivering.

Vitamin and Iron supplements are provided, but women admit to throwing the pills away because of fears that the baby will grow too big for delivery. This fear has been confirmed by other sources (ACF 2002) and has been documented in other parts of Southeast Asia and Africa.

Approximately 50 pregnant women go to consult at the Catholic clinic each month, paying 1-2USD for the visit and treatment.

**Risks & Questions**

What is perceived as a risk varies between cultures (Douglas 1966). In East Timor, most of the health sector’s information about pregnancy comes from Indonesian statistics, the experiences of midwives and nurses who support the medical system, a small number of surveys, and information provided by well-educated urban colleagues. ANC education is often done in reaction to problems encountered at hospitals or clinics.

Materials are adapted directly from programmes proven successful in other countries. Translations and drawing alterations are done to adapt them to a local audience. A group of women examined the ANC card and said the figures did not depict Timorese women as the hairstyle was wrong, skin colour was too light and clothing too new. An image of a woman vomiting was mistaken for a postpartum woman drinking hot water. Conditions in the pictures were largely assessed on the size of the pregnant belly. Most of the plans for health service delivery and education are drawn up by experienced foreign health professionals who have not been given an opportunity to sit and learn from local health professionals, traditional healers or patients’ experiences.
A 19 year old girl came into the ANC clinic, pregnant with her first child. She thought she was in her 8th month, so had come for a tetanus shot. The midwife calculated back to the girl’s last menstruation and then measured her belly. The girl was in her 9th month and likely to deliver in the coming days. She was admonished by the midwife for having taken so long to come for her first consultation and refused vaccine because she was too close to her delivery date. The girl was instructed to return to the hospital to deliver. The girl quietly nodded in response to all that the midwife said and left.

Catching up with her outside, I discovered that she had just recently come into Viqueque from a rural area to be near family and a local TBA recognised for her delivery skills. Despite what the midwife may have thought, the girl had no intentions of coming to the hospital, although she was happy to be close in case of an emergency. This young girl was not at all shy about telling me what she considered as risks and which decisions she had already made.

While most women recognise the main problems of being too young, too old, having had too many children or having them too closely together, few have the means to confront these circumstances. Bleeding, fever or severe pain can be self-diagnosed, but very few women recognise the signs of anaemia, pre-eclampsia or diabetes. Some women do not recognise the absence of foetal movement or the presence of meconium in the amniotic fluid. Women have presented at the hospital months after the baby has died inside their belly.

East Timorese women say they want more information on both the dangers and what can be done to keep healthy during pregnancy, but most are afraid to ask health officials. They see the clinic or the hospital as a place to go when sick, rather than a place to learn about prevention. With the exception of answering direct questions, health education is not a part of ANC visits. Illiteracy rates are high, leaving many women unable to read the information on their ANC cards or the posters on the clinic walls. Women have asked for information on how conception happens, how babies grow, what foods should be eaten, what precautions should be taken and what their options are for delivery. They want more information on the options for family planning and its side effects. Women want to know how to improve the outcomes for themselves and their children.
VI. DELIVERY: THE DOOR IS OPEN

Once the baby drops and the door opens, the baby is ready for its journey into the secular world. For women in Viqueque, delivery has three stages – the pain (knotak moras), the baby comes out (labarik sai) and the placenta follows (ka’an sai).

Research into childbirth began with meeting the gatekeepers. After getting by the medical authorities, the next sessions were with senior women and leaders of the community. Women are the main source of advice for newly pregnant mothers and the main attendants at deliveries. They are the guardians of birthing beliefs and customs.

You become strong. Then it depends on your tradition. Mine is not to use a rope, my tradition is to give birth with a midwife and lying down. But when I gave birth to my daughter, there was no midwife so I had to cast out for something else. I put my legs like this, back like this to give some force. After, I tried using the same method as at the hospital. I tried to give birth by myself. There was no liman badain. It was me with my mother and my husband, just the three of us. I have to say, it was a bit like the feeling when you have to go to the bathroom, but you don’t have to go, it is the baby ready to come. I stood and the baby came down quickly, I was going to lie down but could not. The baby came down, I kneeled down, and the baby came down. Because I went down, it was like I moved and the child moved to come. But, according to tradition, to get breath, strength, you have to push against something, to pull on a rope.

When speaking to women in Viqueque about their deliveries (fo partus/ hahoris/ tuur ahi), they talk about where it happened and who was present. East Timor is largely a rural subsistence economy, with women more focused on where the day’s meal will come from rather than where they plan to deliver when that day finally comes. If they leave the house, who will take care of the children, who will take care of them in transit, and who will provide assistance to them at the hospital? Women can deliver with a midwife at home, in a government hospital or at a Catholic clinic, but sometimes transport may not be available or affordable for these options. The expectant mother may have to make do with the option closest when contractions begin.
BELIEFS
Physically, women believe a baby will either come out 9 months 9 days after conception or when God decides it is time. The sex of the child may be determined by the side to which it lies – right for girls, left for boys. No more than three persons should be present or else the baby may be afraid to come out. Unmarried persons or people who have not yet had children are not allowed into the room. Other than the birthing attendant, no ritual specialists are called in. If the baby is not coming out, then special leaves may be crushed and pressed to the woman’s head and belly. A handful of rice may also be piled outside the mother’s opening to try and lure out the baby. During the contractions, one person may be instructed to place their hands on the woman’s head to contain her breath or to blow on the top of her head directing additional force down towards the baby. During delivery, there are no prohibitions on crying out and no taboos about coming into contact with blood or soiled garments.

PRACTICES
When nearing term, women may exercise or do heavy work to encourage the baby to drop. When the pain begins (knotak moras) or their water breaks (modo been nakfera/ nu bee nakfera), women know the baby is coming. They may be given something to eat or drink to maintain strength during the delivery. Labour is expected to take many hours with the first baby, less with subsequent deliveries. Everyone knows there is a problem if the placenta does not follow within two hours.

Delivery positions vary. Sitting up (tuur sadere) and lying down (tobar) are the most popular. A woman who sits may have a wall behind, her. If her husband or a male relative are present, they may sit behind to give support to the woman and put pressure on her lower back. Some women will pull down on a rope, others will squat, very few will stand. Foreign notions of being on all-fours or giving birth in a water tank are considered shocking.

A recent study (UNICEF 2003) found that 24% of births were assisted by skilled practitioners, while 43% had only a relative or friend present, 18% received no assistance and 10.5% delivered with a TBA. From my research, I wonder how TBAs who are also family members are reported in surveys. There are no clear rules or patterns for where or with whom women deliver. The following accounts show a range of experiences from home to hospital births and with the varied options used within a single family:
Joanna, 40y
- She has been pregnant and delivered at home 8 times. All children are still alive. Joanna has never been to a clinic or hospital and has never taken her children to be immunised. The only medicine she uses is anti-nausea tablets. With all deliveries, her husband sits behind her on the bed pushing down on her belly as she braces her feet against a piece of wood and pulls down on a rope suspended above her head. She knows the placenta has to be examined carefully to make sure it is complete. If she had any problems, she says she would have gone to the hospital.

Domingas F., 35y
- Her children are aged 8, 6, 4, 3 years and 6 months. The first child was born at home with her husband and grandmother, for the second she was home alone, the third was at home with her husband and sister-in-law, and with the fourth she was at home with her husband in the next room cooking rice. With the fifth, she was standing alone in the house when the baby slipped out. People heard the cry and came to help cut the cord. She regularly visits the Catholic Clinic and says she would have gone to the hospital if she had felt too weak. She knows women die in childbirth, but links it to the placenta not coming out. Her husband’s older sister died in delivery with contractions beginning in the middle of the night and no way to get help – the baby lived.

Anna, 32y
- She has delivered six times. She planned to deliver her first child at home, but the midwife convinced her to go to the hospital. Her second child was born at home with a midwife. For her third, the midwife arrived after the birth of the child, but assistance was needed to cut the cord and deliver the placenta. The fourth child was born at home with a midwife from next door. With the fifth, she wanted to call the same midwife but as the midwife was resting after having had her own baby, Anna walked the 100m to the hospital. When contractions began with the sixth, she waited for the midwife next door to return from work. Fortunately she returned in time to deliver and resuscitate the 4kg newborn. Anna would now like to use contraception, but her husband wants more children.

Duarte, 34y
- His first two children were born at the Catholic Clinic during Indonesian times. With the third child, his wife started going into labour at home with a TBA present. When the TBA saw she was having difficulties, they called the Sister from the Catholic Clinic. The Sister gave his wife an injection, but she was still struggling. They carried her in a chair to the hospital on the other side of town where she delivered successfully. His wife was disoriented after delivery and took 4 days to recognise and accept the baby as her own.

Christina, 27y
- With her first child she was two days past her due date, so she was sent to the hospital in Baucau. After waiting two more days, she delivered naturally. The next three children were all delivered at home. Contractions began at night, so it was difficult to call for the ambulance. Instead, she called her neighbour, a male nurse, who brought gloves, Betadine, Oxytetracyline, clamps and sterile scissors. They had studied nursing together and she trusted his skills.
Domingas D., 26y,
- With problems already in her 5th pregnancy and signs of pre-eclampsia in the sixth, the midwife from her sub-district clinic referred Domingas to Viqueque to deliver. Her BP was 160/120, she had oedema of the hands and ankles and suspected malaria. After three days, a healthy 2.3kg baby girl was delivered. An hour later she started to haemorrhage. The medication used to stabilise her blood pressure was changed as it was probably causing the additional blood loss. The ambulance stood by to transfer her to Baucau, but her condition stabilised. She returned home with the baby a few days later.

Natalia, 24y
- She was a trained nurse, attended ANC clinics regularly and wanted to deliver her first child at the hospital so that in case of complications she could quickly be referred to Baucau Hospital. (An aunt had died at home, haemorrhaging when the placenta did not come, even though a midwife was present.) When pains began in the morning, she went to check with the doctor at the hospital and was told the baby would probably come the next day. She collected her things and returned to the hospital with her husband, mother and mother-in-law. While in labour, she ate and drank a lot – eggs, honey, corn, rice and milk – for strength to deliver. She felt the baby’s head drop and at 7am her water broke. She had injections of penicillin and Vitamin B1, having purchased her own drugs in Dili. At 9am she was walking around when the pains intensified. The baby was delivered by two midwives. The placenta came 30 minutes later.
Home

Most women deliver on a bed in the house or in a room specially prepared in the back kitchen. None of the women interviewed spoke about delivering outdoors. The bed is most often made of bamboo, measuring slightly more than a metre across. A plastic mat is unfolded with a pillow and extra sarongs alongside. A large piece of wood is secured at one end for the woman to brace her feet against when pushing (hosar/hakaas). Some families hang a rope around a beam above the bed. There is usually enough room at the foot of the bed for someone to sit or to pass by. People with access included a TBA, midwife or nurse if they had been called, the husband or another close male relative, and a female who is either a mother, mother-in-law, sister-in-law or close friend.

Once the baby is out, birth attendants receive the placenta (ka’an) checking that it is whole and followed by the membrane (oa ikun). There is no set rule, but most people wait for the placenta to be delivered before cutting the umbilical cord (husar talin). The cord is often milked so that equal amounts of blood go to the baby and placenta. It is cut to the length of the baby’s knee using a pair of scissors, a knife, a razor blade or a sharpened piece of bamboo. For the next days, the baby’s navel will be kept dry and warm to encourage the cord to fall off quickly. Once it drops, the cord will be put away for a future date to be used for medicinal purposes or it will be placed with the placenta.
Traditional Birth Attendants

Traditional Birth Attendants (TBAs) in East Timor are referred to as *Liman Badain* or “hand-workers”. Sometimes they are called *dukuns* or *dayas*. They are most often older women, although men are not excluded from the profession. They come from no special lineages and while considered courageous, no special privileges are conferred on them because of their work. All have had children themselves. Some have learned from their mothers or grandmothers, while others are self-taught. While there is no formal certification, some TBAs did receive training during the Indonesian period on hygiene and recognizing maternal risk factors. Those who completed the training were registered, listed at the hospital and supplied with gloves, scissors and Betadine. Some TBAs worked closely with young nurses and midwives in remote communities, trading skills and information. Other TBAs have simply had to make do with local knowledge and materials.

*Liman Badain* are distinguished from *Matan Dook*, *Tohars* and *Ema Ai Moruk Timor*. *Matan Dook* are “far-seers” or shaman, most often men, who can see events in both the past and future. They practice divination, suggest rites to perform and provide herbal combinations including fertility formulas. *Tohars* are essentially bone setters who will sometimes use massage, but rarely treat pregnant women. *Ema Ai Moruk Timor* are individuals who know a lot about plant-based medicines.

*Liman Badain* focus on pregnant women and use mainly massage. While a few *Liman Badain* spoke about using leaves and bark, others professed an ignorance of herbal medicines. Important trees include *Ai Hanak*, *Faimaluli*, *Ai Da*, *Ai Xina*, *Ai Sukaer* (tamarind), *Jambua* (grapefruit) and *Derok* (lime). One *Liman Badain* well known in the community for her skills with traditional treatments outrightly denied any prior use or knowledge of them. It was learned that *Liman Badain* are hesitant to share information due to fears that recipes may be stolen or that revealing the contents and properties will cause their efficacy to be lost.

Coconut and candle nut oils are used for massage. TBAs check the position of babies in the latter months of pregnancy and as long as the head is not engaged, many can use their hands to turn a baby in breech position. Skilled TBAs can feel twins, but hesitate to tell mothers in case this causes stress. If a woman miscarry, a TBA may be called to clear the uterus and relieve the pain.
The clientele of these local TBAs is usually limited to their local community. In Viqueque there are about 30, in Buikarín 6 and another 2-3 in Bibileo. They are available for alleviating pains during pregnancy, assisting with deliveries and doing postpartum visits. As TBAs live nearby, they can be called upon at all hours to come to the pregnant woman's home. It is rare for TBAs to travel out of their community for deliveries, but people do come in from more distant areas or return from the capital for delivery assistance. One TBA is in her 70s and almost blind. Younger women still call on her to assist, saying her skills rest in her hands not her eyes. The better known TBAs assist with 2-3 deliveries per week. One produced a written record of all the children she has delivered since 1981.

When assisting deliveries, almost all TBAs say that they wait for the baby to come out. External pressure may be used on the top or underside of the woman’s belly, crushed leaves may be applied externally, or vomiting may be induced to help with final contractions and expulsion of the placenta. Massage or medicinal compresses can be used on external prolapses (horok feto) to clear the way for an unobstructed delivery. All TBAs interviewed said that when faced with problems like the placenta coming first, exhaustion, heavy bleeding or transverse lie of the baby, they will refer or bring the woman to a hospital. At the hospital, TBAs are often mistaken for a regular family member, although the most experienced are recognised by seasoned midwives. One TBA said that midwives or nurses sometimes called her to assist them with difficult deliveries.
Midwives

To qualify as a midwife (parteira/bidan) requires three years of training as a nurse and then one additional year to specialise in midwifery. Almost all are women. There are approximately 380 trained midwives with 221 working for the Ministry of Health. Some unemployed midwives continue to assist with deliveries of family and friends’ babies using delivery sets obtained during Indonesian employment. Hospital staff assist them with keeping the instruments sterilised.

Ministry midwives do most of their deliveries at the hospital. In Viqueque, they get about 4 calls a month to assist with home deliveries. Sometimes it is a woman who is already in the final stages of labour who cannot be moved, sometimes it is a friend who does not want to come to the hospital, and sometimes they need to intervene when there have been serious complications.

Midwives in Viqueque say they have seen problems with women who have started to push too early ending up with swollen cervixes or not enough strength for the final push. They are highly critical of the rope overhead claiming that its use exhausts the mother. Some complain of unhygienic procedures and have had to remove leaves or traditional medicines from women’s birth canals. Midwives are concerned that when confronted with difficult deliveries, TBAs may not have the anatomical knowledge, medical skills or materials to properly assist. Midwives are being given a new target of assisting 45% of all deliveries, including home deliveries and supervision of TBA deliveries. They will have to become more mobile if this goal is to be met.

The Ministry of Health has plans to hire additional midwives. Due to the current surplus of unemployed midwives and nurses, training of new students has been suspended. Upgrade training was organised for government midwives in 2001-2002. The aim was to ensure competency in using WHO-SEARO Standards of Midwifery Practice. The training also sought to address requests from midwives for educational updates (Wood 2002). Problems identified by the midwives included a lack of planning for re-introducing training sessions, a shortage of midwives in the system, difficulties gaining access to transport for official duties, and the lack of governance of the profession (Wood 2002).
Clinics and Hospitals

During Indonesian times, every village had a health post with a midwife. In 1999, the number of clinics and staff were reduced as NGOs took over emergency services. Further cuts were made when the East Timorese government assessed the limitations of its budget and civil service staffing capacity. NGOs were asked to complete their programmes by the end of 2001 and hand over full management responsibility to the government. Interest has since been renewed in obtaining NGO support for maternal and other selective health programmes.

Viqueque government clinics are open in the mornings Monday to Saturday. Most are equipped with a delivery bed, the instruments needed for vaginal deliveries and a radio in case the ambulance has to be called. Some clinics lack running water. The numbers have recently been increased from 11 to 16 clinics, but midwives are available in only 4 clinics with male nurses covering responsibilities in other sites. Additional recruitment is underway, but there are difficulties due to experienced midwives having moved to the capital, some midwives not wanting to resume medical work, midwives and their husbands not wanting to relocate to rural areas, and conservative attitudes regarding women travelling around on their own. Sixteen delivery sets have been distributed to midwives since independence. Six new motorcycles have been funded by UNFPA for use in Viqueque, but none of the midwives have the licenses needed to collect the bikes from the capital. There are concerns about how female midwives will be accepted moving about the districts and who will accompany them when they are called to go out at night or to remote locations.

The main health structure in Viqueque, while commonly referred to as a hospital is officially categorised as a Community Health Centre (CHC). While the CHC has facilities for patients to stay overnight, the number of beds, the type of equipment and the range of services are limited. The closest surgical-specialist capabilities are in Baucau 25km and 2.5 hours away. Viqueque has adult and children’s wards, as well as a separate delivery room and two maternity beds. One Timorese and one foreign doctor are stationed in Viqueque, but most deliveries are overseen by four midwives who rotate on shifts at the hospital and local clinic.

With an average of 180 deliveries expected each month in Viqueque District, only a third are assisted by midwives. In May 2003, 23 women (13%) delivered with a midwife, with 3 of these (1.7%) referred to Baucau Hospital. Referrals have to be negotiated with patients and their families. While there have been no complaints about care in Baucau Hospital, some people are afraid to go due to
uncertainty about what will happen, rumours about people being killed at the hospital and concerns about finding money to bring a dead body back if the emergency intervention does not work.

Catholic Clinic

Families in Viqueque who have some means often opt to do their ANC consultations and deliveries at a clinic run by the Franciscan Sisters. Most of their patients come from the surrounding neighbourhood, although some families come from further afield. The clinic is open mornings and afternoons, with the nuns living on site if assistance is needed after hours. It is rare for the Sisters to make house calls because of difficulties in transporting their equipment. On average, 6 women deliver at their clinic each month. Almost all the Sisters are from Indonesia and speak limited Tetum, but they have the backing of the Church and the confidence of the people. Currently, two Sisters are medically trained – one as a nurse and the other as a midwife. Surgical referrals can be made through the CHC to Baucau. Like the state clinics, the Sisters submit their monthly statistics to the MoH. It is rare for the Sisters to attend meetings or trainings due to time constraints and patient demands at their clinic.

The Catholic Clinic is extremely clean. Equipment is relatively new and in good condition. Birthing beds are wider and sturdier than at the CHC. In-patients are rare, but there is a comfortable 6-bed maternity waiting room. The Sisters are also popular because they have a wide range of injectables. Consultation fees are approximately 0.50 USD with patients paying extra for medicines or tests. Delivery costs are scaled to the means of patients with regular families paying 12 USD and civil servants paying 20 USD.
RISKS & QUESTIONS

In Timor and Viqueque, a range of locations, attendants and techniques are available for women to deliver. Choices may be limited by distance, cost or the condition of the labouring woman. What is important in a study like this is to try and discern which practices are obstructive, enabling or neutral.

Obliging a woman to push before her body is ready is probably one of the most detrimental practices leading to a series of complications. Vaginal exams are important for checking dilation and monitoring the woman’s progress, but care must be taken to do this hygienically. Placing foreign substances or objects in the birth canal needs to be discouraged. It is unclear whether the pressure applied in massaging or pushing down on a labouring woman’s belly is advantageous or damaging – further medical observation and investigation are required.

Birthing positions have been examined and compared extensively (Eisenberg et al 1996: 289). Upright positions improve blood circulation to the baby and the assistance of gravity aids in its descent. For squatting, Timorese women have the advantage of having developed thigh muscles through daily use of this position. Having a person behind to provide support and apply pressure to the back is beneficial for a delivering woman. As well as the physical advantages, there may be psychological benefits as the father takes an active role in the birth of his child.

Skilled TBAs can tell a lot about the position of the baby by feeling the mother’s belly; their tactile sense and experience are often more developed than that of a midwife. While breech births account for only about 3-4% of births (Olds et al 1988: 579), they can result in grave complications, especially when emergency obstetrical services are not easy to reach. The TBAs technique of external version of the baby in utero may need to be observed, but the practice may be beneficial if done in a safe and timely manner. Transverse positioning may be linked to other complications or physical abnormalities (Eisenberg et al 1996: 238&289, Olds et al 1988:752) so additional care is needed if massage is used. Transverse positions are usually referred for medical assistance, even by TBAs.

Techniques and timing for dealing with prolapses or umbilical cords around the neck of the infant also need further investigation. With a retained placenta, great care has to be taken in ensuring a clean and complete removal. Nipple stimulation, vomiting and Oxytocin all have their proven merits (Jordan 1993: 76) and the varied techniques need to be discussed between Doctors, Midwives and TBAs for use in Timorese conditions.
Timing for cutting the cord has also been inconclusively studied (Leboyer 1976 and Maziaede et al 1986, in Olds et al 1988:671). Ensuring a clean cut is essential for avoiding infection. Sterile scissors or blades are ideal, but many women used kitchen knives, katanas and haircutting scissors dipped in hot water or wiped off on a cloth. Another look may have to be taken at the use of sharpened bamboo as it is readily available and used only one time. All clinics allow the family to take the placenta home.

The decision to go to a clinic or hospital often depends on whether a woman feels sick, whether she is home alone, if she is scared because it is her first delivery, or if she has confidence in the medical workers who can get her quick access to emergency medical services. Women say their comfort level with going to clinics has increased with more female midwives available rather than only male nurses.

Reasons for not going to see medical professionals include moe (shame and/or shyness), poor hygiene at the hospital or clinic, discomfort with narrow delivery tables, fear of contagion from other patients and a lack of medicines, especially injectables. With the medical personnel, there are concerns about the youth and lack of experience of younger midwives and fears of harsh attitudes from mature staff. While consultations and medicines are free, the costs of transport or for families to stay with patients at hospitals may be prohibitive. One of the greatest concerns has been meeting costs for bringing a family member home if they die at a hospital. The responsibility was passed around to different departments for the first years of independence, but now there is a funerary car that can be hired for 1 USD/km.

In developed countries, there are complaints about the over-medicalisation of childbirth and the shift from personalised care to the realm of strangers (Jordan 1993:50). International assistance in East Timor has focused on the provision of emergency obstetric care, training of midwives to recognise complications and trying to stop women from coming too late for medical assistance (UNFPA 2003).

_The MoH will ensure the population of Timor-Leste have access to appropriate, accurate, religious and culturally appropriate information about Maternal and Newborn health, family planning, adolescent reproductive health and STIs, HIV/AIDS. An integrated approach to delivery of these messages shall be used as appropriately as possible._ (Trisnawaty 2003:43)

The main strategy has been to use health care “packages.” This lends to a debate on the merits of targeted Selective Primary Health Care packages versus comprehensive Primary Health Care programmes (Rifkin&Walt 1986). The Timorese strategy is largely shaped by foreign advisors. The aim is to increase deliveries attended by “skilled health attendants” to 60% and work towards one midwife for every 5000 persons. While people in Viqueque may welcome an initiative that increases
their midwife numbers from 8 to 12, this is not enough to ensure a midwife in every clinic or to address the needs of people living in smaller remote villages.

The government has made statements about generating community awareness, improving services and undertaking socialisation (Trisnawaty 2003). As funding is secured, work needs to be done in identifying the major issues that communities want considered. While some materials can be adapted from other developing countries, direct translation is not enough. Socialisation sessions and materials need to tap into the communities’ authoritative knowledge (Davis-Floyd & Sargent 1997) and use concepts and vocabulary the people most at risk can understand.

New ideas like Maternal Waiting Homes have generated an interest in Viqueque. Ideas about appropriate locations ranged from the capital, where a range of services already exist, to more remote satellite centres like Buikarin where women are struggling to get to major centres. Health officials would like to see all women delivering at health facilities and TBAs referring mothers to deliver with “skilled birth attendants” rather than assisting deliveries themselves. Many of the most skilled TBAs are getting old, and it is unclear whether a new generation is being trained. Dialogue is needed between the medical establishment, TBAs and communities.

At delivery, is the door really open? Is the woman fully dilated before she is encouraged to push? If she needs emergency medical assistance, can she find a facility that is open, equipped and staffed? Are the policy makers prepared to listen to what she says she wants or needs? Will she ever go knocking at their door or do they have to come to hers?
VII. POST PARTUM: SITTING FIRE

Immediately after birth, a fire is lit for the new mother and baby. The mother will wash with hot water and change into clean clothes. The baby will be washed and wrapped up in a cloth or blanket. The mother will be given hot liquids and, sometimes, a shot of whiskey. She will apply warm compresses to her body and be massaged with mentholated oils. After a few days, she can venture outside the house, but she will not go far from the fire for the first 40 days.

_Tuur Ahi_ or to “sit fire” is the Tetum term that refers to both the postpartum practice and the entire birthing experience. While medical professionals debate whether postpartum refers to 42 or 365 days after delivery (International Classification of Diseases 9th and 10th revisions), the 40 days comes up repeatedly in history and in other parts of the world (Aria et al 1991). References can be found from the Bible to current day doctors’ prescriptions for 6 weeks rest and abstention. Forty days also corresponds to approximately the time needed for women’s bleeding and discharge to stop. For women in Viqueque postpartum activities can end a few days after the umbilical cord drops off the baby, when the bloody post-delivery discharge stops or when the baby stops breastfeeding - 40 days is average.

The literature is full of references to postpartum women being abnormal, impure or not self-contained and needing to be covered or controlled (Delaney in Buckley et al 1988: 90). Others say it is a period where women take control of their households and social obligations (Lawrence in Buckley et al 1988:117). In most societies, birth and the period directly following are considered a time when the mother, child and family are vulnerable. To cope with the dangers and uncertainties, communities may develop a set of rituals to make sense of and manage the problematic aspects (Jordan 1993:4). In Viqueque, family traditions vary, but there are core beliefs and practices that regularly recur.

Through examining the experiences of women in Viqueque, this chapter will outline the most common practices and analyse why they can be considered beneficial physically or psychologically.
BELIEFS

Heat is essential. A woman needs to be warmed quickly after delivery of the baby and the placenta. It is unclear with women interviewed whether this is due to the woman’s body being “cold” after giving birth or whether it is done preventively to keep the cold wind from entering. Regardless, a fire, hot water and warm compresses are believed to help with increasing blood circulation, expelling dirty blood from the uterus quickly and helping to bring down the breastmilk. Women also believe that the application of heat helps to close the pelvis, prevent illness and allows for strength to be regained quickly. Other physical benefits include keeping the new mother from getting fat and restoring smooth skin. There are even advocates of hot water as a treatment for preventing postpartum depression. Injections also help to warm a body and increase the blood flow.

Postpartum women are not allowed to touch cold water as it may bring on swelling, sickness, haemorrhaging or death. Contact with cold water is also considered dangerous for the new baby. Body and breasts must be warmed before breastfeeding. Hair cannot be washed as it may provoke “the white blood to go up to your head” (raan muin sa’e ulun), wherein a woman becomes sick and can go mad or die. Rinsing hair with warm water is prohibited as this may cause it to fall out.

Tying the mother’s stomach after delivery is encouraged. In earlier times this was done with a woven grass rope tied twice around the waist. Today women use a long cotton cloth or an elastic belt obtained from abroad. Binding helps get the organs back in place and the tummy back to looking “sexy.” Sexual activity is prohibited during the postpartum period.

Women cannot leave the room until the baby starts to breastfeed regularly. Women are allowed to go out to the toilet as long as it is not far from the house. They must dress warmly, preferably in black if it is night, and cover their heads. This is a precaution linked to a fear of black magic or evil spirits (taline) who can harm the new child. The baby has to be kept away from winds and cold. Sacred stones (fatuk lulik) may be used to help keep the child safe.

While these beliefs are primarily concerned with protection, other rites are used to signal transition. All households (rai-nain) have unique ceremonies for returning the mother to community life and introducing their new child.
RITUAL

Anthropologist David Hicks (1976) wrote an account of a ceremony held in the late 1960s, wherein four to five days after the umbilical cord dropped the child was carried out of the house by its father and placed on a mat in front of extended family members. Gifts were given by the father's family to the mother's to mark the "creative benefits" of the union. The father then wrapped the child in a cloth provided by the mother's family and returned into the house to hand the child back to its mother—symbolising a parallel birthing process. The placenta was then taken by the father's sister and two men from his clan to be placed in a tree near the family shrine. When they returned, one of these men brought the child back out to the mat and both families proceeded to have a ritual water fight and feast.

Three decades on, few elders are still alive to remember this event. Everyone canvassed said that such ceremonies are no longer held in Viqueque. Women complete their period by the fire and simply resume normal activities. The placenta is discretely taken out to the forest by the father and family members come tovisit when time permits. Today, the most significant event for the child is considered its baptism at the Catholic Church.

Was tradition a casualty of colonialism, Catholicism and Indonesian occupation or simply the result of urbanisation? Further inquiries led to the discovery that all was not lost.

There are still special rites for the placenta. It is often referred to as the younger sibling (labarik nia alin) and is placed into a woven grass basket or pouch (kohe). Some families will use a special woman’s or man’s pouch depending on either the sex of the child that was born or their aspirations for the sex of the next baby. The pouch is placed near the fire. Ashes are added to stop fluid from leaking out and to prevent odours.

A few days later, once the umbilical cord falls off, the father of the child will rise very early in the morning to take the pouch with the placenta into the forest to hang it in a tall tree (Ai Da). If the father
is not available, a man with admirable traits may be asked to undertake the task – his personality may be reflected in the child as it grows. He cannot be seen going into the forest and is forbidden to speak to anyone along the way. Some people put all their pouches together in the same tree and others choose at random. Items may be added to the pouch – a notebook and pen for intelligence, a needle and thread to ensure a skilled sewer or a small football to guarantee a good athlete. There are families who dismiss this practice, saying skills and smarts are up to God. When babies start talking to themselves, parents may say they are conversing with their little sister or brother up in the tree. Two families did not hang placentas in a tree, instead burying them in the ground near their house. If one day they decide to move, there is no need to take the placentas. In other parts of the island, people mention putting the dried placenta up on a rafter in the house or even eating it.

Another visit some kilometres outside of Viqueque to the town of Buikarin also resulted in an invitation to participate in a traditional coming-out ceremony (tuur adat):

One week after the birth of her 13th child, the mother washed in the river and then returned to help prepare her baby for the family ceremony. No formal role will be played by herself, the father or mother’s brother. The woman’s sister-in-law, the TBA who delivered the child, five elder women, three of the woman’s sons, two young boys and a custodian of the family traditions (ema lulik rai-nain) will take her new baby through the ritual in front of extended family members and guests.

The women prepare in the back kitchen, dressing in traditional cloth (tais hena) and jewellery (morteen, keke, escudo hairpins). The sister-in-law has an extra piece of cloth slung over her shoulder to carry the baby and a new piece of cloth to give as a gift to the new baby. The female elders each carry a small traditional drum (baba dook) under an arm. They play a special rhythm to announce the arrival of the new baby.

The female elders lead the procession out of the back kitchen, through the house and on to the front porch. They are followed by the sister-in-law with the baby and an older female member of the family who will stay seated behind the baby throughout the ceremony. Everyone sits down on a large grass mat (biti). The traditional ceremonial basket (hamulak) is uncovered. Sticking out of this basket are home-rolled cigarettes (sigarru), betel nut leaves (malus) and areca nuts (bua). A boat-shaped basket is placed alongside. It holds the baby’s meconium wrapped tightly in a banana
leaf with a smouldering piece of wood placed on top. A ring, metal chain and small branches are sitting in a mortar filled with water.

The custodian opens the ceremony by asking permission to officiate. After positive responses from the group, he pulls the cigarettes out of the basket and passes them to the baby's three older brothers; even though they are all younger than 12 year old, each takes a turn lighting his cigarette with the smouldering piece of wood and taking a few deep puffs before putting the cigarette out on the basket with the baby's meconium package. The women around the mat each receive some betel nut to chew. The custodian pounds his betel nut – not for ceremonial reason but to soften the nut as he no longer has teeth. As everyone chews, a young man stands and takes leave to carry the meconium basket out to the forest.

The custodian then lifts the leaves from the mortar and sprinkles water on the foreheads of the baby and the sister-in-law. He recites a sacred text, periodically calling for a response from those present as to whether they are prepared to accept responsibility for the newest member of the household.

The female elders then stand up and start drumming. They shuffle to the front of the house to drum and dance in a counter clockwise circle as the three younger boys take up branches to weave in and out through the circle of drumming women. The family apologises about the small number of dancers, explaining that many people are away in their fields. The crowd shifts to the side of the house where two older boys stage a mock battle that ends with an embrace.

A meal is served, including chicken, rice cooked in coconut milk, noodles, cabbage, onions, papaya and banana flowers and a special dish of chicken entrails. Palm wine and whisky are served late into the evening.
PRACTICES

In Viqueque, there is varied application of the postpartum beliefs. Women, especially those who have received medical training, are less apt to sit by the fire and adhere to all the demands for keeping warm. Women with less formal education base their practices on tradition.

One midwife delivered at home and she did not use fire, did not feel she needed any injections, and prepared no hot compresses. She drank warm water, not hot. While she washed her hair two days after delivery, she used only warm water to wash for the first couple of months. Her placenta was buried outside in a plastic bag three days after the cord had fallen off.

Another nurse did not use fire, but put coals into a metal box under her bed for 3 days. She also drank some Jamu Bersalan. After 10 days, she was out of the house and walked across to the other side of town to have her baby vaccinated and her own health checked. She said townspeople were scandalised about her coming out so soon.

Joanna and Anna were introduced in the previous chapter. Joanna has delivered all of her children at home. She sits by the fire for 20 days with each new child or for 90 days if the weather is cool and rainy. Anna has had a combination of home and hospital births. She sat by the fire for 14 days with the first four children, but opted for only a Vitamin B injection with the last two. She uses only hot water for drinking and washing for at least 7 months after delivery.

Another woman delivered twins at the hospital – even though she lives less than 200m from the hospital, tradition prevented her from going for a follow-up exam; other responsibilities kept midwives from checking on the condition of the new mother or her tiny infants.

The majority of Viqueque women do sit by the fire. Most stay in a partitioned section of the outside kitchen, the same place where most of them gave birth. Due to concerns about keeping out cold winds, they say the room has to be sealed tightly (taka metin). In all the rooms visited, there was a space of at least 10cm between the wall and thatch roof and doors were most often made of woven grass mats. People wandered in and out allowing for regular oxygen exchange. Firewood was collected by the father of the child months before delivery; they said there was no need to find a special type of wood, although certain kinds burned better. The fire was at the same level, beside or underneath the bed.
Before the new mother settles in at the fire, she has to wash herself. Ladles of scalding water or towels soaked in hot water may be pelted against her body. She dresses in a clean sarong and shirt, pulling on a long-sleeved jacket. Her baby is washed in warm water, dressed in new clothes and wrapped in a cotton sarong. Cotton cloths are used for both the mother’s and baby’s discharges. The baby’s garments are rinsed and hung on the wall to dry. The mother’s laundry is taken out to be washed in the river by a family member, often the husband. The fire is kept burning, even on hot sunny days when the temperature can be hotter than 30°C. The fire may be kept lower during the day, but is stoked up at night. There is some smoke, but it is no more than with a cooking fire. While the mother can venture out to eat in the next room or to go to the toilet, the baby always stays near the fire. Visitors, male and female, family and friend, are all allowed into the room.

To get warm after delivery, a woman may also ask for an injection of Vitamin B or penicillin. If the hospital will not provide them, they can be purchased in local market pharmacies for 2 USD per vial (Annex 4). Women who have received an injection, take extra care to ensure that their fire is not too hot. Dry cloths may be warmed near the fire or dipped into hot water for use as compresses on the belly, breasts and back. If “cold enters a woman’s body” (anin malirin tama), then small stones (rai henek), may be warmed and wrapped into a cloth to press against the body. Massage is done with mentholated oil (Mina Gondapura) for the mother and milder oil (Mina Telon) for the baby.

Women wash with hot water throughout their postpartum period. Steaming may also be done with the woman squatting or sitting on a low stool over a bowl of hot water. Steeping in it is coarse salt and leaves from the tree of a betel nut, grapefruit, lime, custard apple or tamarind. Some women will take care not to cover their hair, fearing it may fall out. New mothers take care not to come into contact with cold water. Laundry is left to other members of the family or if the new mother must do it, she quickly washes afterwards with warm water. Sandals are always worn to prevent feet from touching cold water. If infection develops, then women say they go to the hospital for injections of Oxytetra or Amoxicillin.
Food and beverages depend on the family’s tradition and the health of the mother. The woman usually cooks for herself or may receive help from family. All women drink up to two thermoses or 2-3 litres of hot water each day. East Timorese women rarely drink any alcohol other than palm wine, but distilled palm whiskey (tua manas) or rum may be given directly after delivery. Some families will restrict alcohol until at least one month after delivery. An Indonesian drink, Jamu Bersalan, is only available in the capital, but drinking it reduces the amount of time required by the fire. Milk is recommended with powdered or sweetened condensed varieties available; only people who own cattle have access to fresh cow’s milk. Special recipes include:

- **Cleansing Tonic**: Ginger, turmeric, pimento seeds, lemongrass and 2 cups of water mixed and boiled down to a concentrate of 1 cup.
- **Kukul**: Palm whiskey, ginger, garlic and red rice.
- **Chicken Soup (Kaldo)**: Chicken, ginger, garlic, shallots, and ai manas ai le ten.

Common dishes include rice gruel (sasoro), corn and lentils. Food has to be eaten hot out of the pot – it cannot have cooled or come from the refrigerator. Cold or unripe fruits are prohibited. Views are mixed on when chicken, tomatoes, watermelon, papaya leaves and flowers and coffee can be taken.

The mother has to take care about what she eats as it can affect her breastmilk (susubeen). Women are encouraged to breastfeed for 6 months. Most do it for 1 year and some up to 3 years. If a woman becomes pregnant, she will stop breastfeeding. Sugar water may be given to babies before breastmilk. Colostrum (susu modok/ susu kinur) is given about half the time. Mothers who do not give it say it is dirty and should be expressed, especially with the first child. Those who do provide colostrum often say it is done on the advice of the Sisters and that it is considered a source of vitamins for the baby. Twenty-four hour electricity is not available, so storing milk is not an option. Formula (SGM) is available in local shops at 1.75 USD/box. Babies are started on solid foods around 3-4 months. They may begin with banana (hudi labarik), rice gruel (sasoro) and cereal purchased from the shops.

**RISK OR BENEFIT**

More than 60% of maternal deaths occur during the postpartum period (Trisnawaty 2003:4) With the medical community’s focus on pregnancy risk factors and delivery complications, not enough attention is given to identifying and monitoring problems post delivery.

In Viqueque, there is no medical information available to women on postpartum care. In the new district plan, midwives are going to be tasked with meeting national targets by visiting 60% of
postpartum mothers three times each and providing counselling to at least 70%. While they work out how to meet these responsibilities, the alternative will remain advice and support from TBAs and family members. The primary concern with this is whether TBAs or family will be able to recognise latent trauma, postpartum complications or excessive blood loss (Eisenberg et al. 1996)? Will families think to seek medical attention or be able to get the woman to a health facility in time?

Western medical literature recommends the application of ice to reduce postpartum swelling and pain. (Eisenberg 1996: 377). Ice is not readily available in Viqueque or remote communities, so one of the main questions raised in this research is whether heat is a viable alternative?

With “sitting fire”, the woman is resting and warming herself. There are repeated references to similar practices throughout Southeast Asia, Latin America and in parts of Africa (Lefebre 1994, Aria et al. 1991). While descriptions are numerous, the literature is almost barren when it comes to clinical or epidemiological evaluation of heat and fire.

The closest medical reference is to dealing with “chills” following the expulsion of the placenta (Eisenberg 1996:305). Hot compresses, Sitz baths and heat lamps have been recommended for perineal areas (Eisenberg 1996: 377). Heat does increase circulation and is reported to have beneficial effects on uterine contraction, drying the womb, healing raw flesh and reducing breast engorgement (Lefebre 1994:50, Eisenberg 1996:393). As for the warming effects of injections, one physician has mentioned a warming sensation after administration of Vitamin B. While drinking hot water per se may not have a direct effect, boiling water before drinking is beneficial for killing parasites and bacteria, especially when local water quality may be questionable and a woman’s immune system challenged. In a country like East Timor where some women deliver in mountain communities, heat may be beneficial not only to the mother, but also for keeping low birth weight babies warm.

The dry smoky air does help to keep away mosquitoes and ‘spirits,’ but the counter argument is that it also contributes to dry skin, coughing and increased respiratory infections (Eisenberg 1996: 433). Acute respiratory infections are the main morbidity in East Timor. Heat and smoke stand unresolved.

With diet, the food eaten after delivery is important for a woman’s strength and well being. While the basic fat-protein-carbohydrate composition of her breastmilk is not dependent on what she eats, if she
does not get enough calories or proteins, the baby will tap into her body stores. If these reserves run out, both the mother and child will suffer.

Of all the health concerns in East Timor, blood is the single most important factor considered in sickness or well-being. For East Timorese mothers there are three kinds—regular (raan), dirty (raan fo' er) and white (raan mutin).

Blood loss is monitored after delivery, but none of the informants were able to say how much was excessive. Women did not seem to be aware that their blood volume had increased by 40-50% during pregnancy. Blood simply needed to be replenished quickly after delivery and injections were seen as the most effective way of accomplishing this. Concepts of blood, blood volume and circulation are key points to consider in any education or socialisation programmes.

“Dirty blood” is equated with the discharge after delivery. It is not good for this dark fluid to stay inside a woman. Women want their circulation increased for it to flow out as quickly as possible.

After excessive bleeding, the condition considered most dangerous to a postpartum woman is “white blood going to the head.” Definitions of what this “white blood” is or where it comes from varies from informant to informant. Some say it is plasma, others liken it to the pus in an infected wound, while a few people said it is the same as the white fluid produced during sex. As menstrual or post-partum flow goes from bright red to pink to white, this lochial discharge may also be a source of “white blood.” The path it uses to rise is also unclear, but the ‘infection’ is triggered by contact with cold winds or cold water. Symptoms begin with pallor, swelling of the face, dizziness, stomach pains and a headache. As the infection rises to the head, a woman can go mad, become violent and even die.

Initially, I dismissed this description as fantastical, but after review of medical literature, I discovered:

*Occasionally untreated severe bacterial infections, including genital sepsis, triggers off puerperal psychosis. Once this grave condition develops, death from overwhelming infection becomes likely, but before then there is another problem. The attendants must be vigilant or else the disturbed woman can physically assault, injure and even kill.* (Lawson et al 2001: 232)

Based on information obtained in this study and the interest shown from both health professionals, traditional birth attendants and the mothers and fathers in the community, there is clearly scope for collaboration between the medical and social sciences for improving maternal health in East Timor.
VIII. CONCLUSION

The day after Odette delivered, I visited her at the hospital. She had regained some colour and was up walking around. The baby, albeit a little small, was also fine. Her family had bought some rice and vegetables in the market and were just cleaning the cooking pots as I arrived. They told me that they hoped to return to Bibileo in the next days so that Odette could begin her time by the fire. Knowing that Odette and her family had little means, I left them with some clothes for the baby and a bit of cash to help pay the 3 USD per person for public transport back home. I had helped one woman. While the gesture may have been significant to her family, what did it mean to the community, East Timor or to women in general?

Independence in 1999 restored the right of self determination and freedom of movement to the East Timorese people. The destruction of the state infrastructure and departure of the Indonesian administrators was also an opportunity to build a new health system that would meet the needs of the population. The new government in East Timor listed health and education as top priorities, allocating 45% of its budget to social services. Millions of dollars have been provided in international assistance and expertise. Despite these commitments, maternal mortality remains high.

Going to East Timor in May 2003, my goal was to use social science research tools, language skills and pre-established networks to help determine the main barriers to maternal health. Knowing that almost 80% of women delivered at home without a trained medical attendant, there were two main theories to test. The first was consideration of whether the high estimate of maternal deaths was an exaggerated extrapolation from doctors who saw only the worst cases at the hospitals. The second involved examining traditional practices to see whether unsafe delivery techniques, herbal treatments or fires used in postpartum care were responsible for the large number of women dying in childbirth.

My findings ended up being very similar to patterns found in other developing countries. Age, parity and birth spacing were compounded by disease and malnutrition. Together these factors contributed to the vulnerability and increased risk of infection for women during delivery. The maternal mortality estimate of 830/100,000 appears correct, if not low. While high by international standards, the level is not considered alarming to local communities struggling with other survival priorities. This study focused on one district, but conditions are similar in other parts of the island allowing for many of these recommendations to be valid beyond the district borders.

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MAIN FINDINGS

For the majority of women, home delivery is a preferred choice. Childbirth is not seen as a threat or an illness, but is considered an activity that a woman willingly undertakes. Unless a woman feels very sick or scared about a first delivery, she will not see the need to go to a hospital. Hospitals are associated with disease, contagion and emergency procedures, not preventive action. At home, women are secure in their environment, incur no travel costs and have access to local support networks. The woman is also close to the hearth she and her husband have prepared for her postpartum healing. There are women who want to limit the number of children they will bear, but they may need assistance in getting information on and access to family planning.

Postpartum care is not sufficiently addressed. While the overwhelming majority of maternal deaths are due to postpartum haemorrhaging, medical professionals in East Timor do not actively seek to intervene unless called on in an emergency. Mothers will not leave their homes during the 40 day postpartum period and medical staff do not do follow-up visits, regardless of whether the woman delivered at the hospital, attended the ANC clinic or was reported to have had a difficult delivery. No special clinics are organised for checking postpartum mothers and no surveys or studies have sought to include questions about postpartum health.

Women lack information on health care. Women's sexual and reproductive health is not discussed openly at home and not with unwed women. There is no health education in schools. When women attend ANC clinics, there are no education sessions, so information is limited to what appears in ANC cards, posters on clinic walls and responses to direct questions. Pamphlets and posters that have been produced by UNICEF and the Ministry of Health are often in insufficient quantities for distribution to all facilities or hoarded by health staff who say they do not have enough resources. The images do not always put across the intended message. The general population in Viqueque has no local access to libraries, bookshops or the internet. In the capital a handful of bookshops carry Indonesian science texts, but there is nothing available on pregnancy or women’s health. The World Health Organisation is establishing a good library, including materials on maternal health, but most documents are in English and require special permission for access. Indonesian continues to be the main language for medical subjects, as Tetum vocabulary and publications are limited and English or Portuguese materials are understood by only 5% of the population. Women in Viqueque repeatedly asked for information on birthing and child care, especially materials with more detailed explanations and images.
Very few women are involved in the planning and assessment of maternal health programmes. Most programmes are imported by English speaking international experts and modified after input from educated urban Timorese intellectuals. In Viqueque, district level health planning was being done by a group of male nurses using a template developed centrally. No midwives were involved and there were no plans for community review or input. There has also been no independent evaluation of services or programmes.

The identity, skills and roles of Traditional Birth Attendants (TBAs) are not well understood by the medical establishment. There is no official training or registry for TBAs. They may be older women who have helped out with a handful of deliveries in their neighbourhood or the title may be used with people skilled in massage and traditional medicines who assist with 2-3 deliveries each week. Very few doctors have actually observed their delivery techniques. Many TBAs are known by midwives, especially those who received training and support during the Indonesian administration. With government funding constraints, transport difficulties and the rural distribution of the population, midwives are not in a position to assist all deliveries. TBAs are interested in renewed training and midwives in Viqueque are willing to work with them if the medical establishment allows. Policy makers at the central level would like TBAs to stop assisting deliveries and switch to acting as liaisons bringing in pregnant women to deliver at clinics and hospitals. One of the main arguments against supporting TBAs has been a fear that recognition will generate expectations for government compensation. To date in East Timor, the state has never paid TBAs. They receive compensation directly from the family of the woman who delivers. TBAs have no set fees but work according to the family’s means receiving a fasi liman or “hand washing” in the form of a little soap, sugar or coffee.

There are some dangerous home birthing and postpartum practices. The most common problem was with women who are encouraged to push when not fully dilated. A number of midwives reported seeing unhygienic delivery room conditions and having to remove leaves and other matter from birth canals. Techniques for cutting the umbilical cord vary, but there were repeated cases of unsterilised scissors and blades being used for home deliveries. Other techniques used by TBAs like manual version of fetuses, putting pressure on the belly and administering herbal medicines need further study.

Government health services need improvement. The unhygienic state of the toilets is often enough to keep women away from delivering at the hospital. The lack of water and narrow delivery beds at clinics prompt midwives in sub-districts to suggest home deliveries. Electronic equipment is unusable.
due to a lack of maintenance or staff competence. Patients are deterred by harsh, disrespectful or disinterested staff attitudes. One Timorese surgeon admitted to regularly reprimanding women for late presentation at his hospital, until he took a trip to a sub-district of Viqueque and saw what they had to go through to get to the hospital. With a limited number of doctors and no medical school, it will take years for enough Timorese doctors to be trained abroad. Two are currently training in obstetrics and gynecology. The gap is being filled by foreign specialists, mainly from Brazil, Nepal, the Philippines and Eastern Europe. Additional assistance is expected to come from China. Most of these doctors are on short contracts and receive limited instruction on traditional skills, practices or health beliefs.

**Concerns about blood and heat are not addressed.** Blood volume and circulation are major health indicators for East Timorese, yet they are not addressed in health education materials. There is no systematic blood testing for pregnant women despite concerns about anaemia. Women do not take iron or vitamin pills due to fears that the supplements will cause the baby to grow too big to deliver. There are no complimentary discussions about the increase of blood volume in pregnancy, depletion of the mother’s reserves or the lack of its association with the size of the baby’s head. There are extensive reports on the use of heat for postpartum recovery in Southeast Asia, Latin America and parts of Africa, yet with the exception to references on Sitz baths for perineal tears, the literature is barren when it comes to clinical assessments on the risks or benefits of these warming practices. There are repeated references to using cold compresses, but no suggestions of alternatives when ice is not available as is the case in many tropical developing countries.
RECOMMENDATIONS
Based on the information gathered and suggestions coming from women, their families and communities, a range of opportunities may be explored to improve maternal health:

1. Organise meetings between midwives, TBAs and female leaders in the community. Priorities can vary between communities and these women are best placed to define the main health concerns in their area. Husbands and fathers should not be excluded from meetings, but efforts are needed to ensure that men do not dominate discussions. Participants should not be lectured to, but encouraged to raise issues. East Timorese are very formal about observing protocol at public meetings, so smaller focus group discussions are more productive. For midwives, TBAs and women in the community there is already some understanding of each other’s experience, skills and limitations. Their solutions may prove more sustainable than replicating international packages or central level programmes. This tactic can also help to avoid exaggerated demands from village leaders, a major stumbling point for aid agencies frustrated by a sense that communities are unable to realistically define needs; local requests are purposely inflated in hopes of getting at least minimal assistance. The rationale behind proposals, management and monitoring are new concepts that will take time to be developed by the new generation of administrators in East Timor. Patience and longer project horizons are essential. A starting activity could be a presentation and discussion of the maternal health aspects of the District Health Plan with a group of Viqueque women, including midwives and TBAs.

2. Coordinate clinic staff to do postpartum visits. Post-delivery visits are included in the district objectives, but need to be implemented. Staff have to be encouraged to go out regularly into the community, rather than waiting for patients to come to the clinic. Midwives and nurses are aware that women are obliged to stay close to home during their postpartum recovery, so the onus needs to shift to the midwives to travel. The recent allocation of motorcycles to district midwives will help to increase the mobility of midwives. Driver training has to be organised quickly to allow midwives to get licenses and bikes from the capital into the districts. In some areas, additional staff may be needed, but better management of the midwives’ schedules and tasking will allow for postpartum visits.

3. Increase and improve access to health education materials, especially regarding women’s reproductive health and nutrition. Women have requested more detailed information on conception, pregnancy, delivery, postpartum care, contraception and childcare. With a national female illiteracy rate of 64% (UNDP 2002), pictures or drawings are essential. Health education is needed at ANC
clinics, even if it is on one subject for 10 minutes to a captive audience of waiting pregnant women. Videos, radio broadcasts, interviews, awareness campaigns and t-shirts are proven means for getting messages across in East Timor. Civic education and electoral programmes ensured that video and sound equipment were available in all districts. School education is listed in the Ministry of Health agenda and needs to be initiated. Messages need to target real concerns and use local concepts and vocabulary. Information needs to be geared to the audience so that it is not too technical for some groups and not too basic for others. Groups need to be canvassed on the points they want to discuss. Health educators may need to be hired or funded through international agencies to get these programmes started and to reach women who may never visit health centres or think of delivering at a hospital. With the surplus of unemployed midwives and nurses, many of whom have worked as health educators with international NGO programmes, there is a strong recruitment base.

4. **Review the responsibilities of midwives and increase MCH staff.** Scheduling needs to be revised so that extra staff are present on busy clinic days. This would allow for more thorough ANC checks, including physical exams and systematic blood testing, as well as health education. Scheduling needs to make allowances for relief staff to be hired when midwives are sick or on maternity leave. Midwives need to be involved in district health planning and monitoring of results. National level staffing should be increased at the Ministry of Health so that there is more than 1 person responsible for all Maternal and Child Health (MCH) programmes in East Timor.

5. **Revise Ante Natal Care consultation records to include women’s past medical histories.** For improved diagnosis and accountability, ANC cards and registers need to be expanded to include more than just the number of prior births and miscarriages. Details about past health conditions or delivery complications are indicators for potential risks during current pregnancies. A full history would also help the midwife or nurse to better assess potential risks as well as building the woman’s confidence in the health service. Each person could be provided with a health booklet that has space for their complete health history including past illnesses, vaccinations and treatments. ANC registers could also be expanded to include space for women’s medical diagnoses and treatments during pregnancy. A booklet system could be started with newborns and eventually expanded to include all patients.

6. **Improve hospital and clinic services.** This recommendation refers primarily to hygiene, available equipment and staff attitudes. Cleaning, especially toilets, needs to be done more regularly and thoroughly. Cleaning materials should be made available to patients if they are helping to care for
family in the hospital. Running water or ample water storage containers are necessary in all health clinics. Distribution of larger delivery beds needs to be organised or budgets allocated for local production. Regular equipment maintenance, repair and replacement systems need to be established. A policy is also needed to ensure that that machines not being used are sent to a central point for redistribution, with compensation given to the facility sending in the equipment. For example, in Viqueque two non-functioning incubators need repair and reallocation to Baucau hospital where they can be used and serviced – this would put them at the service of Viqueque women who go to Baucau for premature deliveries. Medical staff, especially foreigners, need to be given a thorough introduction to East Timorese culture and health practices before starting work in health facilities. Staff should be encouraged to treat all patients with respect.

7. **Pilot maternal waiting homes.** This concept needs to be tested. The idea is based on bridging the comfort of home deliveries with rapid access to emergency medical services. Women are provided with facilities where they can stay for a few days before and after delivery. Trained medical staff are then present to assist with deliveries. Key points to consider are the location of the houses and staffing chosen. Villages that are between district or sub-district capitals might reach a greater catchment population than facilities set up in major towns where hospital and Catholic clinic services are already available. Staff need to be available at all hours with attitudes or approaches acceptable to delivering women and their families. Women’s groups in the proposed communities need to be consulted before the facilities are built, rehabilitated or equipped. Referral arrangements need to be confirmed with the ambulance and nearest health facilities. Viqueque women are interested in testing the concept.

8. **Integrate vertical health delivery packages.** With the selective primary health care interventions currently supported by the WHO, UNICEF and UNFPA, patients may miss out if they do not fall into one of the target groups of a mandated programme. Health staff need to be reminded that once they have received training, their responsibilities are not limited to a single programme. Attention needs to be diverted away from wrangling over who is allowed to attend seminars and how much per diem is offered. Emphasis needs to be placed on using information from the trainings to provide better healthcare to the population and passing on new skills to clinic staff who did not attend seminars. Training organisers need to plan for monitoring and follow-up at trainees’ work sites. Ongoing education needs to be made available to health care providers.
9. **Reintroduce training and registration of TBAs.** Knowing that this is a point of contention among some health officials, it is the only viable solution in the medium term. Budget and staffing restrictions limit the number of doctors and midwives who can be hired, thereby limiting the number of pregnant women who can be reached. Some of the most experienced and respected TBAs are those who received training in hygiene and safe delivery techniques. They are available and being called to assist with deliveries in remote communities as well as major urban centres where medical options already exist. Because of their wider distribution and availability, TBAs are more likely to be used by women who would otherwise deliver alone or with only family members present. If they have positive contacts with the medical establishment, TBAs may be more likely to provide timely referrals for women needing emergency obstetrical assistance. Providing TBAs with essential materials like gloves, Betadine, sterile razor blades and umbilical clamps will not put a strain on the medical supplies as these items should already be in the stock. Payment will not be necessary if the limits to government resources are made clear from the outset.

10. **Undertake clinical studies on the effects of heat in postpartum care.** This is more than just a local cultural phenomenon, but a widely reported ritual. It is often condemned by medical practitioners, but without any clinical basis. Certain practices such as the pelting of boiling water or exposure to a smoky environment may be harmful, but other aspects like a raised room temperature or application of warm compresses may be beneficial to healing in places where cold packs are not available. With the current research interest in maternal health in East Timor, a study in the use of heat may be of benefit to more than just the local population. The physical condition of postpartum women is an under-studied field.

**FINAL REMARKS**

*Man [or woman] is an animal suspended in the webs of significance he himself has spun. I take culture to be those webs, and the analysis of it to be therefore not an experimental science in search of law but an interpretive one in search of meaning.* (Geertz 1973:5)

This study was born from the personal experiences of a physician who did not understand why every day he was struggling at the hospital to treat 2-3 women with heavy bleeding and tears due to delivery complications. His concerns were supported by a shocking statistic of 830 maternal deaths per 100,000 live births – the highest in the region and double what it had been under Indonesian administration. He wanted to know why women did not come to the hospital sooner, what happened when they delivered at home and how to improve their odds.
Coming from the social sciences, my research intentions were to supplement the biomedical data with a more comprehensive understanding of how people seek assistance (Farmer 1999, Weiss 1988:7, Mull&Mull 1988:5). Four years of research and working in East Timor had left me with the impression that health officials were focusing on the political economy of health and socially marketing the benefits of medical services, rather than consulting with communities about their needs or the services they expected (Nichter 1993). Through thick description and ethnography I have attempted to bring forward the voices of women and their communities as they describe what happens to them in pregnancy, delivery and postpartum.

Using biomedical references, I have tried to identify potential risk factors associated with traditional beliefs and practices. The end goal has been to generate a more culturally informed context for hypotheses and empirical testing and to make suggestions for action (Farmer 1999, Koss-Chioino 1997, Nichter&Nichter 1996, Najera 1993, Mull&Mull 1988, Bentley et al 1988, Coreil 1980, Imperato 1974). My study concludes with a number of suggestions for future programming and research that I leave for colleagues to consider and challenge.

In true Timorese tradition, I conclude by asking forgiveness for any mistakes in my observations, record of interviews, translation or final analysis. If I have offended anyone, I offer my most sincere apologies and ask that you carry on where I have left off and improve upon this body of work.
As sandalwood was exploited to near-extinction, coffee, sugar cane and cotton were introduced, around 1815. Profits remained in the hands of Portuguese and Chinese traders, sparking discontent and a series of local rebellions. The Portuguese worked on settling their rivalry with Dutch traders through a series of treaties including the 1859 Treaty of Lisbon and the 1915 Senteca Arbitral, officially dividing control over the island’s two halves.

The Portuguese pinned hopes on the discovery of oil and the expansion of tourism. Growth from 1953-1962 was a meagre 2% (UNDP 2002) and the three successive 5-year plans brought only 6% annual growth.

The Church was one of the only venues for civil society to meet and for the Tetum language to be preserved (Lundry 1996). In 1975, animists numbered 72% (Timor Aid 2001), but by 1999 the majority 90% would count themselves as Catholics (Timor Aid, 2001). Conversion was also aided by Indonesian requirements that all citizens must belong to an official religion, so East Timorese had little problem adapting their secular and sacred beliefs to that of the saints, Christ the Shaman and Mary the ancestral ghost.

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Buat hirak ne’be perigozu no presiza ajuda ajente saude ilan
Beberapa tanda bahaya yang perlu menerima perawatan medis:

1. Muta bai-beik no han la d’ak
   - Muntah serius atau bau badan

2. Utun moris ka limawain bubu
   - Kecoklatan atau kerahputan bagian kulit

3. Raen sai hisi dala moris fagit
   - Kebencian serius atau luka

4. Konvulsiun
   - Gerakan tubuh tidak terkendali

5. Moras makasas isha ka han
   - Maut atau kehilangan nafas

6. Kamulisis
   - Pecahan kulit

7. Isih-minosas
   - Cekam

8. Lemam
   - Loss of weight

9. Tenki hamos isih no kose
   - Kelelahan atau kelemahan

10. Diida susu mata
    - Tanda perubahan pada mata

11. Hemu al-moruk amente raen nian, musan ka loxo-loron
    - Darah keluar dari kelamin atau perut

12. Fulu fulan buku
    - Kehilangan tak terkontrol dari kelamin

13. Uaritra fulan la fase filhi korki
    - Kutan bau atau gejala lain

14. Vasima tatanano
    - Penanda yang wangi

Peran Anda sebagai asisten pendampingan:
Deskameru bai-beik no han la bele ha bele inar bunara.
- Minta bantuan kepada orang terdekat.
- Segera bawa ke rumah sakit.

Petunjuk bagi ibu hamil agar tetap sehat:
Loran ida han la han bindan
- Makanan yang lezat.
- Rutin.

Petunjuk kalau tidur:
- Tidur yang cukup.
- Hindari stres.

Petunjuk kalau menyusui:
- Minum 1 tablet setiap hari.
- Konsultasikan kehamilan.
- Lakukan pemeriksaan kesehatan.
### VIQUEQUE ANC CONSULTS

**Thursdays**  
December 2002 - May 2003

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**VIQUEQUE ANC CONSULTS**

**Thursdays**

**December 2002 - May 2003**

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