



## Antenatal, Place of Birth and Post-natal Related to Breastfeeding Practice among Women in Peri-urban Area, Semarang

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### ABSTRACT

**Background:** Key health issues for women of reproductive age include problems concerning sexuality and reproduction. Sexuality is not merely about sex, but about the right of women to make choices and decisions related to sexual behaviour and practices, relationships, breastfeeding, contraception and abortion. This paper will examine the various health facilities, the services and treatments which are available, in particular those which influence breastfeeding practices.

**Methods:** A combination of qualitative and quantitative data collection methods were used in this research. In the quantitative method, a questionnaire survey was conducted following preliminary analysis of the data collected through focus group discussions (FGDs). The methods employed for qualitative data collection included focus group discussions, informal and in-depth interviews and participant observation. The sample group in the peri-urban area included pregnant women, mothers with babies less than 2 years old, a few husbands and a small number of women of reproductive age.

**Results:** This research found that there were many factors influencing the choice of birth place such as location, costs and the quality of the services provided by nurses, doctors, etc. The women in this area still preferred the services of the dukun bayi for the post-natal treatment.

**Conclusion:** The place where the mother delivers the baby influences their motivation to breastfeed. Although the respondents mentioned that breastfeeding is a good practice for feeding baby, however, they lack of knowledge about breastfeeding. This condition is closely related to poor counselling about breastfeeding.

**Key Words:** Breast-feeding practice, lack of knowledge, antenatal care, birth place.

### ABSTRAK

Tempat persalinan, pemeriksaan pre dan pasca melahirkan terhadap pengetahuan dan praktek menyusui di pinggiran Semarang.

**Latar belakang:** Beberapa permasalahan utama pada perempuan usia reproduksi adalah seksualitas dan reproduksi. Seksualitas tidak hanya meliputi masalah tentang seks, akan tetapi juga hak perempuan untuk memilih dan menentukan terhadap perilaku seksual, praktek, menyusui, pemilihan alat kontrasepsi dan juga abortus. Artikel ini akan menganalisis berbagai fasilitas kesehatan, pelayanan dan perlakuan terhadap ibu hamil dan melahirkan dalam kaitannya dengan perilaku menyusui.

**Metode:** Metode penelitian yang dipergunakan dalam penelitian ini adalah gabungan antara metode kuantitatif dan kualitatif. Teknik survei adalah metode yang diaplikasikan dalam metode kuantitatif dan disajikan secara deskriptif; sedangkan metode kualitatif dilakukan dengan diskusi kelompok terarah, wawancara mendalam dan observasi partisipasi. Sampel dalam penelitian adalah ibu yang tinggal di lokasi penelitian dan mempunyai anak di bawah 2 tahun dan beberapa wanita usia reproduksi.

**Hasil:** Hasil penelitian menunjukkan bahwa terdapat berbagai faktor yang membuat keputusan terhadap pemilihan lokasi pemeriksaan kehamilan, tempat persalinan, dan perawatan pasca persalinan, seperti lokasi, biaya dan mutu pelayanan. Ibu-ibu di daerah penelitian masih lebih memilih dukun bayi sebagai orang yang melakukan perawatan pasca persalinan.

**Simpulan:** Tempat persalinan memberi pengaruh dan motivasi ibu-ibu di daerah penelitian untuk menyusui. Meskipun responden menyatakan bahwa menyusui merupakan perilaku yang baik sebagai pemberian makanan kepada bayi, akan tetapi mereka masih terbatas pengetahuannya terhadap menyusui. Hasil penelitian menunjukkan bahwa rendahnya pengetahuan disebabkan karena terbatasnya penyuluhan yang diberikan oleh petugas pada masa pemeriksaan kehamilan, dan juga pasca persalinan.

## BACKGROUND

Women's health is an important investment in a community's future. A woman who has gone through a healthy, happy, planned pregnancy is more likely to bond well with her newborn. She can be a better parent if she is in good health and leads a happy life. Key health issues for women of reproductive age include problems concerning sexuality and reproduction. Sexuality is not merely about sex, but about the right of women to make choices and decisions related to sexual behaviour and practices, relationships, breastfeeding, contraception and abortion. Reproductive health problems are affected by women's access to the means to protect themselves from unwanted pregnancies and sexually transmitted infections, including HIV. The death of a mother in a family has a profound impact, not only in terms of the loss of one life but also due to the affects on the health and the longevity of her surviving family members<sup>1</sup>.

Women of reproductive age can be subject to high risks from chronic energy deficiency, and measuring upper arm circumference (UAC) is a way of monitoring this condition. Based on 1995 HHS data, 8.4% of the women surveyed had a body height of less than 145 cm, while nearly a third had a UAC of less than the threshold measure of 23.5 cm. Furthermore, 14.5% of married women in five provinces, including West Java, Central Java, East Nusa Tenggara, Maluku and Irian Jaya, were shown to have chronic under-nutrition, as indicated by an average body mass index (BMI) of less than 18.5 kg/m<sup>2</sup>. This BMI measure can reflect maternal malnutrition, caused in part by the tendency of poor women in Indonesia to reduce their own food intake rather than reducing that of their children and husbands. Women experiencing chronic energy malnutrition are at high risk of having a baby with a low birth weight; if they bear a female child with a low birth weight, the offspring is likely to grow into an adolescent and then adult with chronic energy malnutrition and anaemia<sup>2-3</sup>.

Thus, maternal morbidity and mortality can be caused by malnutrition or under-nutrition during pregnancy or before pregnancy, for example, chronic malnutrition, anaemia, iodine deficiency and vitamin A deficiency in adolescence. During pregnancy, women need higher quality iron for fetal development. Pregnant women must improve their intake of calories, protein, and calcium and increase their body weight by 11-13 kg by the end of their pregnancy. Based on UNICEF data for 1997, 41 % of pregnant women in Indonesia have chronic energy malnutrition, which increases the likelihood of maternal morbidity, especially in the third semester (months 7-9), and increases the risk of having a low birth weight baby. In the post-natal phase, a woman's condition often quickly worsens and she can easily face health problems. Production of breast milk will be affected, and the mother may be unable to care

for the child or herself, and, furthermore, the baby may face severe malnutrition, which will worsen if she/he is not provided with the nutrients to promote immunity which are contained in the mother's milk. Adult women's nutritional status is based on their nutritional experience as a child and this in turn influences not only their own adult health but also the health of the children they bear. Most nutrition interventions in developing countries have been designed primarily to reduce malnutrition amongst children. Even programmes that include women tend to focus on pregnant and lactating women. This approach limits the success of interventions since action to improve nutrition related to reproductive outcomes is most effectively implemented before women become pregnant, and should be undertaken before girls reach reproductive age<sup>3-4</sup>.

According to the World Health Organization (WHO), breastfeeding is considered the best way to feed babies<sup>5</sup>. In Indonesia, a campaign for exclusive breastfeeding was introduced more than 20 years ago. The Ministry of Health (MoH) have set a target that 80 % of newborn babies will receive exclusive breastfeeding by 2005. The latest data from the Indonesian Demographic and Health Survey 2002 show that only 55.1 % of babies were breastfed exclusively until 4 months old. Previous research has indicated that the lower rate of exclusive breastfeeding was due to psychosocial or behavioural factors affecting the mother and her family, and also environmental factors<sup>6-8</sup>. These factors are a result of a lack of knowledge about the advantages of exclusive breastfeeding, and the massive commercial campaigns to promote infant formula and baby foods which are thought to be responsible for the emergence of the mistaken belief that exclusive breastfeeding causes infant malnutrition. This paper examines patterns of breastfeeding practice among women in peri-urban area in Semarang. Specifically, this paper examines the health seeking behaviour of mothers, such as where and how they find the health facilities for ante-natal treatment and for giving birth. Also included is an examination of the various health facilities, the services and treatments which are available, in particular those which influence breastfeeding practices.

## METHODS

A combination of qualitative and quantitative data collection methods were used in this research. In the quantitative method, a questionnaire survey was conducted following preliminary analysis of the data collected through focus group discussions (FGDs). The samples for the survey were drawn from two resources; population data from the head of the neighbourhood or sub-village, and from the *posyandu* (monthly health service), which is carried out in each village every month. Both sources of data were used to avoid missing data in the population study since there were many migrants in this village and some of them were not

registered in the village population data. Based on these data, purposive sampling methods were used to select samples of the population. In particular, the quantitative data were used to collect basic information about respondents such as socio-economic levels, general health seeking behaviour as well as certain aspects of breastfeeding practice; analysed by descriptive analyses to show the frequency distributions. The methods employed for qualitative data collection included focus group discussions, informal and in-depth interviews and participant observation. Qualitative data were analysed by content analyses for all of the methods which have mentioned above.

Lintang village (a pseudonym) in the industrial suburbs close to the city centre of Semarang was chosen to represent a peri-urban area. The Lintang village which is a part of Sekar district (a pseudonym), is located in 15km from the city centre of Semarang, it forms part of Semarang municipality, and is undergoing development as an industrial zone of Semarang. Its position is ideal for industry as it lies along the road between Semarang and Jakarta, which passes through some major industrial towns in Central Java. The other reason that Lintang has chosen as research site was that although this village is under supervision of Raja public health centre (*Puskesmas Raja* – a pseudonym), there is another Puskesmas in Lintang, which is the Ratu public health centre (*Puskesmas Ratu* – a pseudonym), which has facilities for hospitalization (*puskesmas rawat inap*) and a maternity clinic.

As mentioned above, purposive random sampling was taken to get the respondents for this study. The total respondents for quantitative data in the peri-urban area were 174 women; this sample included women of reproductive age and pregnant women who had no experiences of birth processes. The total sample of respondents who were able to answer specific questions about the birth process and breastfeeding practices was 155 mothers. The questionnaire was compiled based on data collected through the focus groups discussions which were held in each sub-village and also on initial observations. In the qualitative method, there were 267 participants in the focus group discussions in the research site. Participants in informal and in-depth interviews were comprised of 54 pregnant women; 69 mothers with babies less than 2 years old; 15 husbands, and 23 women of reproductive age. To support the data, some interviewed some key informants also interviewed including 2 medical doctors from both of the health centres (*Puskesmas Ratu* and *Puskesmas Raja*), 4 midwives, 13 health volunteers (*kader kesehatan*), 5 factories' officers, 2 traditional midwives, and 7 childminders.

## RESULTS & DISCUSSION

We found that the majority of women respondents to the questionnaire survey were less than 30 years old (77%). In terms of socio-economic level, approximately 75% of the respondents had lower income levels, with an expenditure of less than one million *rupiahs*; while with regards to education, the respondents had a significant medium educational achievement. In the Lintang village, women were almost evenly split between those who worked outside of the home (47%) and those who did not (53%). However, it is important to note here, that the quantitative data on the number of women in this research site who worked outside of the home does not tally with the observations and data collected through qualitative research which suggested that there were more working than non-working mothers in this area; roughly 70% of women respondents in the focus group discussions and in-depth interviews were working women. The difference between the data collected may be explained by the fact that, the questionnaire survey was administrated by research assistants who usually carried out the survey during normal working hours, whereas the qualitative data such as in-depth interviews were held at times that would best suit working women.

There are two public health centres in Lintang called *Puskesmas Raja* and *Puskesmas Ratu* (a pseudonym). *Puskesmas Ratu* is a public health centre with facilities for hospitalisation (*puskesmas rawat inap*), which also serves as a maternity clinic. Both centres, however, employ midwives and provide maternity services. There are also other health care facilities in the village, including one private doctor, one midwife and three traditional midwives (*dukun bayi* – traditional midwife – here after referred to as the *dukun bayi*). Ante-natal care (ANC) is provided by the midwives in the public health centres, and doctors seldom examine the patients in receipt of ANC, which is seen as the responsibility of the midwives. The qualitative data both from FGDs and in-depth interviews show that the respondents mentioned several factors, including their financial means and the distance from their homes to the health care centres, affected their choices concerning pregnancy examinations. The quantitative data show that 72 mothers chose private midwife clinics for their ANC; 54 mothers chose the public health centre; and 19 mothers went to hospitals. The cost of ante-natal care varies according to place. For instance, registration in the public health centre costs Rp 3,000; Rp 10,000 in the private midwife clinics, and ranged from between Rp 30,000 – 60,000 for a gynaecologist in a hospital. In the private certified midwife clinics the cost includes vitamins and any medication.

While the public health centre was the cheapest option, respondents complained about the poor quality of service provided by the midwives in those centres. One respondent interviewed stated that she had 'moved to a midwife who practiced in a private health centre' because she did not feel satisfied with the service at the public health centre, the officers were 'cruel' and did not give any counselling. Besides the lack of counselling, it was felt that the health officers were reluctant to attend the centres, so the respondents went to other places for check-ups. One respondent felt disappointed because the health officers often went home early. Respondents in a stronger financial position also said they preferred having their pregnancy check-ups at the private maternity clinic where they planned to give birth.

The fact that public health centres are not providing good ante-natal care is very disturbing, since in Indonesia the *puskesmas* (public health centre) is the primary health facility, with lower costs that are affordable for people with lower socio-economic statuses. Actually, public health care services in Indonesia are highly subsidised by the government and funded through taxes, international grants and contributions from the private sector, but, unfortunately, these resources have shrunk as a result of the economic crisis in Indonesia.<sup>3</sup> Moreover, the economic crisis has undermined progress for the whole population; and its effects on women are even more severe, since women generally figure amongst the poorest of the poor.<sup>9</sup> Furthermore, according to UNICEF and the World Bank, all pregnant women face some level of maternal death risk, which means that regular ante-natal care is needed to help detect and manage some pregnancy related complications, such as pre-eclampsia, infection, etc. and to educate women about danger signs, potential complications, and where to seek help. Ante-natal care is also an opportunity to provide preventive care that will benefit the baby as well as the mother, such as counselling on hygiene, breastfeeding, nutrition, family planning, tetanus toxoid immunization, and iron/folate supplementation.<sup>3,4</sup> According to UNICEF, pregnant women in Indonesia often do not take danger signs seriously during pregnancy, such as swelling, vomiting, seizures and bleeding. Even when they know such symptoms should be checked and treated promptly, many hesitate to seek care. Bleeding or haemorrhage, dizziness and vomiting are the most common symptoms reported to midwives and doctors, according to a study of 300 women who had given birth in the past year in the district of Semarang in 1996.<sup>3</sup>

Limited skills, including managerial skills and the low salary of health providers in Indonesia are also contributing to poor services in the health centres. Within the health centre, midwives are supposed to be responsible for maternal and child health (*KIA/kesehatan ibu dan anak*), yet because of under-

staffing they often have to take on other duties. Moreover, some of them also work in private clinics. If these conditions do not improve in the future the maternal mortality rate in Indonesia will increase.

Only 20% of participants in FGDs stated that they received any counselling about breast care for after the birth, such as massaging and cleaning the nipples with baby oil. The rest of the respondents said that their older female relatives usually provided them with such information.

As with their choice of antenatal care, there were several factors affecting women's choice of birth place, such as the location, the costs, and also the perceived quality of the services provided by nurses, doctors, etc. The most frequently reported place of birth (34%) was private midwife clinics, while the second most frequently reported place of birth was the hospital (23%). The cost for giving birth in a private midwife clinics range between Rp 150,000 – Rp 300,000, while hospital rates range between Rp 2,000,000 - Rp 4,000,000, depending on the standard of the room and whether doctors or midwives assist at the birth. While private midwife clinics cost less than hospital, both private clinics and hospitals cost considerably more than giving birth either in the public health centre (*Puskesmas Ratu*) or the village maternity clinics. However, only 16% of respondents said they choose the village maternity clinics, while 9% said they choose the public health centre. The respondents who choose the private midwife clinics and hospitals said they did so because they considered them to be safer and provide better nursing care than other options. Similarly, respondents who choose village maternity clinics over public health centre (*puskesmas*) said they did so because of the poor service provision in the public health centre, though the distance between their homes and the centre and the limited transportation available might also have contributed to their decision to give birth in the village maternity clinics.

However, there were also 28 mothers (18%) who gave birth at home. In these cases, women were often assisted by a *dukun bayi* (traditional midwives) as well as a government trained midwife (*bidan desa*). The women interviewed said that they prefer using a *dukun bayi* partly because it is the least expensive form of maternal care, since the *dukun bayi* do not charge a fixed fee. Instead the payment for the *dukun bayi* can be given in instalments or in the form of rice, coconut, or other goods. Another reason for their continuing popularity amongst women is their status; they are elderly women who are considered to have a great deal of experience about the birth process and its related treatments. *Dukun bayi* are common place throughout rural Indonesia, and even though the government already employs *bidan desa* in the villages, some people still prefer the *dukun bayi* as a birth assistant. To acknowledge this

preference, the government developed the concept of 'pendampingan'. This is where a *dukun bayi* delivers the baby but is assisted by a *bidan desa*. The trained midwife supervises the *dukun bayi* to ensure that the delivery is carried out according to medical guidelines and with the proper, sterile tools. In addition, the midwife is on hand if an emergency arises, and can supervise and oversee the *dukun bayi* in the care of the baby for the first post-natal hour.

The data mentioned above suggests that women in the village still preferred the services of the *dukun bayi*, even though they had access to trained midwives. In the late 1950s, Jaspian who conducted research in Sewon, Yogyakarta, found that on the fortieth day after the birth of her child a mother request *dukun bayi* to turn her uterus to one side or to 'raise it'.<sup>10</sup> In the early 1960s, Geertz and Geertz also found during their research in Modjokuto that the *dukun bayi* assisted at births and also treated the mother during the post-natal period, and nowadays the situation in rural Indonesia remains largely unchanged.<sup>11-12</sup> Recognising the need for improvement, the Government of Indonesia implemented the 'Mother Friendly Movement' in 1996, which focused on initiatives such as community mobilisation (*gotong royong*) to provide transportation for pregnant women in need of referral, and community savings schemes, supported by village heads (*kepala desa*), to finance the cost of more specialised care. At the village level, trained midwives (*bidan desa*) provide basic emergency obstetric and neonatal care. Between 1989/90 and 1997/98, out of 68,724 targeted villages in Indonesia, *bidan desa* were placed in 53,247 or 98 % of villages. As mentioned earlier, another programme also developed the concept of 'pendampingan' in Indonesia. Under this scheme a trained midwife is called to attend whilst the *dukun bayi* assists at the birth. The role of the trained midwife is to supervise the *dukun bayi*, and to ensure that the proper, sterile tools are used.

In the private midwife clinics, hospital and public health centres, women are usually nursed for between 2-4 days after the birth. All of the above maternity services officially operate rooming-in programmes. The aim of the rooming-in programme is to encourage the mother to breast-feed her baby on demand since the baby is put in the same room as the mother after giving birth. However, the perception amongst respondents was that they had to take responsibility for the baby due to the lack of nurses. On average up to 60% of mothers interviewed complained that having the baby in the same room prevented them from resting.

Approximately 70% mothers interviewed said that the baby was given to them after they had taken a bath. This research found that 47% of respondents in the questionnaire survey said they breastfed their baby within the first three hours, and a total of 70% within the first five hours.

Mothers reported that they practiced breastfeeding the baby for two hours. However, roughly 80 % of participants in FGDs also claimed that during the immediate post-natal period, they produced no breast milk, so the baby was fed infant formula or other kind of food such as honey, sugared water, etc. Moreover, in interviews, respondents who gave birth in private maternity clinics said that the baby was also fed infant formula with a bottle. In order to support the breastfeeding programme nurses are supposed to give infant formula with a spoon and not with a bottle, yet they reportedly used bottles because there were so many babies to take care of and bottle feeding was quicker.

Bottle feeding newly born babies with infant formula in the clinic may not only inhibit breastfeeding but also means that the babies were not receiving colostrum from their mothers.<sup>13</sup> In fact, the perception and understanding about colostrum varied amongst respondents. Just small numbers of mothers (less than 30 % participants of FGDs) knew that colostrum referred to the first milk to come out from the mother's breast, which is yellow and very good for the baby's immune system. However, other respondents did not know about it, or were unsure about whether they should give it to their babies.

The mothers who gave birth in the home mentioned that either the midwives or *dukun bayi* taught them how to breastfeed the babies. The responsibility of having to take care of the baby seemed to encourage the mothers to breastfeed the baby immediately after birth. However, some of them also stated that they also prepared infant formula for the babies.

The post natal treatment for village women in Lintang usually continues at home. Either the midwives or the *dukun bayi* visit the new mother in her home. The treatment given by the *dukun bayi* lasts for about 35 days after the birth (*selapan*), while the treatment given by the midwives is until the umbilical cord falls off (*puput puser*). The midwives and the *dukun bayi* usually bath and massage the baby (*didadah*). The purpose of this massage is to stimulate muscle growth and is thought to prevent the baby from being fussy.

Besides cared for the baby, the new mother is also cared for by the *dukun bayi*. Javanese people believe that the mother is very weak after the birth and needs to be massaged and to drink 'jamu' (traditional herbs) to recover her strength. The massage is for restoring the womb. The *dukun bayi* also trains the new mother to breast-feed the baby properly, and advises her to eat certain foods to improve her breast milk, such as beans, peanuts, and also one kind of leaf called *daun katu*.

Under the public health service, midwives are supposed to visit the baby and the mother after the birth at home. If the baby is born under average weight (less than 2.5kg) the midwives are responsible for carrying out

home visits to monitor the baby's growth. However, it was found that the lack of midwives in the health service meant that home visits were rarely made.

Based on FGDs and in-depth interviews, this research found that mothers in Lintang agreed breastfeeding provides the best nutrition for the babies. Approximately 60–70% of respondents thought that breastfeeding was natural for women, like menstruation, pregnancy and giving birth. About 70% mothers interviewed considered that breastfeeding was a woman's obligation or duty, and in Javanese society, breastfeeding is considered part of parenting. Women who were pregnant with their first babies always hoped to breast-feed their babies, while those who were pregnant with their second or subsequent babies tended to go by their experiences from the first pregnancy. Working mothers interviewed stated that they really wanted to breast-feed their babies when they returned from work, but the babies refused their milk.

They said that after they go back to work their babies do not want their mother's milk. This case demonstrates that if a baby is fed formula milk, he/she will get used to bottle-feeding and may refuse breast milk. Sucking on a bottle teat is quite different from nursing at the breast, and this is one of the reasons why bottle-feeding often leads to the cessation of breastfeeding.

One respondent said that she was willing to exclusively breast-feed her baby. However, she noticed that her baby was not as fat as her friend's baby who consumed infant formula. There was a perception amongst the communities that a healthy baby should be a fat baby, and such a perception is influencing breastfeeding practice. In many cases, bottle-fed babies tend to be fatter than breastfed babies. Another respondent commented that she did not like breastfeeding, since the baby was often fussy. The babies tended not to enjoy suckling if the mother's physical and psychological conditions were under par. One woman said that she preferred not to give her new baby breast milk because her baby was fussy and also because if she fed her infant formula she was free to leave the baby with other people to be fed.

After the birth the breasts are often swollen (*mbangkaki*), which can lead to fever. This is a difficult period because the mother is still weak and the baby is not good at suckling. For women having their second or subsequent birth, this period tends to be easier. Not every woman can breast-feed her baby successfully, since sometimes the milk has not been produced and the baby is not used to sucking milk from the mother's nipple. The production of breast milk varies amongst women. In general, the production of breast milk will get better 2-3 days after giving birth. Before that period the respondents said they did not succeed in breastfeeding. Besides the swelling of the breast, the baby is not used to suckling. One respondent mentioned

that she often felt pain during this time. She wanted the baby to suck her nipples, but the baby's mouth couldn't suck properly, which made the baby distressed because she was hungry. The respondents said that while their breasts were painful they would give their babies the bottled milk that they got from the maternity clinics. Various traditional remedies are used to improve breast milk. Beans, or peanuts fried without oil (*sangrai*), fried corn, vegetables, and traditional herbs (*jamu*) are considered the best foods for the new mothers. Only two respondents mentioned that they took medicine to stimulate milk production. They knew about these medicines from TV commercials.

The place where the mother delivers the baby influences their motivation to breastfeed. Whilst this research was being carried out, this study found that some maternity services in Lintang provided infant formula milk for the babies, perhaps making the mothers less motivated to breastfeed their babies. The fact that some mothers could not produce breast milk or needed to rest were the main reasons why the nurses gave out bottled milk. The doctor in the Ratu health centre and some of the midwives said that they supported the exclusive breastfeeding programme, and always encouraged the mothers to breast-feed their babies. However, the respondents who had given birth in the health centre said that they still received bottled milk to give to their babies even when they were producing breast milk. The availability of one particular brand of infant formula milk in those maternity clinics suggests a relationship between the hospital and the milk company.

The majority of mothers interviewed (approximately 60–70%) in Lintang really did not know the term of 'exclusive breastfeeding'. However, they eventually understood that it refers to feeding the baby only breast milk until he or she is about 4 - 6 months old. According to the mothers interviewed, breastfeeding is considered a mother's duty or responsibility, regardless of whether the quantity of breast milk is sufficient for the baby or not. Babies tend to be offered to suck the nipple when they are crying. In this way, breast milk is not considered to be the main food for the baby i.e. the primary source of nutrition. Rather, solid food such as bananas and baby porridge come to be seen as a primary source of nutrition, with breastfeeding primarily regarded as a form of comfort. But if the baby keeps on crying the mother will feel very embarrassed about her baby's distress. One respondent said that she wanted to give her baby only breast milk, but that the baby was often fussy and her neighbours reprimanded her. One neighbour said that it was not good to let the baby cry, and perhaps the baby was hungry and wanted something to eat. Finally, the respondent fed her baby a banana even though the baby was only one month old.

According to WHO and UNICEF, breastfeeding should be initiated immediately after the birth of the child. The

initiation of breastfeeding is based on the duration between delivery and first breastfeed, and is usually defined as 'early initiation' when a breast-feed takes place within the first half hour or first hour after birth.<sup>14</sup> This research found that based on the quantitative data shows that 67 mothers (43 %) breastfed their babies for the first time less than 3 hours after the birth, 43 mothers between 3-5 hours after the birth, and 45 mothers took more than one day to breast-feed their babies. The large number of mothers in this area who breastfed their babies less than 3 hours after the birth had given birth at home, in the public health centre and also in private midwife clinics. The poor services at the health centre and the limited number of nurses both in the public health centre and in the private clinics means that the mothers have to take care of their babies, which includes trying to breast-feed the babies as soon as possible. They could initiate breastfeeding earlier than mothers who gave birth in birth places which did not implement the rooming-in policy, such as the maternity clinics in the urban area.

The initiation of breastfeeding in the research area was in line with data from UNICEF. UNICEF reported that in Indonesia 95 % of babies are initially breastfed after birth, although these data also show that only 14 % of babies in Indonesia were breastfed within the first 12 hours after birth.<sup>3</sup> It would therefore seem that in Indonesia, including Semarang, breastfeeding initiation is delayed (past 30 minutes), whereas international recommendations suggest that breastfeeding should be initiated immediately after the birth. However, this research found that mothers, particularly in the peri-urban area, initiated breastfeeding earlier than the UNICEF data suggests (within the first 12 hours after birth). 1997 and 2002 IDHS data, however, show that the initiation of breastfeeding within one hour has decreased quite significantly (8 percent in 1997 to 3.7 % in 2002).

There were many factors influencing the delayed initiation of breastfeeding in Indonesia. In Indonesia, the health provider (the doctors, the midwives, and even the *dukun bayi*) gives the baby to the mother after both of them have been bathed. Immediately after they give birth, they hold the baby up for the mother to see and tell her the sex of the baby. It is only after both the mother and baby have been washed that they might ask the mother to try to breast-feed the baby. This procedure can take some time.

The other factor is the rooming-in programme. The rooming-in policy is not implemented in most of the maternity services in Semarang, which delays the initiation of breastfeeding. This means that the timing of breastfeeding initiation does not accord with the ideal expressed by health providers. In Indonesia, including Semarang, some hospitals have been termed 'baby friendly' hospitals (*Rumah Sakit Sayang Bayi*), which

means they have a policy of putting the baby in the same room as the mother after giving birth and encouraging the mother to breastfeed her baby on demand. However, the paediatricians interviewed claimed that the hospitals do not really apply this policy. There were various reasons offered for this. It was felt that the mothers needed to rest after the birth and the baby should be kept separate to prevent infection from guests in the hospital. On the other hand, the Ratu public health centre and private midwife clinics in Lintang implemented the rooming-in programme. However, whilst this research was carried out found they implemented the rooming-in policy because there was a shortage of nurses in this health centre. Up to 60 % of the mothers complained about having to take care of their babies, since it prevented them from resting after the birth.

Health providers, such as doctors and midwives who assist at births, all stated that they really support the 'exclusive breastfeeding' programme and always encourage their patients to breastfeed until the baby is 4 months old. Hull, Thapa and Pratomo have explained that the role of health providers is crucial to the successful initiation and maintenance of breastfeeding in maternity clinics and hospitals.<sup>5</sup> Doctors, midwives and nurses can all provide the necessary motivation, support and information not only to assist during the early postpartum days, but to establish a firm foundation for continued breastfeeding and the solving of problems which may emerge once the breastfeeding woman has left the hospital to return home. However, many of the babies had been given bottled milk since birth, which suggests that there is a relationship between the midwives and the procedure of giving infant formula.

## CONCLUSION

This study found that women in this area used the public health centre for their ante-natal care rather than other health services because it was cheaper. However, some of them complained about the poor services in this centre. In these ways it is clear that poverty and health are closely related and that poorer women the suffering is usually marked because of their low socio-economic capital, and their relative lack of decision making powers. They were generally affected since they have a lower socio-economic status and more limited access to better health. Women in this area were still preferred the traditional services of the *dukun bayi* (the traditional midwife) for post natal, although during the birth process they were assisted by midwives. This study found that the *dukun bayis* were seen by mothers in Lintang more friendly, they did not charge a fixed fee and they have some local social status due to their older age and they are therefore thought to have a great deal of experience concerning the birth process and its related treatments.

This study found that the place where the mothers deliver the baby influence their motivation to breastfeed. This study also found that the respondents have taken on board the understanding breastfeeding was healthy, cheap and practical. They perceived breastfeeding to be a natural process, part of a women's duty and good parenting, which promotes a good relationship between mother and baby. However, they tended that they lack of knowledge about breastfeeding practice. The lack of understanding about breastfeeding among women in this area is closely related to poor counselling, since as many other parts in Indonesia, although the government has in recent years taken step to promote breastfeeding, leading to a growing interest in the promotion of breastfeeding among health professionals, such interest seems not to have taken hold at the grassroots level.

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