



Culture, Health & Sexuality

An International Journal for Research, Intervention and Care

ISSN: 1369-1058 (Print) 1464-5351 (Online) Journal homepage: <http://www.tandfonline.com/loi/tchs20>

Delivery and postpartum practices among new mothers in Laputta, Myanmar: intersecting traditional and modern practices and beliefs

Nadia Diamond-Smith, May Me Thet, Ei Ei Khaing & May Sudhinaraset

To cite this article: Nadia Diamond-Smith, May Me Thet, Ei Ei Khaing & May Sudhinaraset (2016): Delivery and postpartum practices among new mothers in Laputta, Myanmar: intersecting traditional and modern practices and beliefs, Culture, Health & Sexuality

To link to this article: <http://dx.doi.org/10.1080/13691058.2016.1144792>



Published online: 23 May 2016.



Submit your article to this journal [↗](#)



View related articles [↗](#)



View Crossmark data [↗](#)

Delivery and postpartum practices among new mothers in Laputta, Myanmar: intersecting traditional and modern practices and beliefs

Nadia Diamond-Smith^a, May Me Thet^b, Ei Ei Khaing^b and May Sudhinaraset^a

^aGlobal Health Group/UCSF Global Health Sciences, University of California, San Francisco, USA; ^bPopulation Services International, Yangon, Myanmar

ABSTRACT

Myanmar is witnessing increased access to modern maternity care, along with shifting norms and practices. Past research has documented low rates of facility-based deliveries in the country, along with adverse maternal and child health outcomes. Research has also documented diverse traditional practices in the postpartum period, related to maternity care and maternal food intake. Through 34 qualitative interviews with women who recently gave birth and their mothers-in-law in one township in Myanmar (Laputta), we explore factors influencing decision-making around postpartum care and the practices that women engage in. We find that women use both modern and traditional providers because different types of providers play particular roles in the delivery and postpartum period. Despite knowledge of about healthy foods to eat postpartum, many women restrict the intake of certain foods, and mothers-in-laws' beliefs in these practices are particularly strong. Findings suggest that women and their families are balancing two different sets of practices and beliefs, which at times come in conflict. Educational campaigns and programmes should address both modern and traditional beliefs and practices to help women be better able to access safe care and improve their own and their children's health.

ARTICLE HISTORY

Received 9 July 2015
Accepted 18 January 2016

KEYWORDS

Postpartum; maternity care; Myanmar; traditional medicines; traditional birth attendants

Introduction

Myanmar has gone through dramatic changes in recent decades, politically, socially and related to health. Fertility has fallen from around 6–7 children per women in the 1960s to about 2 in the 2000s (Spoorenberg 2013). Despite these changes, Myanmar still lags behind its Southeast Asian counterparts in terms of health indicators, especially related to maternal and child health. The most recent Multiple Indicator Cluster Survey (MICS) in Myanmar suggested that whilst 70% of women delivered with a skilled birth attendant, only 36% of women delivered in a facility (Ministry of National Planning and Economic Development, and Myanmar Ministry of Health 2011). The present study was carried out in Laputta, Ayeyarwady Division, in the delta region of Myanmar. Laputta Township is one of the most populated townships of Ayeyarwady Division and is situated over 250 kilometres away from Yangon. The township

area is 2492 km² and the population is 229,929, of whom nearly 85% are rural people according to the 2014 Myanmar Population and Housing Census: The Union Report, May 2015. In Laputta, only 2.7% of women in 2009 delivered in a health facility (Asian Studies Virtual Library 2015). In comparison, in recent surveys (Kongsri et al. 2011; Limwattananon, Tangcharoensathien, and Sirilak 2011), it was found that 99% of deliveries in Thailand were with a skilled provider and 79% of women in Vietnam delivered in facility. As of 2014, maternal mortality ratio of Laputta township was 1.2 per 1000 live births (Laputta Township Health Department 2014).

In Myanmar, urban health centres (UHC) and rural health centres (RHC), both under supervision and management of township medical officers, are responsible for providing primary healthcare services (Ministry of Health, Myanmar 2014). Each UHC is lead by a township medical officer with a team of medical officers, nurses and basic health staff such as health assistants, lady health visitors and midwives. There are 1684 RHCs in Myanmar. The manpower of a health centre depends on staff availability and size of the catchment area. Additionally, there are 348 Maternal and Child Health centres across the country that provide basic services in communities. Community health workers and auxiliary midwives based in villages also provide more limited primary healthcare services to the community. Those who need special care are referred to station hospitals, township hospitals, district hospitals and specialist hospitals. At the state/regional level, the state/regional health department is responsible for state/regional planning, coordination, training and technical support, close supervision, monitoring and evaluation of health services. At the township level, actual provision of health services to the community is undertaken. The public healthcare system is complemented by private healthcare providers that range from formally (Ko Ko 2007, 123) trained medical professionals, such as specialists doctors, general practitioners and nurses, to informal providers, such as traditional birth attendants and 'quacks'. In large cities, secondary and tertiary hospitals providing more advanced healthcare services are also run by private sectors.

The majority of women in Myanmar choose to deliver at home, and many do so with a skilled birth attendant, and little research has explored the drivers and decision making behind these practices (Ministry of National Planning and Economic Development, and Myanmar Ministry of Health 2011). Past qualitative research in Myanmar suggested that women delivered with traditional birth attendants because they felt that traditional providers were more comfortable and easily accessible (Oo et al. 2012). Other qualitative research in Myanmar found that women perceived the relationship with the traditional birth attendant as being 'beyond business' (Ko Ko 2007, 123) with women having special relationships with traditional birth attendants that extended beyond the delivery itself (Ko Ko 2007). Past research has suggested that women prefer home births because they believed that going to a facility for non-complicated deliveries was not necessary and received more support at home (Ko Ko 2007; Win et al. 1995).

There is a body of literature on traditional practices in pregnancy, delivery and the postpartum period in Myanmar and other parts of Southeast Asia. As early as 1959, the Chief Medical Officer in the Burma Oil Company Hospital published a paper called 'An Account of Some of the Beliefs and Superstitions About Pregnancy, Parturition and Infant Health in Burma' (Foll 1959). In this paper he discussed beliefs related to maternal diet during pregnancy and postpartum, as well as child feeding practices, that are still prevalent today. For example, not eating certain foods deemed to be 'cold' during pregnancy was practised as often then as it is now, in addition to avoiding certain types of fish, meat, vegetables and

other food (Foll 1959; Ko Ko 2007). Described in 1959, recent surveys also suggest that some women fear having a baby that is too big and therefore restrict their foods during pregnancy (Foll 1959; Ko Ko 2007). A recent survey of women in Myanmar found that 96% had some dietary restrictions in the postpartum period, mostly not eating sour/spicy foods (93%), followed by foods not compatible with milk (64%) and meats and vegetables (34%) (Sein 2013). Women also restrained from a variety of behaviours (most commonly, having sex) and practised a variety of traditional behaviours, the most common of which were smearing/drinking turmeric (95%), induced perspiration (62%) and strict home confinement (38%) (Sein 2013). These types of practice are common in other Southeast Asian countries, such as Vietnam, as well (Lundberg and Thu 2011).

While descriptions of these traditional practices are known, little research has explored how they interface and change as people also start adopting modern practices related to maternal and child health. An unpublished study by Chit Ko Ko (2007) explored some aspects of the interaction between traditional and modern practices. Interviews suggested that women knew of these traditional practices but did not always practise them, and that female family members were important conduits of information and pressure regarding them.

The Ministry of Health of Myanmar has specifically stated that programmes such as those carried out by international NGOs, local NGOs and the government themselves should take cultural values into account and traditional practices that are beneficial to reproductive health should be understood and incorporated into healthcare delivery where possible (Ko Ko 2007). The evidence that women adhere to many traditional practices in Myanmar, combined with the low rates of institutional delivery and poor maternal and child health outcomes, suggests that we need a more thorough understanding of how people may be integrating traditional and modern practices. It is especially important to understand how traditional practices may offer barrier to accessing and adopting high quality maternal and child health services and behaviours.

The study reported in this paper explores these factors among women who had recently had a baby and their mothers and mothers-in-law in urban and rural Laputta township, Myanmar. It provides insights into the main beliefs that impact women's use of modern healthcare services and consumption of nutritious foods in the postpartum period, which can help policy makers better develop interventions to improve postpartum maternal health.

Methods

In-depth qualitative interviews (IDIs) were conducted in rural and urban households in Laputta Township, Ayeyarwady Division, in the delta region of Myanmar. Ayeyarwady is one of the most populous regions in Myanmar, with a population size of six million. Geographically, Laputta township comprised 10 urban wards and 388 rural villages. Public sector health services are provided at a township hospital, four station hospitals, a maternal and child health centre, 15 rural health centres and 70 sub-rural health centres under supervision of the township medical officer for both urban and rural residents (Laputta Township Health Department 2014). For the rural population, 460 community health workers and 131 auxiliary midwives also provide primary health services as part of the public sector. Additionally, 9 private clinics and maternity homes, and the health staff of 5 local/international NGOs provide services in private health sector. Interviews were conducted with 24 women who had a 6–12-month-old-infant, 10 of their mothers or mothers-in-laws (referred to as

grandmothers in this manuscript) and 10 of their husbands. Of 24 respondents, 12 were recruited from urban wards and 12 from rural village tracts. Purposive sampling techniques were used to recruit respondents. As a list of nursing mothers with infants aged 6–12 months was not available, mothers were identified and approached for recruitment with the help of local community leaders in urban wards and rural villages. Inclusion criteria for recruitment were being a new mother aged 18 to 40 years, with a 6–12-month-old baby and resident in Laputta township. Women who were younger than 18 years and older than 40 years, and those who did not give consent, were not recruited. Women served as the index recruitment, with family members recruited after the initial recruitment of women. All women were interviewed once. Interviewers, who were research officers and research assistants from the Population Services International (PSI)/Myanmar research team native to Myanmar, took notes and recorded comments about the field situation, any interruption of interviews and new topics that had emerged after completing each interview. We continued recruiting new mothers until we found no new themes arising from the data collected. All IDIs took place in respondents' homes after obtaining informed consent. This paper presents findings from interviews with women and their mothers or mother-in-laws, since these provided the most detailed information about delivery and postpartum practices.

Interviews were conducted over a two-week period in August 2014. Researchers were trained in qualitative research methods for one week prior to the start of data collection, and included four female interviewers and one male interviewer. All interviewers had previous qualitative data collection experience. A researcher of the same gender as the participant conducted each interview in the Myanmar language. As much as possible, interviews were conducted in private. In some cases, other people entered the room during the interview. When this occurred, if the person who entered the room was of the same sex as the respondent, the interview continued, otherwise it was halted. Interviews lasted on average 45 minutes for the mothers, and were of slightly shorter duration for the grandmothers. Interviews were audio recorded.

The interview guides were pilot tested in the study population prior to the start of data collection. The interview guide for the women included a broad set of questions about antenatal care practices; delivery; breastfeeding and exclusive breastfeeding knowledge, practices and barriers; child feeding knowledge, practices and barriers; and maternal postpartum practices. Questions were asked about the most recent birth. The guide for the grandmothers focused on their role in decision-making about delivery and postpartum practices and childcare.

Audio recordings were transcribed and translated into the main Myanmar language and then into English by the research team members. Data analysis was performed by two analysts from Myanmar (MMT and EEK) and two from the USA (NDS and MS), the co-authors of this paper. All the researchers were trained in qualitative research methods and analysis. We used a grounded theory approach to analyse the content of interviews. Initial codes were developed based on the primary aims and interests of the research. Then, two researchers (NDS and MMT) expanded the coding scheme by double-coding 10 interviews and comparing codes. After discussing and refining the codes, the two researchers then coded two more interviews to ensure that no new codes were developed and that the data was saturated. Finally, all four authors independently coded the remaining interviews. After the interviews were coded, all four authors worked together to group codes into broader themes. This was accomplished by a code mapping exercise in which codes were thematically

grouped. Sets of codes were then compared to develop themes, or families, of codes. Throughout the coding process, memos were used in order to ensure quality of coding and documenting analyses across the four researchers. *ATLAS.ti* software was used to code and analyse the data.

The study was reviewed and approved by the Population Services International Research Ethics Board in Myanmar.

Results

Women ($n = 24$) in the sample ranged in age from 19 to 40 (mean 30) years. Half of women had no or only primary school education, 14 were not working at the time of interview and women had had an average of 2.6 births in their lifetimes (range 1–6). Grandmothers ($n = 10$) ranged in age from 49–65 (mean 56) and all grandmothers were illiterate or had some primary school education.

Conflicting preferences in the choice of place of delivery and provider

The majority of women delivered with a trained birth attendant, referred to as a *seyama*. The term *seyama* can encompass a variety of different levels of provider, including women health visitors and midwives working at government facilities such as rural health centres, urban health centres and maternal and child health clinics, nurses in hospitals and medical doctors and nurses from NGO clinics. Delivering with a trained provider is a relatively recent phenomenon and many women still preferred to deliver with a traditional birth attendant. One woman described how she perceived the *seyama* to have more experience and resources, allowing her to be able to refer her to another facility or provider if necessary, compared to traditional birth attendants, who commonly used traditional methods:

Su Su: I went to a *seyama*. Before, other mothers, they took care of their pregnancies with a birth attendant, but for me I wanted to take care of my pregnancy with a *seyama* and deliver with her. Now, most mothers deliver with a *seyama* instead of a birth attendant. But some mothers call the birth attendant when they deliver because birth attendant will clean everything that is dirty

Interviewer: The *seyama* and the birth attendant, are they very different?

Su Su: Yes. The birth attendant has no delivery materials. The *seyama* has complete materials [materials such as emergency obstetric medicine, life saving medicines, needles and syringes]. Because of the *seyama's* experience, she knows if a mother can't deliver at the clinic and tries to refer them to the hospital.

Interviewer: You said the *seyama* has 'complete materials', what does she have that is better than what the birth attendant has?

Su Su: She has all delivery materials and when the mother has abdominal pain but can't deliver, the *seyama* has an IV injection that she connects to the mother to make the mother deliver within 10 or 15 minutes. She knows whether a patient is close to delivery or not. If the mother is close to delivery, then she gives the injection The birth attendant doesn't have any materials. When she has to cut the umbilical cord she makes a bamboo spear and uses that to cut the cord. So some mothers don't want to deliver with her. For me, this was my first delivery, so I didn't want to deliver with a birth attendant, I delivered with a *seyama*. (Su Su, 33-year-old mother, parity 3, urban resident)

The *seyamas* have clinics or work at government facilities, where they conduct deliveries; however, most women preferred to have the *seyama* come to their home. This was because women preferred the comfort and privacy there:

[I wanted to deliver at home because] it takes time to go to the clinic. At my home it is easier for me. If my delivery had not been easy, I would have had to go to the hospital or clinic. The *seyama's* clinic is close to my home. The *seyama* told me I could deliver at the clinic but I told the *seyama* I wanted to deliver at my home I thought I would feel more comfortable. At the clinic I thought I would be more uncomfortable At home I can walk and sit and shout, and if I have abdomen pain I can shout openly. (Phoo Phoo, 39-year-old mother, parity 4, rural resident)

Women said that using traditional medicines was not allowed or needed if they delivered with a *seyama*. They felt that traditional medicines were only needed if they delivered with untrained traditional birth attendants:

Interviewer: Did you buy any medicine?

Phoo Phoo: No I couldn't because I delivered with a *seyama*. If I delivered with a traditional birth attendant, I would buy turmeric powder and *samoun net* [special seed, anise or cumin, that is smelled for seven days after delivery] and *mi mihkhin say* [a type of traditional medicine to remove dirty blood from the uterus] in advance. With my previous children I delivered with a birth attendant so needed to have these things. With the last child I delivered with a *seyama*, so I didn't need to prepare all of this before delivery

Interviewer: Did she do *thwekwe* [a traditional practice of cleaning out the 'dirty blood' after birth, usually one week long]?

Phoo Phoo: The *seyama* doesn't agree with *thwekwe*, so I didn't During *thwekwe*, birth attendants press on the abdomen to push out the dirty blood. This makes the blood flow more, and the *seyama* is against it ... the *seyama* said: 'I cleaned and prepared your uterus already, don't press on it. Don't worry about your health, Pressing can make the uterus fall down, so don't press.' (Phoo Phoo, 39-year-old mother, parity 4, rural resident)

Women perceived *seyamas* as providing safer and more hygienic forms of care than traditional birth attendants. However, some women could only afford traditional medicines and birth attendants, even though they thought traditional attendants were less hygienic.:

I bought turmeric powder, *mi mihkhin say* and cumin ... I drank turmeric powder and *mi mihkhin say* together. I delivered with a birth attendant, and did this as a traditional process. When I delivered with a *seyama*, she gave me an injection and so I didn't worry about my health. The birth attendant delivered by hand, she didn't wash her hands and was not clean, so I could get an infection or diseases. So I bought Myanmar medicine in advance because I was worried about my health, but I can only afford traditional medicine because it is cheaper and I don't have much money to spend. If I don't remove the dirty blood, then I will be unhealthy. (Sann, 29-year-old mother, parity 4, urban resident)

Reasons that women gave for not wanting to go to a facility such as a clinic, a health centre or a hospital in the private or public sector included lack of familiarity with facilities, transportation difficulties and cost. As one woman described, the fact that neither she nor any of her neighbours had been to a facility made her afraid of going there:

I knew that the hospital would be free but I didn't have any experience going there. I didn't think about how much it would cost, it was that I had never been that kept me from going. My neighbours advised me to go to the hospital, but none of them had ever been and also did not know how much it would cost because they have no hospital experience. If they did have

experience, I would go, but they didn't so I didn't go because I did not know what to expect if I went. (War War, 29-year-old mother, parity 4, urban resident)

Another woman described the burden of costs likely to be incurred at a facility as a deterrent from seeking care with a trained clinic provider:

[I delivered with a] traditional birth attendant I didn't want to go to the hospital because the hospital is far from my house. I have no money and I didn't have money for transport. Some people said that I won't spend any money when I deliver at the hospital. If I have a helper with me at the hospital, the helper will get 3000 kyats. But my family members are manual workers and they work outside, so I decided to deliver at home. (Ma Khaing, 26-year-old mother, parity 1, urban resident)

Women described how the amount of the payment to both the *seyama* and traditional birth attendants were not set, so families had to estimate what it was appropriate to pay. However, it appears that both the *seyama* and traditional birth attendants would sometimes allow women and families to pay in instalments after the birth:

Yes, she did and then I paid *gadaw* [paying respect to person of higher standing] and one thousand kyat. With both the *seyama* and the birth attendant, there is no set fee, they don't ask for payment. I assumed how much they would want. I asked others what they had decided and decided myself how much I would pay. For the birth attendant, I thought that was as much as they usually get. (Phoo Phoo, 39-year-old mother, parity 4, rural resident)

While some providers gave the option to pay in instalments, others did not, leading to problems when women and families could not pay. One woman described her sister's experience of receiving inadequate care when she could not pay the *seyama* enough:

... during my sister's delivery she had this problem [not having enough money in hand] because she is separated from her husband and when she delivered she didn't have any money. So, the *seyama* didn't sew up her vagina because she didn't give the *seyama* any money. (Yadanar, 40-year-old mother, parity 5, urban resident)

Some women still chose to deliver with a traditional birth attendant (not a *seyama*). Women who did so cited familiarity and trust as being the most common motivators. This makes sense given women's description of fears of delivering in facilities and the comfort and privacy felt when delivering at home, as described above:

Daw Ngwe: She is the trusted community birth attendant. She is always trusted. She has delivered most of the grandkids in my family. She is my relative.

Interviewer: Did she attend the birth attendant training?

Daw Ngwe: No. She learned from watching the midwife and from experience. When the *seyama* would come, the birth attendant would come and help and learn. (Daw Ngwe, 49-year-old grandmother, urban resident)

Integration of traditional practices after trained provider deliveries

There are a number of traditional practices that women practised for the first few days after delivery. One of the common practices, called *chwayaung*, was believed to help remove the 'bad' sweat from the body. As one woman explained:

She did *chwayaung* three times. I needed to do *chwayaung* seven days after delivery. The birth attendant did it. She took many kinds of leaves and grasses, some that I don't know of. She boiled all these plants and put my head over it for me to breathe. She put the mat around me and covered me with a blanket. I sat inside and I pulled up my female *longyi* [wrap around skirt]. (Ma Khaing, 26-year-old mother, parity 1, urban resident)

Another woman described how before doing *chwayaung*, the traditional birth attendant would massage the uterus in order to remove the 'dirty blood':

Winn Winn: Yes, she was good and skillful. She checked my abdomen and knows if the baby is normal or not. She did *thwekwe* for three days.

Interviewer: What did she do?

Winn Winn: She massaged my abdomen because the dirty blood in my uterus needed to be removed. Then, she did *chwayaung*. (Winn Winn, 29-year-old mother, parity 4, rural resident)

Another strategy that women used to remove 'dirty blood' was using hot bricks:

She delivered with a birth attendant and the birth attendant is not skilful and the placenta stayed inside her uterus. Her birth attendant didn't do *thwekwe* so the abdomen grew with dirty blood and placenta. Her face also grew and she couldn't breathe easily, so I was afraid when I saw her and so I did this with the bricks and stayed near the fire. I put bricks on the places that hurt. If I put on the hot bricks, my uterus will return to the normal size and I will remove all the dirty blood. This is why I did this process. (Winn Winn, 29-year-old mother, parity 4, rural resident)

Women discussed having traditional and trained providers perform specific and different tasks during and after the delivery. As one respondent, Mon Mon, describes below, she delivered at a clinic, but then asked the traditional birth attendant to help her in the first week after delivery with traditional practices that were associated with stopping bleeding and becoming clean after delivery:

When I delivered the baby at the clinic, I called a traditional birth attendant to help me during the first seven days after delivery. She helped me with this [*thwekwe*] for the first seven days after delivery, when confinement ends. She helped me with everything, even cleaning my dirty clothing. I gave her a small amount of money. (Mon Mon, 22-year-old mother, parity 1, rural resident)

Many women described using traditional birth attendants to clean up after the delivery with a *seyama*, both for a fee:

For the *seyama*, I paid 50,000 and for the woman who helped me, I paid her 5000. She cleaned everything that was dirty. (Yadanar, 40-year-old mother, parity 5, urban resident)

Balancing discrepant beliefs about women's eating practices postpartum

Women and grandmothers also discussed the woman's eating practices and how these were related to breastfeeding and newborn health. Respondents believed that the food that breastfeeding mother's ate would directly affect the baby: 'The food the mother eats flows into the breast milk' (Daw Sein, 56-year-old grandmother, rural resident).

Given the strong belief that what the mother ate could directly affect the baby, there were numerous prohibitions about what women should eat while they were breastfeeding:

Mothers should avoid foods that aren't suitable for the baby. Seven days after delivery I didn't eat Chinese water cress vegetable and sour leaves, I thought they would be bad for the baby. The *seyama* told me I could eat all foods, but I didn't. I ate chicken, beef, fish and prawns, and cooked it all without chili. I ate this until the baby was three or four months, after that I could cook it with chili. Other people told me I should do this. I followed what they told me because this was my first child. Now I eat Chinese water cress vegetable and sour leaves. After eating these I also fed the baby *laybote tote say* [traditional medicine for babies to prevent digestion problems]. (Sandar, 24-year-old mother, parity 1, urban resident)

Grandmothers, in particular, gave advice to their daughters regarding their nutrition. Sour leaves, gourds, chili and certain kinds of fish were the most commonly discussed foods to

avoid that do have protein and other important vitamins and minerals that would be good for women to be consuming during that time:

I told her not to eat food that might give her leprosy, like sour leaves. Gourd stems also make women who have just delivered have weak joints and difficulty moving. (Daw Shwe, 65-year-old grandmother, urban resident)

My mother told me not to eat a chili called *awathi* [a kind of smelly fish, with a strong nauseating smell], scale-less fish and bitter gourd because *awathi* and scale-less fish can cause leprosy and because bitter gourd can make me deaf. When my baby was delivered, she [the baby] felt stomach pain so I avoided most foods; I ate only fried chicken and beef. My mother told me I should eat foods that give the baby nutrition. (Nwe' Nwe', 23-year-old mother, parity 1, rural resident)

Respondents believed that certain traditional herbs and foods could improve the mother's ability to produce breast milk. Many women discussed drinking *hinga*, a traditional clear soup believed to help increase breast milk production.:

After I delivered the baby I was very happy because I had prayed for a son and I got one, so I was very happy. I worried that the baby wouldn't eat enough breast milk so I tried to make my breast milk produce well and I drank *hinga* because I love my son the most. (Yadanar, 40-year-old mother, parity 5, urban resident)

Despite traditional beliefs about not eating certain foods, many women received appropriate counselling from the *seyamas*. As Yadanar explained: 'The *seyama* didn't tell me to avoid any foods, but said I should eat more oranges and apples' (Yadanar, 40-year-old mother, parity 5, urban resident).

Grandmothers especially discussed weighing the information provided by the *seyama* with traditional practices in the advice given about cooking eating to their daughters and daughters-in-law:

The *seyama* told me I should give her all foods, including vegetables. This can give her strength. She also told my daughter to eat all vegetables, it won't affect the baby. But I gave my daughter only fried chicken and fried fish. I didn't give fish that can make leprosy. For Myanmar tradition, after delivery the mother shouldn't eat scale-less fish. Older people say not to eat scale-less fish, it can cause leprosy and big spots on the skin. So, I don't feed or give this to my daughter ... I compared with my experience and told them not to eat vegetables that aren't suitable for them. For me, after I delivered my children, I avoided vegetables. But now, my daughter eats all kinds of vegetables, the *seyama* allows her to. I told her not to eat this, it will affect the baby. I told her not to eat bitter gourd and bean tendrils. This can give the baby abdominal pain. Sometimes I prepare bean sprouts with hot water and I feed this. (Daw Myint, 60-year-old grandmother, rural resident)

Even though some women discussed avoiding vegetables and certain types of fish, most women mentioned eating other meats, thereby getting protein.:

Nyein Nyein: Yes, I did [avoid eating certain foods]. I didn't eat vegetables until now. I did not eat sour foods like roselle, mango, tamarind and a snack made of plums ... it causes diarrhoea in the baby.

Interviewer: So you didn't eat any vegetables?

Nyein Nyein: I didn't. Someone prepared special food for me, like fried fish, chicken, and prawn I ate all kinds of meat, such as chicken, beef and pork. I avoided fish skin, *ahnyigyi* [a kind of fish with a strong nauseating smell], river catfish and striped dwarf catfish. I cannot eat a fish that does not have scales.

Interviewer: Why is *ahnyigyi* not good for you?

Nyein Nyein: If I eat this fish when the baby is young, first few months, I can get leprosy during menopause. My skin will get big white and red spots from eating this. If I eat Manta ray [a type of fish] the same will happen. (Nyein Nyein, 22-year-old mother, parity 1, urban resident)

Discussion

Findings from this study suggest that women in Myanmar are required to weigh up information and pressures to practise both modern and traditional practices during delivery and in the postpartum period. This results in a mixture of practices, with women using both modern and traditional providers at delivery, intermixing traditional practices with modern practices in the postpartum period and restricting the intake of certain foods, even if they have received information not to do so.

While the majority of women in this study reported delivering with a trained provider, they still preferred to do so at home. The recent MICS survey found that 70.6% of the births two years preceding the survey were attended by a skilled birth attendant (UNICEF 2011). Delivering with a trained provider should ensure higher quality of care than delivering with a traditional birth attendant; however, past literature has suggested that delivering in a facility may be necessary for women to have ready access to high level care in case of an emergency (Campbell and Graham 2006). Women in urban areas, such as those in urban Laputta, may be close enough to a high level facility to be transferred in the case of emergency, but women in rural areas may not be. Ensuring that women deliver in facilities or that healthcare providers aiding in home deliveries have the resources to get women to a facility quickly should an emergency occur is essential.

Although many women now deliver with a trained provider, they still see a role for traditional providers in the delivery and especially in the postpartum period. Past research in Indonesia has also found that women perceive there to be important roles for both traditional and modern providers in delivery services (Titaley et al. 2010). Some of the functions performed by traditional providers carry little potential for harm (such as cleaning up after the pregnancy), however, some other functions, such as pressing on the uterus after delivery, do have the potential to cause harm. A previous survey in Myanmar found that the use of uterine massage was relatively rare; however, a number of respondents in our small sample mentioned it (Sein 2013). While uterine massage is a clinically indicated practice, providers must be trained to do this, and it is unclear from the description in these interviews how this practice was conducted (Hofmeyr, Abdel-Aleem, and Abdel-Aleem 2008). For example, the words of some respondents ('pushing on the uterus') would suggest that massage was not being done correctly, although more in-depth research is needed to understand this fully. Past literature has found evidence from other countries of various forms of massaging and pushing on the abdomen among traditional birth attendants (O'zsoy and Katabi 2008; Thatte et al. 2009). Many women discussed sitting under a blanket with steaming water mixed with herbs to produce perspiration, as has been described in past literature in Myanmar (Sein 2013). Research from Laos on the effects of the plants used in this practice found that while they were unlikely to actually confer medical benefit, there were no noted harmful effects (de Boer, Lamxay, and Björk 2011). Some women mentioned a practice where women lie with hot bricks under them, which is believed to help remove the 'dirty' blood from the body. This practice has been described in past literature on Myanmar and in other

parts of southeast Asia (de Boer, Lamxay, and Björk 2011; Lundberg and Thu 2011). The impact of breathing in steam or smoke in this way is not known, although past studies in other countries that have similar practices in the postpartum period have reported high levels of carbon monoxide exposure (Thompson et al. 2011). Women appear to be conflicted about knowing that the trained providers do not want these practices preformed, but still believing that they are important parts of the delivery and postpartum period. This could explain why some women had postpartum care from an untrained traditional birth attendant following the delivery by trained providers.

Despite maternal healthcare programmes emphasising the receipt of antenatal care and its related components, this study suggests that there may be a lack of culturally appropriate and sensitive postnatal care information, which may cause women to practice potentially harmful traditional practices. Women could be educated that postnatal care is as important as receiving proper antenatal care and delivery assisted by a skilled person. More research is also needed on the impact of traditional practices.

Another major finding is that women limited or changed their own food consumption in various ways during pregnancy and while breastfeeding. Of concern is the practice of not eating certain vegetables and fish, which may provide important micronutrients and protein, although women do seem to continue eating other meats. Past survey research in Myanmar found that 96% of women reported restricting their diet postpartum, and found similar kinds of food to be restricted (sour foods, certain fish, etc.) (Sein 2013).

Our research suggested that grandmothers were important conveyers of these traditional beliefs about eating restrictions, and though they knew about recommendations to not restrict foods, they seemed less convinced than the women themselves. Increased education to women and family members about the importance for both maternal and child health of women receiving adequate nutrition while breastfeeding should be a priority. Women and grandmothers could be reached through trained health providers for disseminating nutritional education as most women received services by those providers and they play a significant role in providing essential maternal and child health services. This may be complemented by establishing womens' support groups in the community to facilitate sharing information in the postnatal period.

Financial barriers (cost, being poor, etc.) were mentioned as a primary reason why some women were not able to access modern healthcare or gain enough nutrition. While both traditional birth attendants and *seyamas* seem to provide more flexible payment structures than facilities, the *seyamas* cost more, and this research finds evidence that women who cannot pay enough receive inadequate care. Strategies to ensure that poor women are not put at increased risk, such as government programmes that cover the cost of deliveries or conditional cash-transfer programmes are needed.

The qualitative nature of this study limits the generalisability of its findings, both internally and externally. Especially due to the diversity of ethnic and religious groups in Myanmar, postpartum traditional practices may be different in various parts of the country or among different sub-groups. Traditional practices during the postpartum period specific to different ethnic groups may need further research. Even within Luputta itself there are different ethnic groups, thus, these findings may not be reflective of the experiences and beliefs of all women in this township. Furthermore, while we were able to interview women and their family members, we were not able to interview traditional and trained health providers, whose views and experiences are important for understanding the full scope of the balance between

modern and traditional postpartum practices. Specifically, given limited information about the actual traditional practices performed, we are unable to fully understand whether or not these practices have the potential to cause harm. Finally, we interviewed women who had a 6–12-month-old baby, which may have led to recall bias. The larger study that these findings resulted from also focused on breastfeeding and childfeeding, therefore including women at least 6 months after the birth of their child was necessary. Given the significance of delivery and a one-year window post-birth, we feel confident that women would be able to accurately remember this event.

Overall, this study sheds light on the interplay between the traditional and modern among postpartum women in Myanmar, with respect to both providers and practices. Findings highlight the complexity of understanding care and striving to improve maternal and child health in contexts where service providers need to be aware of competing cultural belief systems and practices. Importantly, there continues to be room for improvement in providing information and high quality postpartum care as well as nutrition education for mothers who have recently delivered. Messages and approaches must also address prevailing traditional practices so that women are able to balance conflicting perspectives and improve their own and their newborns' health.

Acknowledgements

The authors would like to thank Tin Aung (Director, Strategic Information Department), Nang Mo Hom (Research Unit/ Strategic Information Department), U Zaw Win (Research Unit/ Strategic Information Department), Sandar Oo, Naw Eh Thi Paw and Thet Swe (PSI/Myanmar Research Team) and other staff from PSI Myanmar for providing the required support for the study.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was supported by the 3 Millennium Development Goal Fund [grant number PSI-MNCH-3MDG-C1-14-00088702].

References

- Asian Studies Virtual Library. 2015. "Township Health Profile: Laputta Township, Ayeyarwady Division". in *Online Burma/Myanmar Library*. Australia National University, College of Asia and the Pacific.
- de Boer, H. J., V. Lamxay, and L. Björk. 2011. "Steam Sauna and Mother Roasting in Lao PDR: Practices and Chemical Constituents of Essential Oils of Plant Species Used in Postpartum Recovery." *Evidence-Based Complementary and Alternative Medicine* 2011 (15): 1–8.
- Campbell, O., and W. Graham. 2006. "Strategies for Reducing Maternal Mortality: Getting on with What Works." *The Lancet* 368 (9543): 1284–1299.
- Foll, C. V. 1959. "An Account of Some of the Beliefs and Superstitions about Pregnancy, Parturition and Infant Health in Burma." *Journal of Tropical Pediatrics*, 5 : 51–59.
- Hofmeyr, G. J., H. Abdel-Aleem, and M. A. Abdel-Aleem. 2008. "Uterine Massage for Preventing Postpartum Haemorrhage(Review)." *Cochrane Databases E of Systematic Reviews*, 16 (3): 1–18.
- Ko Ko, C. 2007. "Cultural Meanings and Practices regarding Pregnancy, Childbirth, and the Role of Women: A Community Study in Myanmar." Unpublished thesis, Mahidol University, Thailand.

- Kongsri, S., S. Limwattananon, S. Sirilak, P. Prakongsai, and V. Tangcharoensathien. 2011. "Equity of Access to and Utilization of Reproductive Health Services in Thailand: National Reproductive Health Survey Data, 2006 and 2009." *Reproductive Health Matters* 19 (37): 86–97.
- Laputta Township Health Department. 2014. Unpublished data.
- Limwattananon, S., V. Tangcharoensathien, and S. Sirilak. 2011. "Trends and Inequities in Where Women Delivered Their Babies in 25 Low-Income Countries: Evidence from Demographic and Health Surveys." *Reproductive Health Matters* 19 (37): 75–85.
- Lundberg, P. C., and T. T. N. Thu. 2011. "Vietnamese Women's Cultural Beliefs and Practices Related to the Postpartum Period." *Midwifery* 27: 731–736.
- Ministry of Health, Myanmar. 2014. "Health Statistics." Government of Myanmar.
- Ministry of National Planning and Economic Development, and Myanmar Ministry of Health. 2011. "Myanmar Multiple Indicator Cluster Survey 2009-2010 Final Report." Nay Pyi Taw, Myanmar: Ministry of National Planning and Economic Development and Ministry of Health, Myanmar.
- O'zsoy, S. A., and V. Katabi. 2008. "A Comparison of Traditional Practices Used in Pregnancy, Labour and the Postpartum Period among Women in Turkey and Iran." *Midwifery* 24: 291–300.
- Oo, K., L. Le Win, S. Saw, M. M. Mon, N. Yin Thet, T. M. Oo, M. S. Latt, T. Myint, and T. Myint. 2012. "Challenges Faced by Skilled Birth Attendants in Providing Antenatal and Intrapartum Care in Selected Rural Areas of Myanmar." *WHO South-East Asia Journal of Public Health* 1 (4): 467–476.
- Sein, K. K. 2013. "Beliefs and Practices Surrounding Postpartum Period among Myanmar Women." *Midwifery* 29: 1257–1263.
- Spoorenberg, T. 2013. "Demographic Changes in Myanmar since 1983: An Examination of Official Data." *Population and Development Review* 39 (2): 309–324.
- Thatte, N., L. Mullany, S. K. Khatry, J. Katz, J. M. Tielsch, and G. Darmstadt. 2009. "Traditional Birth Attendants in Rural Nepal: Knowledge, Attitudes and Practices about Maternal and Newborn Health." *Global Public Health* 4 (6): 600–617.
- Thompson, L. M., M. Clark, B. Cadman, Canúz, and K. R. Smith. 2011. "Exposures to High Levels of Carbon Monoxide from Wood-Fired Temazcal (Steam Bath) Use in Highland Guatemala." *International Journal of Occupational and Environmental Health* 17: 103–112.
- Titaley, C. R., C. L. Hunter, M. J. Dibley, and P. Heywood. 2010. "Why Do Some Women Still Prefer Traditional Birth Attendants and Home Delivery?: a Qualitative Study on Delivery Care Services in West Java Province, Indonesia." *BMC Pregnancy Childbirth* 10 (43): 1–14.
- UNICEF. 2011. "Myanmar Multiple Indicator Cluster Survey 2009-2010."
- Win, M. D., T. T. Sein, K. T. Wai, and N. N. Aye. 1995. "Gender, Health, and Sustainable Development: Perspectives from Asia and the Caribbean." In: *Proceedings of Workshops Held in Singapore, 23-26 January 1995 and in Bridgetown, Barbados, 6-9 December 1994*, edited by J. Kitts, J. H. Roberts, and L. J. Arsenault, 180–190. Ottawa, Canada: International Development Research Centre [IDRC].