Midwifery (2005) **21**, 139–153

midwifery

www.elsevier.com/locate/midw

Traditional beliefs about pregnancy and child birth among women from Chiang Mai, Northern Thailand

Pranee Liamputtong, PhD (Associate Professor)[a,*], Susanha Yimyam, PhD (Associate Professor)[b], Sukanya Parisunyakul, PhD (Associate Professor)[b], Chavee Baosoung, MSc (Associate Professor)[b], Nantaporn Sansiriphun, MSc (Lecturer)[b]

[a]*School of Public Health, La Trobe University, Bundoora, Victoria, Australia 3083*
[b]*Faculty of Nursing, Chiang Mai University, Chiang Mai, Thailand*

Received 23 April 2003; received in revised form 29 July 2003, 16 September 2003; Accepted 15 May 2004

KEYWORDS
Traditional beliefs and practices;
Pregnancy;
Child birth;
Thai women;
Northern Thailand;
Traditions and changes

Summary

Objective: to examine women's embodied knowledge of pregnancy and birth, women's explanations of precautions during pregnancy and birth and preparations for easy birth and the role of a traditional midwife in a Thai birthing care.

Design: in-depth interviews relating to traditional and changed beliefs and practices of pregnancy and childbirth with Thai women in Northern Thailand.

Setting: Chiang Mai city and Mae On sub-district in Chiang Mai province, Northern Thailand.

Participants: 30 Thai women living in Chiang Mai in Thailand.

Findings: the social meaning of childbirth in Thai culture is part of the larger social system, which involves the woman, her family, the community, society and the supernatural world. Traditional beliefs and practices in Thai culture clearly aim to preserve the life and well-being of a new mother and her baby. It seems that traditional childbirth practices have not totally disappeared in northern Thailand, but have gradually diminished. Women's social backgrounds influence traditional beliefs and practices. The traditions are followed by most rural and some urban poor women in Chiang Mai.

Implications for practice: the findings of this study may assist health professionals to better understand women from different cultures. It is important to recognise many factors discussed in this paper within the context of Thai lives and traditions.

*Corresponding author.
E-mail address: pranee@latrobe.edu.au (P. Liamputtong).

0266-6138/$ - see front matter
doi:10.1016/j.midw.2004.05.002

This will prevent misunderstanding and, consequently, encourage more sensitive pregnancy and birthing care for pregnant women.

Introduction

Childbearing in any society is a biological event, but the birth experience is also socially constructed. It takes place within a cultural context and is shaped by the perceptions and practices of that culture (Lefkarites, 1992; Steinberg, 1996; Liamputtong Rice, 2000a, b). Therefore, many beliefs and practices relating to childbearing process must be obseved by the woman and her family to ensure the health and well-being of herself and her newborn baby (MacCormack, 1982; Laderman 1984, 1987; Sich, 1988; O'Dempsey, 1988; Steinberg, 1996; Jordan, 1997; Liamputtong Rice, 2000a, b).

In this paper, we attempt to contribute to an understanding of traditional beliefs and practices regarding pregnancy and childbirth among Thai women in Northern Thailand. In particular, we examine the following issues: women's embodied knowledge of pregnancy and birth, women's explanations of precautions during pregnancy and birth, and preparations for easy birth and the role of a traditional midwife in Thai birthing care. We also look at whether women take traditional beliefs and practices seriously. We conclude the paper with some interpretations of women's accounts and implications for birthing care.

Traditional childbirth beliefs and practices: literature review

Traditional pregnancy and childbirth beliefs and practices among women of non-Western backgrounds have received much attention in the past few decades (McClain, 1975; Pillsbury, 1978; Manderson, 1981; Kay, 1982; MacCormack, 1982; Sargent, 1982; Laderman, 1987; O'Dempsey, 1988; Sich, 1988; Jeffery et al., 1988; Liamputtong Rice and Manderson, 1996; Townsend and Liamputtong Rice, 1996; Liamputtong Rice, 1999, 2000a, b). For example, O'Dempsey (1988) provides detailed descriptions of traditional beliefs and practices among the Pokot people of Kenya. During pregnancy, the woman must undergo a purification ceremony known as *parpara*, a celebration attended by the whole community in order to ensure a safe and easy birth. During this period, a husband ceases his hunting activities. It is believed that the animals will not die and instead he will be killed. He is in fact made to stay to assist his wife. Nutritional taboos are observed to protect a woman from malaria and malnutrition. Birth is seen as a woman's affair, and is assisted by a traditional midwife, known as *kokoegh*, and other female relatives and neighbours. Any complications associated with birth are perceived to be a result of the woman's own behaviours, possibly because she has acted against custom.

The beliefs and practices of women in Thailand have also been documented. More than four decades ago, Hanks (1963) studied childbirth rituals among women in Bang Chan village, central Thailand. This was followed by writings of a Thai scholar on birth customs (Anuman Rajadhon, 1987). In the past three decades, we have seen some western research into childbearing in Thailand. These included Muecke (1976), who compared the western approach to birth with the northern Thai approach to birth, and Mougne (1978) who, as part of her larger study of reproduction, examined issues relating to pregnancy and childbirth in northern Thailand. More recently, Poulsen (1983) has examined customs and rites of pregnancy and childbirth in a north-eastern Thai village, and Whittaker (2000, 2002) has written about the postpartum practices of Thai women in Isan (north-eastern Thailand).

In the past several decades, rapid social and economic transformations have changed women's lives in many parts of the world (Brown et al., 1997). Thailand is no exception (Pyne, 1994; Yimyam et al., 1999; Whittaker, 2000). Thai women have entered the labour force in order to increase their family income since the 1960s, when the national economy has become increasingly dependent on the global market economy (Wantana, 1982; Tantiwiramanond and Pandey, 1991; Pyne, 1994; Yimyam et al., 1999). These changes have profound effects on women and their reproductive role (Tantiwiramanond and Pandey, 1991; Pyne, 1994; Boonyoen et al., 1998; Yimyam et al., 1999). However, what it means to become pregnant and give birth in changing social and economic circumstances has not been given much research attention among childbearing Thai women. What women in Chiang Mai currently do during pregnancy and birth is not known. In addition, it is important to examine whether women in Chiang Mai still adhere to

traditional beliefs and practices within the context of modernisation and medicalisation of childbirth in Thai society. Equally important is the extent to which women from different social class backgrounds adhere to traditional beliefs and practices. We attempt to fill this gap in the literature in this paper.

Current maternity service provision in Thailand requires that all pregnant women should have at least four antenatal care visits (Ministry of Public Health, 2002). However, the number of antenatal visits varies depending on the woman and her health-care providers. A common recommendation will be that a pregnant woman should visit an antenatal service when she learns about her pregnancy and to register her pregnancy. The woman will attend antenatal check-ups every month until 28 weeks of gestation, then every fortnight from 28–32 weeks and every week after 32 weeks.

Health care in Thailand is organised and provided by the public and private sectors. The Ministry of Public Health is the provider of public-health services. Public-health services are also provided in teaching hospitals under the Ministry of Interior Affairs, and in private clinics and hospitals (Warakamin and Takrudtong, 1998). Antenatal care is provided free of charge in public-health services. It is generally provided by obstetric and gynaecological nurses or midwives in a normal pregnancy, but a pregnant woman may be seen by an obstetrician once during antenatal care. Obstetricians or gyneacologists will be responsible for women with high-risk pregnancies (Hanvoravongchai, et al., 2000). Women may, however, choose to have their own private obstetricians or gyneacologists, and hence have antenatal check-ups in their doctor's private clinics or in the hospital where the doctor attaches himself as a medical specialist; these can be public or private hospitals. Most births, however, occur in hospital or health-care settings. In general, a woman will give birth where she receives her antenatal care. In the case of receiving antenatal care from a private doctor, the birth will take place in a hospital where the doctor works as a medical specialist.

Method

Participants

In-depth interviews were conducted with 30 Thai women living in Chiang Mai, Northern Thailand. Fifteen women were recruited from Chiang Mai City and 15 from the Mae On sub-district, 49 km from the municipality of Chiang Mai. This was to ensure that women from different socio-economic backgrounds would be selected. Women from Chiang Mai City were mainly from urban and middle-class backgrounds, with a higher educational level, whereas women from the Mae On sub-district were from a peasant background and had lower educational attainment and income. Most women in this study had recently given birth, but a few were pregnant at the time the study was conducted. Selection criteria included the following: women who had given birth in the past 5 years; aged between 18 and 45 years; were born in northern Thailand; and resided in either Mae On or Chiang Mai City.

The theoretical sampling technique set out by Strauss (1987) was used to determine the required number of women. Accordingly, interviews should continue until no further new data are generated. In this study, the sample was restricted to 30, as few new data were generated after the 30th interview.

Women in Chiang Mai City were firstly recruited through the researchers' personal network (SY, NS), as well as through a 'snow ball' sampling technique (Ezzy, 2002; Liamputtong and Ezzy, 2005); that is, women were asked to nominate or contact their friends or relatives who would be interested in participating in the study. Women from the Mae On sub-district were firstly recruited with the assistance of a health worker at Mae On hospital antenatal clinic. A 'snow ball' sampling technique was then applied. Through these networks, all the approached women agreed to participate in the study. Each woman was informed about the nature of the research and her participation. A consent form (in Thai) was signed once the women agreed to participate in the study. Ethical approval was sought and granted by the Ethics Committees of La Trobe University and Chiang Mai University.

Data collection

This study is based on a larger study of the cultural construction of childbearing and motherhood among women in Chiang Mai, northern Thailand. An in-depth interviewing technique was used to elicit information (Liamputtong and Ezzy, 2005; Gubrium and Holstein, 2001). This is appropriate, as the goal of this study was to uncover and understand the women's subjective experience of childbearing and motherhood. In this way, culturally relevant and sensitive care can be

designed and implemented (Liamputtong and Ezzy, 2005).

The women were individually interviewed about traditional beliefs and practices relating to pregnancy and childbirth, as well as background information on socio-demographic characteristics. The interviews were held in the women's homes. All the interviews were conducted in Thai. Each woman was interviewed once and lasted between 1 and 2 h, depending on her responses. Women were asked several main questions, and these were prompted with questions to verify their explanations, such as reasons for their actions or non-actions. All investigators personally conducted interviews, but most (over half) were undertaken by the first author. All interviews were tape-recorded for later transcription and analysis. The study was undertaken between December 1998 and July 1999. However, all the interviews were conducted during March and April 1999.

Analysis

The in-depth data about the traditional beliefs and practices relating to pregnancy and childbirth were analysed using a thematic analysis method guided by phenomenology (Ezzy, 2002; Liamputtong and Ezzy, 2005). Although different phenomenological approaches were used in this paper, we follow the approach used by Becker (1992). According to Becker (1992), phenomenology aims to interpret 'situations in the everyday world from the viewpoint of the experiencing person' (p.7). Phenomenology attempts to 'determine what an experience means for the persons who have had the experience and are able to provide a comprehensive description of it' (Moustakas, 1994, p.13). In this study, the interview transcripts were used to interpret how women described their meanings and experiences of traditional beliefs and practices regarding pregnancy and childbirth in their everyday lives. Their responses were then organised into coherent themes (Ezzy, 2002; Liamputtong and Ezzy, 2005), as presented in the following sections. Women's explanations about traditional beliefs and practices relating to pregnancy and childbirth are presented, and their names have been changed for confidentiality. Our interpretation of the data relies heavily on women's accounts given in the in-depth interviews. Owing to time constraints, we did not use other means, such as participant observation, for data collection. Hence, we cannot claim a triangulation of information generated.

Findings

Women's characteristics

The women's socio-demographic characteristics are presented in Table 1.

Pregnancy and birth: women's embodied knowledge

On the basis of Browner and Press (1996), we recognise that 'subjective knowledge derives from

Table 1 Demographic characteristics of Thai women ($n = 30$).

Age (years)	
< 20	1
20–30	12
31–40	15
41–50	2
Religion	
Buddhist	30
Marital status	
Married	28
Widowed	1
Living together	1
Length of marriage (years)	
1–5	15
6–10	7
11–15	5
16+	3
Educational level	
Primary	11
Secondary	7
Diploma	4
Tertiary	8
Occupation	
Home duties	4
Self-employed	6
Government officials	9
Farmer	3
Casual/part-time job	8
Number of children	
0–1	14
2–3	15
4–6	1
Family members in the household	
Spouse and children	11
Spouse children and other relatives	19
Family income (in baht)	
< 5,000	10
5,001–10,000	6
10,001–20,000	6
20,001–30,000	2
30,001–40,000	2
>40,001	4

a woman's perception of her body and its natural processes as these change throughout a pregnancy's course' (p. 142). Women, it is argued, possess knowledge about the change in their body and they are often able to identify their pregnancy long before other means may confirm it (Davis–Floyd, 1992; Martin, 1992; Jordan, 1997). Women in this study also used their embodied knowledge to diagnose their own pregnant state. The most common of all was that they missed their period and that they started to notice a change in their bodily parts, particularly the enlargement or soreness of their breasts. Many women also mentioned particular food cravings as a way for them to know that pregnancy had occurred. One woman explained the signs of her pregnancy:

> Normally, I have a regular period, but suddenly my period stopped. I was not quite sure if I was pregnant but then I started to crave for sour foodstuff. This made me very sure that I was pregnant. (Pimjai)

Some women recognised weight loss and the loss of appetite as a phenomenological indicator of pregnancy. As one woman told us:

> I became thinner. At first I thought I lost my appetite, but it turned out to be that I was pregnant. (Wilai)

Women also used their embodied knowledge as a way to predict birth. Two prominent signs used were *nam tok* or *nam liang lai* and *mook luad*. *Nam tok* or *nam liang lai* is equivalent to the break of amniotic water before labour. *Mook luad* literally means the show. Pimjai, an educated woman in Chiang Mai, told us this:

> I was sleeping and then suddenly there was water coming out of my vagina; *Nam liang lai*. It was not a lot but it made the bed wet. And then not long after that I felt abdominal pain. So I knew it was time to go to hospital. (Pimjai)

Saijai, a rural poor woman, when asked how she knew that the labour had started, explained:

> I knew that my labour starts because the water was broken. I felt like a sag of water was broken and the water burst out. I was lying and then suddenly the water burst out and my bed was wet. I told my husband that I suspected the baby was coming so we called my mother and told her that the water has broken. Mum told us to go to hospital as soon as possible.

To Araya, an urban woman, however it was the show that informed her about her labour, as she remarked:

> In the afternoon, I started to have a bit of abdominal pain but then it went away again. The whole night it was like that. In the morning I went to the toilet and, when I was cleaning myself, I noticed *mook luad*. So that was it, I knew that the labour had started. So I went to the hospital straight away.

Precautions during pregnancy and birth

As in previous studies on precautions to be taken during pregnancy and birth (Laderman, 1987; O'Dempsey, 1988; Sich, 1988; Melville and Francis, 1992; Hamid et al., 1995; Nichter and Nichter, 1996; Townsend and Liamputtong Rice, 1996; Naksook and Liamputtong Rice, 1999; Liamputtong Rice 2000a; Whittaker 2000), women's explanations revealed precautions that they must take seriously during pregnancy and birth.

Dietary precautions

Women were advised to be cautious about certain foodstuffs during pregnancy (Wilson, 1973; Weise, 1976; Snow and Johnson, 1978; Laderman, 1984; Nichter and Nichter, 1996, Townsend and Liamputtong Rice, 1996; Naksook and Liamputtong Rice, 1999; Liamputtong Rice, 2000a; Whittaker, 2000). *Khong salaeng* (allergic foodstuff) was particularly avoided by pregnant women. Thai people take *khong salaeng* seriously, as it is believed that the consumption of *khong salaeng* can cause health problems and perhaps death (Liamputtong Rice, 1988). During pregnancy, *khong salaeng* may have a negative effect on the health and well-being of a fetus, as Saijai explained:

> *Salaeng* food includes papaya salad or pickled food. Pregnant women should not eat these foodstuffs as they may have some effects on the baby. They may make the baby weak or not healthy.

Some dietary precautions are to safeguard the fetus. For example, women are warned against the consumption of spicy hot food as the baby may be born hairless. In addition, the consumption of coffee and tea will make the child unintelligent.

Certain foodstuffs are prohibited, as these may have effects on the woman's well-being during the postpartum period. Women are told to consume only half of the banana, as eating a whole banana may result in a birth obstruction. Women mentioned that consuming shell fish and northern Thai relishes during pregnancy will prevent the perineum from drying out properly after giving birth. Similarly, consuming Thai egg plants during

pregnancy will cause anal pain after giving birth or during a confinement period (*yu duan*).

Behavioural precautions

Precautions during pregnancy seem to be more behavioural (Anuman Rajadhon, 1987; Townsend and Liamputtong Rice, 1996; Liamputtong Rice, 2000a; Whittaker, 2000). During pregnancy, rigorous activities are seen as harmful to pregnancy, as these may lead to a miscarriage or stillbirth. These activities include lifting heavy objects in farm work (i.e. a rice bag or water buckets). Women are warned not to lie on their abdomen as this may cause a miscarriage. Driving a car, is seen as having an exertion on the fetus that may also cause a miscarriage. Wilai, a rural woman, told us that:

> During pregnancy, I was told not to lift a heavy object, not to lie on my abdomen as my heavy abdomen may put pressure on the baby and I may miscarry. I was also told not to drive a car, as again this may cause a miscarriage.

Sexual intercourse during pregnancy is also seen as a vigorous activity, which may also cause a miscarriage:

> We were told not to have sex during pregnancy as the activity may have some impacts on the baby and the baby may miscarry. (Wilai)

Women mentioned that not only do they avoid sexual intercourse for fear of a miscarriage, but their husbands also fear it. Pimjai, a rural poor woman, explained:

> My husband did not want to have sex because he was afraid that I might be hurt [from sexual act] and it will be dangerous to the baby. If we had sex and if our action was too hard, it might have impact on the baby, it might be dangerous for the baby. And this may make me miscarry and then everything will be damaged.

Most women were cautioned about this and tried to avoid rigorous activities. But, for some poor women, this advice would be difficult to follow and may even be impossible. As Malai remarked:

> People told me not to lift heavy things because they said the baby would be harmed. But I still had to do it. We work on a farm and I often have to lift an engine to draw water into the farm. Even when I was 8 months pregnant I still had to help my husband doing that.

Isara, a rural woman, also commented on the difficulty in observing this cultural knowledge. She remarked:

> My parents told me that I should not do too much heavy work and that I should rest more … so that I won't miscarry… But talking about women in our situation [being poor], not to work hard or not to work at all is impossible. We have to continue working throughout pregnancy for survival.

Some cultural knowledge is more symbolic. Women mentioned the prohibition of attending a funeral as a strong cultural prohibition during pregnancy. Siriporn, an urban educated woman, told us that:

> People told me not to attend a funeral. They said it is a prohibition as it is not good for a pregnant woman. I could not even attend the funeral of my mother who passed away during my pregnancy. Older people who came to help with the funeral told me not to go, so I didn't attend a funeral. All pregnant women will be told like this. It may be because a funeral is a sad event which can affect pregnancy, I don't know!

However, for some women, this prohibition could be modified. If it was necessary for one to attend a funeral, she must wear a brooch on the abdomen to counterbalance the ill effect of a funeral on a pregnancy.

During pregnancy, a woman should not finish her meal after other family members. As soon as she has finished her meal, she must leave the eating place. It is believed that she may give birth to a child who will always cry or need to go to the toilet when the mother is having a meal, meaning that the mother will have a difficult time bringing the child up.

Another strong cultural belief that women were cautious of during pregnancy is not to prepare anything, including nappies and clothes, for their baby. Advance preparation will result in the death of the unborn baby. As Saijai explained:

> I did not prepare anything for my baby. It is a taboo in this region. They say if you prepare anything for your baby, you won't get the baby [meaning the baby will die]. The baby will not have a chance to be born, so people would tell me not to prepare anything.

When asked what she did with things that the baby needed, she said:

> Well people would buy things for you before you gave birth, but they would keep them until they were sure that the baby was born and the baby was safe, then they would bring them to you. Also my mother would prepare most things for

> me and she would bring them into the hospital for me.

Ruchira said:

> I did not prepare anything in advance because I was afraid that what people told me would become true. After I gave birth my mum and husband went to buy something for the baby. Well nowadays we can buy ready-made nappies so it is not too difficult to do so. As soon as I gave birth, they went to buy the nappies and wash them. When I return from the hospital, I had nappies ready to use.

Most poor rural women followed this cultural belief, as they believed in the older generation's wisdom and knowledge. Pimjai, a woman from Mae On, did not prepare anything for her newborn baby. She said:

> If you are talking about a northern Thai cultural practice, we cannot prepare anything in advance. People believe that something will happen to the baby if we prepare things for it. The baby will be in danger [die]. I did not prepare anything for my baby. When older people tell you anything you need to believe them and follow their advice. They know better and it is not good for us if we do not follow their advice.

Despite following this belief, some women believed that the cultural practice was not really practical. They voiced their concern that if they did not prepare anything in advance, it would create difficulties when the baby arrived. Who would help them with the task? Some women would prepare things for their baby without letting others know. Pimpilai explained:

> My mother-in-law told me not to prepare things for the baby, things like nappies and bottles. I thought why not. What if I give birth before the due date, where do I get nappies for the baby, where do I get clothes for the baby? So I secretly bought some and I hid them from my mother-in-law.

Darunee was told by her mother not to prepare anything for the baby but she secretly bought a roll of material for making a nappy. However, she said:

> ... I did not cut and sew them. I gave it to my aunt who prepared them for me. I did that because I would feel anxious that I would not have nappies ready when the baby was born. Older generations are always cautious about this because they are afraid that the baby may die or something bad may happen to the baby. But if someone else prepares them for you it is OK.

Some women would go ahead and prepare things for the baby, ignoring what older people have warned them. This was particularly so for women who did not have their extended family members living with them or close by to assist them. Manee, a rural educated woman, remarked on her not following cultural beliefs that:

> Older people told me that if we prepare things for our baby in advance, we may not have a baby to rear [the baby may die]. It is a belief, but I don't believe in that. It may not be. If I didn't prepare for my baby it would be too difficult for me as I am here by myself. My husband is living [working] somewhere else.

Wilai, a nurse herself, said that she prepared everything for her baby, because if she had to wait until the baby was born it would be difficult for her as she had to do it herself. Her husband would not know what to do.

The practicality of advance preparation seemed to apply to some women. These women would prepare baby's things because they could afford to at a particular time. Payao, a rural woman, said she had to prepare things for her baby as she had some money to purchase it then, and there might not be anyone to prepare things when the baby was born, as everyone was so busy with their work. Patanee, an urban health professional woman, also prepared things for her baby for practical reasons. She elaborated:

> I prepared things for my baby just before I gave birth... In fact, this is prohibited in our culture. They say you should not prepare things in advance. But maybe I am a nurse I thought it should be all right and so I did. But older people warned me not to do so because they think something might happen to the baby... but I thought if I didn't prepare anything when I gave birth it would be difficult for me. So I was thinking about my convenience more than the Thai belief.

Hence, it seems, women only incorporate cultural knowledge when it is practicable and suitable to their daily living situations.

Preparation for easy birth

As practised in other cultures (Laderman, 1987; Goldsmith, 1990; MacCormack, 1982; Liamputtong Rice, 2000a), pregnant women in northern Thailand were given advice by their mothers or women and

men of older generations about preparation for the birth of the baby.

Consumption of food stuffs

One common cultural belief and practice that almost all women mentioned was the advice to consume *pak plang*, a vine-like green vegetable that is believed to make women give birth easily. The vegetable is rather slippery in its texture. Being 'easy slipped' symbolically indicates having an easy birth. Women believed that the vegetable will make the baby's body slippery, therefore, facilitating an easy birth. Some said that they consumed this vegetable throughout their pregnancy, but others mentioned that it is only taken towards the end of their pregnancy. The vegetable can be prepared in a soup form with chicken meat and chillies, stir-fried with pork mince or in an omelet form. Isara explained:

> I ate a lot of *pak plang* during pregnancy. *Pak plang* is a soft vegetable and we make into hot soup, a Northern style hot soup… We eat all the leaves and the water because it is slippery and this makes the baby slip out easily.

Consumption of traditional herbal medicine was also mentioned as a way of preparing for an easy birth. The traditional herbal medicine was referred to as *ya tom*. A woman must consume *ya tom* three times per day for three consecutive days. Women can purchase dried herbal medicine and boil it until it reduces to small cup quantity and drink it as tea. This is believed to make the baby strong, hence facilitating an easy birth. For some women, however, they did not wish to take herbal medicine, as they believed that it might jeopardise the fetus. Wilai told us a great deal about what women in her village eat, but when asked if she took some, she said:

> What I have told you is what other women do, but I didn't consume any. I didn't want to consume it because I was afraid that it might harm my baby in my womb.

Activities

Women mentioned that to facilitate an easy birth, they should keep doing their routines or working throughout pregnancy. Alternatively, idleness may make birth difficult. Ongoing activities during pregnancy will make the abdomen 'loose' (*tong klon*) to facilitate an easy rotation of the baby's head downward, hence, an easy birth will follow. In addition, ongoing activities help the woman to have enough energy to push during labour. Srinang, a rural woman, explained:

> My mother and sisters told me to keep working as usual as a way to do my exercise, so that I will have an easy birth. If we only just lie down or take a rest, we won't have enough energy to push. So I must do bits and pieces throughout my pregnancy.

As this cultural practice seems to coincide with their daily life, most women had no difficulty in following the advice:

> Most often people would tell me to do some light work and walk. They say do not just sleep or lie down all the time. If you do some work it will be easy to give birth. I walked a lot during pregnancy. (Pimpilai)

Saijai, an urban, educated woman, told us that to prepare for an easy birth:

> I kept on working. I must be diligent with housework. I did not just stay around doing nothing. I worked throughout my pregnancy as it would help me to have an easy birth.

Another common practice is to gather *pak plang* and *maiyarab* plant (another vine-liked green plant) and make them into a loop and then boiled with water. A pregnant woman then showers with this herbal water. When she is taking a shower, the loop will be put on her head. This is believed to facilitate an easy birth. Women who were told to do so had no problem in following this cultural practice, as it did not interfere with their pregnancy or harm their fetus.

During pregnancy, a woman must not sit on the stairway (steps) of the house, as this may make a baby obstructed at birth. The act of burying anything in the soil can also make birth difficult. Srinang, a rural poor woman, told us that due to her ignorance of some cultural beliefs, she buried some fence posts and planted some plants during pregnancy. She did not realise the effect of this activity until the birth of her baby became prolonged. She mentioned it to her husband, and the husband contacted his mother to pull out the posts and a chillie plant in the garden.

During childbirth, there are also many precautions that people must observe. For example, when the birth is taking place, no one in the family should punch a nail in a plank or pitch a fence, as these activities will make the baby stick in the birth canal. Symbolically, the action of nailing and punching will make the birth difficult.

While the woman is in labour, no nailing and so on are allowed, as these actions will obstruct the labour process. All windows and doors must be opened widely. This symbolically signifies an easy

birth. When giving birth, the woman must face the east. It is believed that east is the direction of first light and hence it symbolically means birth and life. On the contrary, it is prohibited to give birth facing the west. In Thai culture, west is associated with death. Hence, it is inauspicious for a woman to give birth in the direction of death.

If a difficult birth occurs, a person whom the woman has offended must come to help. The person must place his or her foot on the head of the woman and turn the foot around in a circle as a way to signify that he or she has given his or her forgiveness. This will help to ease a difficult birth.

Magic and montra

Women mentioned that, to prepare for an easy birth, they must undergo magical showers, which has been blessed with sacred words known as '*nam mon*' during pregnancy. Traditionally, this must be done from the eighth month through to the ninth month. It is performed by '*mor mon*' (a magical healer) or an older man who has knowledge about magical cures and healing. Orachorn, a rural woman, told us that:

> I had several magical showers. Older people prepared it for me because I would have an easy birth. I started to have it when I was eight months pregnant. It should be once or twice per month, as if you do it too often, you will feel very tired. I only had three magical showers. I had twice in the eighth month and I felt too tired so I had only one in the ninth month.

Ruchira, another rural woman, also said that:

> My mother went to get *nam mon* for me to have a shower with in the last month of my pregnancy. She told me I would have an easy birth.

For some, they mentioned that this ritual should only be performed once at 9 months, but it must be done on a half-moon day (*duan dab, duan peng*). The woman must have this shower in an open space. When the shower is taken, the bucket must be turned upside down and the woman must take her sarong downward. She must not turn around to see the spot where she had the shower, and she must put on a new set of clothes afterwards. It is believed that this particular day will make the magic more effective. Nida, an urban educated woman who had a long labour, told us that:

> I did have a shower with *nam mon* for both of my children [laugh]. My neighbour was a monk so he has knowledge about this magical thing. I only had one, not every day. He had to look for a *duan dab duan peng night* to do that ritual for me. I think it was for blessing and for making a woman to be more positive about childbirth… But I must be doing something not quite right that I had a difficult and long birth. I had the shower in a bathroom, not in an open space, as I was living in a dormitory at the University house. I could not just have a shower outside the bathroom there, so may be that the magic did not work [laugh].

Nam mon sadow kroh (magical water to rid of bad fate) was also mentioned as a traditional practice to facilitate an easy and safe birth. Accordingly, this magical water must be made from water fetched from seven wells. These wells are those of neighbours, but one must be at the home of the woman. The water is then blessed with magical power before it is given to a pregnant woman to drink. Some women mentioned that any woman who has just given birth must drink *nam mon* to prevent rising childbirth blood to the chest. This can suffocate a new mother and hence death may follow. This is applicable to all women whether they have an easy or a difficult birth.

Montra water (*nam mon*) is also used if there is a delay in the delivery of the placenta. Placenta delay is seen as fatal by the women in Chiang Mai, causing blood to rise up to the women's chest and hence suffocate her. This results in death:

> If the placenta is stuck, the woman may die because the blood will rise up to her chest and choke her. So the woman will die. (Pimjai)

To assist the women with the delivery of the placenta, a magic healer will be summoned to prepare *nam mon* for the woman to drink. This has assisted many women in the past.

Bucha tien ritual was also mentioned as a way of easing a difficult birth or to make sure that the birth will be safe. Accordingly, when a woman is in labour, a family member must take her clothes, her birth date and time of birth, and a candle stick to a temple. A monk then performs a blessing on these items to bless them for a safe and successful birth. Patanee, an educated urban woman, told us that when she was in labour, her husband telephoned her mother to inform her about the difficult birth. Her mother took a set of her clothes and a candle stick to the nearby temple and asked a monk to perform the *bucha tien* ritual for her. Unfortunately, Patanee agreed with the doctor that she should have a caesarean section.

Women also mentioned *pa yan* (magic cloth) as a way of ensuring safe birth. *Pa yan* has to be propitiated by *mor mon* and, once it is blessed with magic, it is stitched onto the woman's upper garment during pregnancy and birth.

Mae jang—*mor tamyae*: a traditional midwife

Muecke (1976) states that: 'Childbearing is a thoroughly domestic event of explicit moral and social significance. The event occurs at home, in the presence of the husband and children. Each witness has a role to play, and even young children might be called upon to run an urgent errand' (p.377). Women talked in great length about how birth was managed in the old days. When they referred to the old days, they used the term *samai korn*. Birth *samai korn* was managed at home. A traditional midwife or an old granny midwife (Muecke, 1976), known as *mor tamyae* in Thailand (Jirojwong, 1996; Whittaker, 2000, 2002), but called *mae jang* in the North, was a caregiver for women (Kitzinger, 1982; Laderman, 1987; Lefeber and Voohoever, 1997; Liamputtong Rice, 2000a; Paul and Rumsey, 2002). M*ae jang* delivered in the villages and assisted women with postpartum practices during the first month after birth. Sira, an urban and educated woman, told us that:

> I have seen my neighbour giving birth at home when I was young. She gave birth on a floor with the help of many women. *Mae jang* was called to help her giving birth. Her husband was at birth too.

When the labour begins, *mae jang* will be summoned to the woman's home. A husband is expected to assist *mae jang* and the labouring woman. Birth is located mostly in a kitchen where hot water can be prepared. Mattresses are folded up for the woman to prop her back up against when pushing. A husband provides physical support to a labouring woman. He sits behind her with his legs astride her shoulders so that when contractions are intense she holds on to his muscled thighs, which gives her strength to push. A piece of strong wood or bamboo is tied to a post or wall so that the woman can push her feet against them when pushing. If there is no husband assisting a woman at birth, a piece of long cloth or rope is hung over the rafters of the room. This is for the woman to cling onto when contractions are intense. The midwife squats at the woman's thighs and waits to catch the baby when it emerges so that the baby will not drop. After the birth, the husband boils the water for the midwife to wash the placenta, clean the body of a new mother and her baby. He also cleans up remnants of the birth and the floor, and prepares a bed for his wife to observe a postpartum ritual. She must observe this for the whole month, and he buries the placenta of his newborn baby.

Mae jang may also help a woman to have an easy birth by manipulating her abdomen and uterus during pregnancy. This is known as '*klang tong*' or '*kwag tong*' in northern Thai. Essentially, the midwife massages and pushes the uterus upward to make it 'loosened up'. This will create enough space within the uterus to make the baby move easier in the womb and hence only make it easy to emerge, it can also ensure that the baby is not squashed and deformed inside the womb. This ritual is performed two to three times per week from 6 months onward.

Several women from the rural area mentioned that they were themselves delivered by *mae jang*, which was some 20 years ago. Pimpilai was delivered by *mae jang* in her village home before moving into Chiang Mai metropolitan area, and she explained:

> My mother told me that I was born with the help of *mae jang* at home. My mother could not get to hospital in time so my grandfather had to summon *mae jang* in the village.

Siriporn, an urban educated woman, said she was the fourth child in the family of 10 children, and she and her older siblings were born at home with the assistance of *mae jang*. Some said that their siblings were also born with the assistance of *mae jang*, and this occurred only 6 years ago. Most rural women were knowledgeable about traditional birth and the role of traditional midwives. But women in Chiang Mai city tended to lack this knowledge. It seems, then, that in some rural parts of Thailand, *mae jang* still exist despite the fact that childbirth in Thailand has been medicalised. In her study in the early 1970s, Muecke (1976) points out that two systems of childbirth existed in Chiang Mai: 'the indigenous tradition-honoring and domestic North Thai system of delivery and postnatal care, and the imported medical and institutionalised Western system of obstetrics' (p. 377). Whittaker (2000, 2002) and Jirojwong and Manderson (1999) have also observed this in their studies in northeast Thailand and in far north Queensland, respectively.

Do women take traditional beliefs and practices seriously?

As women nowadays receive care under modern obstetric regimes, and have more contact with biomedicine, most women received two sources of knowledge: medical and cultural. Lakana, a woman from Mae On district, said that her doctor advised her to drink lots of milk, eat food containing the five food groups and not to consume pickled food,

smoke or drink alcohol. Her mother, however, told her to eat traditional food such as *pak plang* for an easy birth, and taking only half a banana so that she could avoid an obstructed birth. Isara provided a logical explanation of why she followed any authoritative knowledge:

> I followed what other people told me to do because I wanted to make sure that the baby would be fine. I was afraid that the baby would be born abnormal. If I didn't follow their advice, and if something was wrong with the baby, it would be difficult for me as a mother and it would be difficult for the crippled baby. If the baby was abnormal, then I had to find money to cure him and that would be difficult for me. The baby would also be looked down by others in the society because a crippled person is not valued in the society.

Some women reported their tendency to follow traditional beliefs and practices as a precaution to safeguard the health and well-being of their fetus and themselves. For example, when Sumalee, an urban educated woman, talked about the need to keep doing things during pregnancy to prevent a difficult and long labour, she said she did so as she was afraid about the negative outcome and she wished to prevent it happening. She elaborated:

> When I was pregnant I was told to keep working. They told me not to lie down or just stay home doing nothing, as I would have a difficult birth. I must keep working, and if I didn't go to work [formal work] I must keep doing housework. I did so. I kept on doing bits and pieces because I was afraid that it might happen if I didn't do it.

For some poor women, observing cultural practices may be problematic. As cultural practices require family support, some women no longer had this network. Srinang, a poor rural woman, remarked that:

> I am telling you many things that women in Chiang Mai have to do for birth, but I did not do any of these... My mother was too far away and so I did not have anyone to help me, except my husband who does not know anything about Thai traditional knowledge and practices. He is a modern man; that is why he does not know any thing.

Nonetheless, we saw women who said they no longer believe in the old ways as they had become modernised. As Pimpilai, an urban and educated woman, told us when asked about traditional beliefs and practices concerning a difficult birth in the North, she answered that she had no knowledge about these. When prompted she said:

> I don't know about it because I am a modern person. I don't really believe in the old way. This does not mean that I look down on traditional beliefs and practices but I don't really hear about them either so I don't know much about it. Now if a woman has a difficult birth, she just has to go into hospital and has an operation [caesarean].

Some women, despite their skepticism about traditional beliefs and practices, would still follow the advice of the older generation. Pimpilai, an urban educated woman, explained that she was advised to drink fresh coconut juice daily, as this would make the baby be born without fatty stuff on its scalp and she did this. When asked if the baby was born without it, she said:

> Yes there was some on the baby' head (laugh). I don't know how it is related but I did drink coconut juice just to make my parents feel at ease. They explained that they had two children before so they know better. So I thought it is ok, I will drink it too. My husband bought it for me every day, one per day. But when the baby was born he had that fatty stuff on the head; it was not really clean as I was told.

We also found that women were prepared to follow traditional beliefs and practices if they could see the relevance to their pregnancies. For example, Darunee, an urban educated woman, told us that older people told her to observe many traditional beliefs, such as not to go under a clothes line and not to consume a bee hive. She said that, in her view, these beliefs seemed irrelevant to her. However, she said she would follow their advice of not lifting a heavy object, as this might cause a miscarriage. She also mentioned that she followed their advice about the consumption of *pak plang* as a way to facilitate an easy birth, as she eats this vegetable in her daily diet.

Discussion and conclusion

The findings reported in this study were based on qualitative research that focuses on meanings and interpretations of individual women. Qualitative research provides a sophisticated research strategy to understand how, and why, people act in particular ways (Liamputtong and Ezzy, 2005). However, the findings generated from a qualitative method cannot be generalised across the whole

population. According to Sarantakos (1994), 'the sample units are typically representative of a group of phenomena, (p. 15). In this study, it was a group of Thai women in northern Thailand and their traditional beliefs and practices of pregnancy and childbirth. Data generated from our qualitative approach provide readers with a deeper understanding of the women's subjective experiences of childbirth, as the information was gained through their own voices.

According to Laderman (1984), 'childbirth is the most significant of all rites of passage, conferring new status of the parents and changing a non-entity, the unknown fetus in the womb, into an individual with kinship ties, functions and potentialities within a society' (p.549). Although conception occurs within a woman's body (her womb), pregnancy is given 'meaning by the dialogue between empirical perceptions and a system of symbols that takes place in every culture. They are elaborated on and accompanied by behavioural changes that define the roles of the actors and are intended to protect those who, by virtue of their liminality, are especially vulnerable to harm'ref. In this sense, both mothers and their fetuses or babies are vulnerable entities that need to be protected by rituals.

Women's explanations discussed in this paper point to the need to see pregnancy as a rite of passage as proposed by van Gennep (1960). Childbirth in many societies is seen as dangerous, powerful or polluting (Kitzinger, 1978). A woman is not yet a mother, yet she is clearly different from the state before her pregnancy. It is a time when the woman is in 'a liminal state, separate from the safe categories of ordinary existence' (Homans, 1982, p. 25). This liminal state is referred to as 'rites of passage' (van Gennep, 1960). The theory offers illuminating patterns of childbirth in many traditional societies.

In rites of passage, people are separated from ordinary society. This can be seen clearly with women in childbirth. In most societies, parturient women are usually separated from normal social activities. However, in most cases, the separation is not physical but behavioural and in terms of diet. This is an attempt to safeguard the woman from danger as well as to protect others around her from her 'liminal and polluted state' of health. We argue that this may also hold true with Thai childbearing. Pregnancy is seen as a transitional state when a pregnant woman is not yet a mother but is clearly different from other women. Her behaviour and diet are set apart from those in everyday life and from other members of the society. These behavioural and dietary distinctions function to protect her from danger, giving her the best possible chance to carry her pregnancy to term.

In discussing childbirth among Malay women, Laderman (1987) argues that childbirth is 'not only a physiological event' (p.124), but also 'a stage in a rite of passage requiring spiritual prophylaxis and ritual expertise' (p.124). This is similar to the Thai view of birth. In a normal birth, a woman separates from others by retreating into her bedroom and giving birth with a minimum of assistance. However, in certain circumstances, such as a long and difficult labour, a woman may require physical support and spiritual and ritual aid from traditional healers, and there are people around her who can help.

In most traditional societies, a labouring woman is usually assisted by other women or birth attendants (Sargent, 1982; Goldsmith, 1990). Thai traditional childbirth is similar. Goldsmith (1990) points out that, in most traditional societies, women do not give birth among strangers. Women carry out their 'intimate act' (p.25) among those whom they 'know well and trust' (p.25). Most often, women give birth with the assistance of their mothers-in-law and their husbands. Even the healers who are called in when complications occur are those whom the women know. Goldsmith (1990) argues that familiarity with the people around her helps a woman in traditional societies to have 'a positive attitude toward the birth process' (p. 97). This argument may also be applicable to Thai women who give birth among those whom they know well and trust. Although birth is seen as a woman's affair, it is also related to the family, the community, the society and the supernatural world. This can clearly be seen in the case of a difficult birth, with the healing processes involving many people and supernatural beings. These 'helpers' relieve the woman's difficulties in bringing another life into society. It is clear that the social meanings of birth in Thai culture are part of a larger social system that involves the woman, her family, the community, society and the supernatural world, as Lefkarites (1992) points out:

> Childbirth is a significant human experience, its social meaning shaped by culture in which birthing women live. Cultures throughout the world express the meaning of childbirth through different beliefs, customs and practices. These diverse cultural interpretations are part of a larger integrated system of beliefs concerning men, women, family, community, nature, religion, and supernatural powers (p.385).

In the old days, traditional midwives played a vital role in pregnancy and birth in Thai society

(Anuman Rajadhon, 1987; Jirojwong, 1996; Whittaker, 2000, 2002). A traditional midwife does 'more than just deliver babies. As part of the local community, she is acquainted with the woman and her family with whom she shares the cultural ideas about how the birth has to be prepared for and performed. She knows the local medicines and rituals that are used before, during and after birth. The work of the traditional midwife is adapted and bound to the social and cultural matrix to which she belongs, her beliefs and practices being in accordance with the needs of the local community' (Lefeber and Voohoever, 1997, p. 1175). Despite this, the number of traditional midwives has reduced dramatically in Thailand.

Traditional beliefs and practices in Thai culture clearly aim to preserve the life and well-being of a new mother and her baby. This is similar to the biomedical model of childbirth. But, as we have shown in this paper, the two systems may, as Muecke (1976) argues, 'differ in terms of both the immediate social context in which they act, and of the cultural values that they espouse' (p.377). In Thai culture, pregnancy and birth are treated as part of a childbearing process that is a normal event in a woman's life. Despite this, pregnancy and birth can be a critical event that may 'imperil her well-being' (Laderman, 1987, p. 172) and, in some cases, may end with the death of the woman, her newborn baby, or both. The Thai have established certain beliefs and practices to prevent this and to assist women who have difficulties giving birth, as have been discussed throughout this paper.

It seems that traditional childbirth practices have not totally disappeared in northern Thailand, but they have gradually diminished. Why has this happened? Birth in Thailand has been medicalised, hence, its management is controlled by doctors and nurses, and it takes place in hospital settings. The medicalisation of childbirth in Thailand health care, like childbirth in many Western societies, makes medical knowledge 'supersede' other kinds of relevant sources of knowledge, such as cultural beliefs and practices. As such, traditions may no longer be relevant, or at worse, must be relinquished. Cultural knowledge has become structurally inferior to Western biomedicine (Lee, 1982). In addition, modernisation of society may also contribute to this. This results in the neglect of many traditional practices of pregnancy and birth in hospitals. Muecke (1976) argues that 'the underpinnings of this rapid change have, as part of the processes of 'modernisation', 'westernisation' and 'urbanisation', been discussed in terms of the socioeconomic and political development of the country…. Such aspects of 'modernisation' have made a social context that is often incompatible with the socialising messages and cultural attitudes of the North Thai health-care system, and therefore are no doubt contributing to its demise' (p.380).

Women's social backgrounds influence traditional beliefs and practices (Lazarus 1994; Zadoroznyj, 1999). The traditions are followed by most rural and some poor urban women in Chiang Mai. This was also observed by Muecke (1976) in her study of childbirth more than two decades ago, and in a recent study by Liamputtong et al. (2002). Yimyam et al. (1999) have also observed these differences in their study of breast feeding among working mothers in northern Thailand. In addition, some traditional practices can constrain women rather than assist them. For example, a precaution given to pregnant women not to work too hard to avoid miscarriage. This would be difficult for some poor women to avoid, as these activities form part of their daily routines, and they may not have familial or a social network to relieve them from the work. It is, therefore, imperative that differences between women based on their social backgrounds need to be taken into account when advising Thai women, in order to achieve sensitive birthing care for women.

This study contributes to the published literature on cross-cultural studies of pregnancy and birth in a Thai setting. We provide readers with cultural meanings of pregnancy and birth within a Thai context that may assist health professionals to better understand women from different cultures.

However, beliefs and practices related to pregnancy of Thai women contrast with those promoted in the midwifery training programmes, which are based on the biomedical model of birth (Cosminsky, 1982). It is, therefore, important to recognise many factors discussed in this paper within the context of Thai lives and traditions. This will prevent misunderstanding and, consequently, encourage more sensitive pregnancy and birthing care for pregnant women.

Acknowledgments

We thank the Faculty of Nursing, Chiang Mai University for assistance while the fieldwork was being conducted as part of Outside Study Programme. The first author is grateful to the Faculty of Health Sciences, La Trobe University for providing financial support during her Outside Studies Program leave period. We also thank Associate

Professor Kannika Kantaruksa for her assistance during the data collection period, and Associate Professor Greg Murphy for his comments in the preparation of this paper.

References

Anuman Rajadhon, Phya, 1987. Some traditions of the Thai. Thai Inter-Religious Commission for Development and Sathirakoses Nagapradipa Foundation. Bangkok, Thailand.

Becker, C., 1992. Living and relating: an introduction to phenomenology. Sage, Newbury Park.

Boonyoen, D., Wongboonsin, K., Tangcharoensathien, V., et al., 1998. Economic crisis and effects on reproductive health in Thailand. Chulalongkorn University Institute of Population Studies, Bangkok, Thailand.

Brown, S., Small, R., Lumley, J., 1997. Being a 'good mother'. Journal of Reproductive and Infant Psychology 15, 185–200.

Browner, C.H., Press, N., 1996. The production of authoritative knowledge in American prenatal care. Medical Anthropology Quarterly 10, 141–156.

Cosminsky, S., 1982. Childbirth and change: a Guatemalan study. In: MacCormack, C.P. (Ed.), Ethnography of fertility and birth. Academic Press, London.

Davis-Floyd, R.E., 1992. Birth as an American rite of passage. University of California Press, Berkeley.

Ezzy, D., 2002. Qualitative analysis: practice and innovation. Allen and Unwin, Sydney.

Goldsmith, J., 1990. Childbirth wisdom from the world's oldest societies. East West Health Books, Brookline, Mass.

Gubrium, J.F., Holstein, J.A. (Eds.), 2001. Handbook of interview research. Sage Publications, Thousand Oaks CA.

Hamid, M.A., Hussein, N.A., Bakar, A.A., et al., 1995. Cultural beliefs and practices during pregnancy among urban squatters. International Journal of Health Services 6, 143–154.

Hanks, J.R., 1963. Maternity and its rituals in Bang Chan. Cornell Thailand Project. Cornell University Press, Ithaca.

Hanvoravongchai, P., Letiendumrong, J., Teerawattananon, Y., et al., 2000. Implications of private practice in public hospitals on the cesarean section rate in Thailand. Human Resources for Health Development Journal 4, 1–12.

Homans, H., 1982. Pregnancy and birth as rites of passage for two groups of women in Britain. In: MacCormack, C.P. (Ed.), Ethnography of fertility and birth. Academic Press, London.

Jeffery, P., Jeffery, R., Lyon, A., 1988. Labour pains and labour power: women and childbearing in India. Zed Book, London.

Jirojwong, S., 1996. Health beliefs and the use of antenatal care among pregnant women in southern Thailand. In: Liamputtong Rice, P., Manderson, L. (Eds.), Maternity and reproductive health in Asian societies. Harwood Academic Publisher, Amsterdam.

Jirojwong, S., Manderson, L., 1999. Physical health, lifestyle and preventive health behaviours: what are the implications for health care for immigrants? In: Liamputtong Rice, P. (Ed.), Living in a new country: understanding migrants' health. Ausmed Publications, Melbourne.

Jordan, B., 1997. Birth in four cultures: a cross-cultural investigation of childbirth in Yucatan, Holland, Sweden, and the United States, 4th edn. Waveland Press, Prospect Heights Illinois.

Kay, M.A. (Ed.), 1982. Anthropology of human birth. F.A. Davis Company, Philadelphia.

Kitzinger, S., 1978. Women as mothers. Fontana Books, London.

Kitzinger, S., 1982. The social context of birth: some comparisons between childbirth in Jamaica and Britain. In: MacCormack, C.P. (Ed.), Ethnography of fertility and birth. Academic Press, London.

Laderman, C., 1984. Food ideology and eating behavior: contributions from Malay studies. Social Science and Medicine 19, 547–559.

Laderman, C., 1987. Wives and midwives: childbirth and nutrition in rural Malaysia. University of California Press, Berkeley.

Lazarus, E.S., 1994. What do women want? Issues of choice, control, and class in pregnancy. Tropical Medicine and International Health 2, 1175–1179.

Lee, R.L., 1982. Comparative studies of health care systems. Social Science and Medicine 16, 629–642.

Lefeber, Y., Voohoever, H., 1997. Practices and beliefs of traditional birth attendants: lessons for obstetrics in the north. Tropical Medicine and International Health 212, 1175–1179.

Lefkarites, M.P., 1992. The socio-cultural implications of modernizing childbirth among Greek women on the island of Rhodes. Medical Anthropology 13, 385–412.

Liamputtong Rice, P., 1988. Health and sickness: the influence of Thai cultural knowledge and commonsense interpretations among Thai schoolchildren. Melbourne, Unpublished Ph.D. thesis, Faculty of Education, Monash University.

Liamputtong Rice, P. (Ed.), 1999. Asian mothers Western births, 2nd edn. Ausmed Publications, Melbourne.

Liamputtong Rice, P., 2000a. Hmong women and reproduction. Bergin and Garvey, Westport, CT.

Liamputtong Rice, P., 2000b. Nyo dua hli – 30 days confinement: Traditions and changed childbearing beliefs and practices among Hmong women in Australia. Midwifery 16, 22–34.

Liamputtong Rice, P., Manderson, L. (Eds.), 1996. Maternity and reproductive health in Asian societies. Harwood Academic Publisher, Amsterdam.

Liamputtong, P., Ezzy, D., 2005. Qualitative research methods, 2nd Edition. Oxford University Press, Melbourne.

Liamputtong, P., Yimyam, S., Parisunyakul, S., et al., 2002. Women as mothers: the case of Thai women in northern Thailand. International Social Work 45, 497–515.

McClain, C., 1975. Ethno-obstetrics in Ajijic. Anthropological Quarterly 48, 38–56.

MacCormack, C.P. (Ed.), 1982. Ethnography of fertility and birth. Academic Press, London.

Manderson, L., 1981. Roasting, smoking and dieting in response to birth: Malay confinement in cross-cultural perspectives. Social Science and Medicine 15B, 509–520.

Martin, E., 1992. The woman in the body: a cultural analysis of reproduction. Beacon Press, Boston.

Melville, B., Francis, V., 1992. Dietary habits and superstitions of rural Jamaican women during pregnancy. European Journal of Clinical Nutrition 46, 373–374.

Ministry of Public Health, 2002. Thailand: basic health, population and reproductive health information, Ministry of Public Health, Bangkok.

Mougne, C., 1978. An ethnography of reproduction: changing patterns of fertility in a northern Thai village. In: Stott, P.A. (Ed.), Nature and man in South East Asia. School of Oriental and African Studies, University of London, London.

Moustakas, C., 1994. Phenomenological research methods. Sage, Thousand Oaks.

Muecke, M.A., 1976. Health care systems as socializing agents. Childbirth in north Thai and western ways. Social Science and Medicine 10, 377–383.

Naksook, C., Liamputtong Rice, P., 1999. Birth: traditional and changing beliefs and practices among Thai mothers. In: Liamputtong Rice, P. (Ed.), Asian mothers Western births, 2nd edn. Ausmed Publications, Melbourne.

Nichter, M., Nichter, M., 1996. The ethnophysiology and folk dietetics of pregnancy: a case study from South India. In: Nichter, M., Nichter, M. (Eds.), Anthropology and international health: Asian case studies. Gordon and Breach Publishers, Amsterdam.

O'Dempsey, T.J.D., 1988. Traditional belief and practice among the Pokot people of Kenya with particular reference to mother and child health: 2. Mother and child health. Annal Tropical Pediatrics 8, 125–135.

Paul, B.K., Rumsey, D.J., 2002. Utilization of health facilities and trained birth attendant for childbirth in rural Bangladesh: an empirical study. Social Science and Medicine 54, 1755–1765.

Pillsbury, B.L.K., 1978. Doing the month: confinement and convalescence of Chinese women after childbirth. Social Science and Medicine 12, 11–22.

Poulsen, A., 1983. Pregnancy and childbirth – its customs and rites in a north-eastern Thai village. Danish International Development Agency, Copenhagen.

Pyne, H.H., 1994. Reproductive experiences and needs of Thai women: where has development taken us? In: Sen, G., Snow, R.C. (Eds.), Power and decision: the social control of reproduction. Harvard Series on Population and International Health, Boston.

Sarantakos, S., 1994. Social research. Macmillan, Basingstoke.

Sargent, C., 1982. Solitary confinement: birth practices among the Bariba of the People's Republic of Benin. In: Kay, M.A. (Ed.), Anthropology of human birth. F.A. Davis Company, Philadelphia.

Sich, D., 1988. Traditional concepts and customs on pregnancy, birth and post partum period in rural Korea. Social Science and Medicine 15B, 65–69.

Snow, L.F., Johnson, S.M., 1978. Folklore, food, female reproductive cycle. Ecology of Food and Nutrition 7, 41–49.

Steinberg, S., 1996. Childbearing research: a transcultural review. Social Science and Medicine 43, 1765–1784.

Strauss, A.L., 1987. Qualitative analysis for social scientists. Cambridge University Press, Cambridge.

Tantiwiramanond, D., Pandey, S.R., 1991. By women, for women: a study of women's organizations in Thailand. Institute of Southeast Asian Studies, Pasir Panjang QJ;Singapore.

Townsend, K., Liamputtong Rice, P., 1996. A baby is born in Site 2 Camp: Pregnancy, birth and confinement among Cambodian refugee women. In: Liamputtong Rice, P., Manderson, L. (Eds.), Maternity and reproductive health in Asian societies. Harwood Academic Publisher, Amsterdam.

Van Gennep, A.V., 1960. The rites of passage. University of Chicago Press, Chicago.

Wantana, S., 1982. Development of the Thai working class. Thai Khadi Research Institute, Thammasat University, Bangkok, Thailand.

Warakamin, S., Takrudtong, M., 1998. Reproductive health in Thailand: an overview. Fact sheet, Family Planning and Population, 1, March, 1–4. http://www.anamai.moph.go.th/factsheet/health1-6_en.htm. Last accessed 3 December 2004.

Weise, H.J.C., 1976. Maternal nutrition and traditional food behavior in Haiti. Human Organization 35, 193–200.

Whittaker, A., 2000. Intimate knowledge: women and their health in North-east Thailand. Allen and Unwin, Sydney.

Whittaker, A., 2002. Water serpents and staying by the fire: markers of maturity in a northeast Thai village. In: Manderson, L., Liamputtong, P. (Eds.), Coming of age in South and Southeast Asia: youth, courtship and sexuality. Curzon Press, Surrey.

Wilson, C.S., 1973. Food taboos of childbirth: the Malay example. Ecology of Food and Nutrition 2, 267–274.

Yimyam, S., Morrow, M., Srisuphan, W., 1999. Role conflict and rapid socio-economic change: breastfeeding among employed women in Thailand. Social Science and Medicine 49, 957–965.

Zadoroznyj, M., 1999. Social class, social selves and social control in childbirth. Sociology of Health and Illness 21, 267–289.