Breastfeeding and Bottle Feeding Practices: A Phenomenon towards Infant Feeding Practices in Semarang

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ABSTRACT

Background: Breastfeeding is regarded as good practice today. Women are encouraged to breastfeed and to continue breastfeeding for at least four to six months. In Indonesia, a campaign for exclusive breastfeeding was introduced more than 20 years ago. However, the Indonesian Demographic and Health Survey (IDHS) 2002 show that only 55.1 percent of babies were breastfed exclusively until four months old.

Method: The purpose of this paper is to examine breastfeeding and bottle feeding practices among women in Semarang based on socio-cultural factors. The respondents for the study were, respectively, pregnant and breastfeeding women who living in Lintang village in Semarang. A qualitative data collection method was used in this research. The methods employed for qualitative data collection included focus group discussions, informal and in-depth interviews and participant observation.

Results: This study found that the mothers in Lintang village stated that breastfeeding is 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, this study found that they lack a complete of understanding of the processes and nutritional issues involved in breastfeeding. This researchalso found that inconsistency in government policies to support the breast-feeding programmes, such as the poor implementation of the 'baby friendly hospital' with 'rooming-in programmes' and also the length of maternity leave for working women, have led to an increase in bottle-feeding practices in Indonesia

Keywords: Breastfeeding practice; Socio-cultural aspects; Bottle feeding practice

INTRODUCTION

Breastfeeding is regarded as good practice today. Women are encouraged to breastfeed and to continue breastfeeding for at least four to six months. According to the World Health Organization (WHO), breastfeeding is considered the best way to feed babies (Hull, Thapa and Pratomo, 1990). 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 percent of newborn babies will receive exclusive breastfeeding by 2005. However, In Indonesia, as in many other countries, women used to breastfed for two or three months exclusively, but this has become rare and even in younger infants exclusive breastfeeding is becoming less common (Baumslag & Michels, 1995).

The Indonesian Demographic and Health Survey (IDHS) 2002 show that only 55.1 percent of babies were breastfed exclusively until 4 months old. The biggest problem that results from the premature termination of exclusive breastfeeding and the premature introduction of complementary foods or liquid other than breast milk is the infant's increased risk of catching an infection due to the interruption to the natural chain of immunity which only breast milk can impart.

The 1997 multi-site complementary feeding study found that exclusive breastfeeding gives children a growth advantage of approximately 0.14 STD in weight for age at 0-5 months. However, the same study found that only 63 percent of infants are exclusively breastfed in the first month of life; 45 percent in the second; 30 percent in the third; 19 percent in the fourth; 12 percent in the fifth and only 6 percent in the six month (Sharma, 1999). The comparison between the 1997 and 2002 Indonesian Demographic and Health Survey (IDHS) show the situation of breastfeeding practices in Indonesia. Based on these data, it would appear that only the rate of exclusive breastfeeding for 4 month old babies has increased in comparison to the 1997 IDHS

data, although the increase is not significant. Other data, such as the rate of ever breastfed babies and babies who have been exclusively breastfed until 6 months old have decreased, although not significantly. However, the data show that bottlefeeding has increased sharply, from 10.8 percent 1997 to 32.45 percent in 2002.

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 (Kusin and Kardjati, 1994; Nordenhall and Ramberg, 1998; Untoro, 2004). These factors are a result of 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 will examine breastfeeding practices among mothers in Semarang; the determinants which influences breastfeeding practices, such as socio-economic background, health services and also cultural aspect. I also would like to examine bottle feeding practices as well as a description of government regulations towards bottle feeding in Indonesia.

METHODS

A qualitative data collection method was used in this research. Jerome, Kandel and Pelto (1980) have suggested that qualitative methods are important during the early phase of research in collecting data about the general knowledge, perceptions and understandings of respondents, and also to determine the contextual situation in the research site. Maynard (1994) has also reminded us that feminists have argued that there are aspects to women's lives which cannot be pre-known or pre-defined in quantitative research, particularly in survey and questionnaires, which have been seen to represent a 'masculinist' form of knowing, where the emphasis is on the detachment of the researcher and the collection and measurement of 'objective' social facts through a value-free form of data collection. To escape such limitation, research about women's lives should maximise the capacity to explore experience rather than impose externally defined structures upon them. To this end, feminists have emphasized the importance of listening to, recording and understanding women's own descriptions and accounts (Maynard, 1994).

The purpose of this study is to examine how patterns breastfeeding and bottle feeding practices are based on socio-cultural factors. With this in mind, a micro study was chosen to discover and suggest relationships which could be further explored in larger and possibility studies. The respondents for the study were, respectively, pregnant and breastfeeding women living in a village in a peri-urban area in Semarang. The research design of this study was not based on a cohort or longitudinal study but used a crosssectional design as the data collection and observation were not carried out over a long time period. Thus, this study did not observe and follow breastfeeding practices for individual babies from birth through the whole weaning period, but just focused on mother's experiences of breastfeeding at various points in the process during a 10 months period, from October 2001 to July 2002.

Since one of the aims of this study was to examine how working mothers cope with breastfeeding after they have returned to work, I needed a village where the female population were largely engaged in paid employment – in this context as factory workers. It was for these reasons that I chose Lintang village (a pseudonym) in the industrial suburbs close to the city centre of Semarang. 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. Sekar district is divided into ten villages. I chose Lintang as the village for this study because of the factories located in Lintang. Among the population in Lintang are migrant from surrounding areas who came to look for factory work, some of whom chose to settle and start families in Lintang. The other reason that I chose Lintang is that although Lintang 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.

In this research, the methods employed for qualitative data collection included focus group discussions, informal and in-depth interviews and participant observation. In total there were 267 participants in the focus group discussions in the peri-urban area. Participants in informal and indepth interviews were comprised of 54 pregnant women; 69 mothers with babies less than 2 years old; 15 husbands, and 23 women of reproductive age. I also interviewed some key informants 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.

Focus group discussions were held twice in each sub village, with the number of participants in the focus group discussion between 8-12 respondents. I asked general questions about health facilities in Lintang village, health behaviour and maternal health issues, including attitudes to breastfeeding and bottle feeding practices. Indepth interviews and participant observation were carried out throughout the period of this research. I interviewed my respondents either in their homes or while they attended their monthly health services (*posyandu*) and health centre (*puskesmas*). The interviews were used to explore in detail women's choices, constraints and attitudes towards breastfeeding, bottle feeding as well as maternal health issues. I asked, for example, why they chose a particular health centre, why they preferred certain health providers, and explored the breastfeeding practices and experiences of individual mothers. In-depth interviews were also held with some key informants, including doctors from the two health centres -Puskemas Raja and Puskesmas Ratu; midwives, traditional midwives, factories' officers, and childminders. From these respondents, in addition to gaining information about health and breastfeeding practice from their perspectives I also sometimes sought to get clarification on information provided by other respondents. Participant observation also formed of key aspect of this research. In this way, I was able to observe and absorb contextual detail than could be gained purely from other methods.

RESULTS AND DISCUSSIONS

This research found that mothers in Lintang agreed that breastfeeding provides the best nutrition food for the babies. The majority of the mothers in this area knew that breastfeeding is healthy, cheap, practical and natural and they also mentioned that breast milk was the best food for their babies. Approximately 60-70 percent of respondents thought that breastfeeding was natural for women, like menstruation, pregnancy and giving birth. About 70 percent mothers interviewed considered that breastfeeding was a woman's obligation or duty, and in Javanese society, breastfeeding is considered part of parenting. One mother told me:

"As a woman, we have an obligation or duty to get pregnant and also brestfeed the baby. I was so happy because just a couple of weeks after I got married, I got pregnant. I felt perfect as woman, and though that I should also try to breastfeed my baby as much as I can." "I work 8 hours a day in the factory, and I have to leave my baby in the early morning, and since I have to start work at 7am, I do not have time to breastfeed my baby before I leave. After I return back home, I want to breastfeed my baby, but my baby always refuses my milk".

Women who were pregnant with their first babies always hoped to breastfeed 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 breastfeed 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. One working mother told me:

This case demonstrated 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.

The place where the mother delivers the baby influences their motivation to breast-feed. Whilst this research was being carried out, I found that some maternity services in Lintang provided infant formula milk for the babies, perhaps making the mothers less motivated to breast-feed 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 breastfeed 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.

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 majority of mothers interviewed (approximately 60-70 percent) in Lintang really did not know the term of 'exclusive breastfeeding'. Most of them had heard of it for the first time when I mentioned it. However, they eventually understood that it refers to feeding the baby only breast milk until she or he is about 4-6 months old. As noted earlier, 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 banana 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 told me that she wanted to give her baby only breast milk, but 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.

Another respondent said that she was willing to exclusively breastfeed 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 among the communities that a healthy baby should be a fat baby, and such a perception is influencing breastfeeding practices. In many cases, bottle-fed babies tend to be fatter than breastfed babies. The other respondent 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.

As mentioned above, some mothers (estimated 60 - 70 per cent) stated that breast-feeding is part of parenting, women's duty and responsibilities. Sometimes, particularly in the villages, women will breast-feed their children even though their breast milk production is poor and the child is more than two years old. They will do this if the child is being fussy or is difficult (rewel) to breastfeed (ngempeng). Based on her research findings in Ngaglik, Sleman, Yogyakarta, Hull (1984) indicated that in Javanese culture there are different terms for breastfeeding. The first term is meneteki (suck the nipple) and the second term is menyusui (suckle milk). Building on Hull's distinctions between different kinds of breast-feeding practice, meneteki is seen as part of parenting, and in Javanese society mothers tend to breastfeed on demand. If the baby cries the mother assumes the baby is hungry, sleepy or fussy so she will breastfeed regardless of whether the quantity of the breast milk is sufficient or not. The second term, menyusui, is concerned more with the production of breast milk. According to this term, when the mother breastfeeds her baby, she is giving breast milk to her baby, as opposed to using suckling as a means to calm her baby.

With regard to the two forms of breastfeeding as mentioned above, based both on the observations I made over the course of the research and also on findings from the qualitative data about breast-feeding practice in Lintang, I argue that the mothers in Lintang village practice a meneteki (suck the nipple) form of breastfeeding rather than a menyusui form. The qualitative data show that the mothers interviewed told me that breast-feeding is a mother's duty or responsibility, regardless of whether the quantity of the breast milk is sufficient for the baby or not. I argue that 'meneteki' is not the same as systematic breastfeeding rather it is a form of comforting a 'fussy' baby. In this way, solid food such as baby porridge, soft rice, bananas come to be seen as a primary source of nutritious food, while breast-feeding primarily as a form of comfort.

Also, I found in the qualitative data, both from focus group discussions and in-depth interviews, that the mothers in Lintang lacked knowledge about the nutrients contained in breast milk, the duration and frequency of breastfeeding and the relationship between the production of breast milk and food intake. This lack of knowledge is a result of socio-economic factors, such as poor education and a lack of adequate counselling in that area. Approximately 60 - 70 per cent of the mothers stated that they felt satisfied when they breastfed their babies and assumed that the babies would not be fussy or cry. In the Javanese perception, a baby who cries often is assumed to be hungry and the mother must breastfeed to satisfy her baby. If the baby keeps on crying, he or she is still deemed to be hungry, and the mother will feel very embarrassed if her baby often cries.

The lack of understanding about breastfeeding amongst women in this area is also closely related to poor counselling. Based on information from the Ministry of Health (MoH), there is a breast-feeding counselling programme, which is associated with the Nutrition and Children Programme (Program Gizi & KIA -Kesehatan Ibu dan Anak). This Nutrition Programme supervises the 'exclusive breastfeeding' programme, while a maternal and child health programme (KIA) offers counselling. Unfortunately, there is only a small budget available for this programme. One officer in the MoH said that the limited budget results in an assumption that the breastfeeding programme is not really necessary. The existing fund is used to produce flipcharts or posters to distribute across the districts.

Lactation clinics are available in many hospitals, as well as in maternity clinics. These clinics are used to give training to mothers about how to breastfeed the babies, but, in fact, these facilities are never used. On the other hand, in the public health centres (*puskesmas*), such as Ratu public health centre, which is used for hospitalizations, there is no lactation clinic. Posters describing breastfeeding are attached to the walls of health centres, maternity clinics, and hospital buildings. In fact, these posters look more like wall decorations than important messages. There are some short slots on talk shows on the television or radio about babies and children but the topic of breastfeeding is rarely mentioned. While this research was being carried out, some private TV channels showed some short spot about the benefits of exclusive breast-feeding. Unfortunately, the show was sponsored by one infant formula brand.

As mentioned earlier the government of Indonesia has in recent years taken steps to promote breastfeeding. Non-governmental agencies and organizations have also taken increasing interest. A non-governmental agency known as BKPP-ASI has been established as a national coordinating body for the promotion of breastfeeding in Indonesia. International agencies, such as UNICEF, the Ford Foundation, USAID, and the International Nutrition Communication Service have also provided assistance to augment the momentum and support the project to promote breast-feeding practice. Unfortunately, the growing interest in the promotion of breastfeeding, which has had a positive impact on health professionals, seems not to have taken hold at the grassroots level. Thus, breastfeeding counselling is rarely carried out at the village level. At the district level (kecamatan or puskesmas / public health centre), midwives are expected to be in charge of counselling. However, due to understaffing, this counselling is not always delivered.

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 (Huffman, Zehner, & Victora, 2001). Based on the focus group discussions and in-depth interviews in Lintang, I found that approximately 70 - 80 per cent of mothers interviewed stated that they started to breastfeed their less than 3 hours after the birth. The large number of mothers in Lintang 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 breastfeed 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 (2000) reported that in Indonesia 95 per cent of babies are initially breastfed after birth, although these data also show that only 14 per cent of babies in Indonesia were breastfed within the first 12 hours after birth. 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, initiated breast-feeding earlier than the UNICEF data suggests (within the first 12 hours after birth). 1997 and 2002 IDHS data, however, show that the initiation of breast-feeding within one hour has decreased quite significantly (8 percent in 1997 to 3.7 per cent 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 breastfeed the baby. This procedure can take some time.

The other factor is the rooming-in programme. The rooming-in policy is not imple-

mented 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, I found they implemented the rooming-in policy because there was a shortage of nurses in this health centre. Up to 60 per cent 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 (1990) have explained that the role of health providers is crucial to the successful initiation and maintenance of breastfeeding in maternity clinics and hospitals. 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.

CONCLUSSIONS

- 1. This research found that mothers in Lintang village have taken on board the understanding and stated that breastfeeding is 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, this study found that they lack a complete of understanding of the processes and nutritional issues involved in breastfeeding. This relative lack of knowledge is a result of socio-economic factors, such as limited access to education and lack of adequate counselling in that area. The mothers stated breastfeeding is a mother's responsibility, regardless of whether the quality and quantity of the breast milk are sufficient for the baby or not.
- 2. Inconsistency in government policies to support the breastfeeding programmes, such as the poor implementation of the 'baby friendly hospital' with 'rooming-in programmes' and also the length of maternity leave for working women, have led to an increase in bottlefeeding practices in Indonesia, including in Semarang. The massive commercial campaigns to promote infant formula and baby foods both in maternity services and the mass media are also responsible for decreasing the trend in exclusive breast-feeding practice. I found in my study that during this difficult period the maternity clinics often gave the baby infant formula. The availability of infant formula in the maternity clinics and the fact that many of the babies had been given bottled milk since birth, suggests that there is a relationship between the health providers and the manufacturers of infant formula.

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REFERENCES

- Baumslag, Naomi & Michels, Dia L. 1995. Milk, Money, and Madness: the Culture and Politics of Breast-feeding. London: Bergin & Carvey.
- Huffman, Sandra L, Elizabeth R Zehner and Cezar Victora. 2001. Can Improvements in Breast-feeding Practices Reduce Neonatal Mortality in Developing Countries?, Midwifery 17, 80-92.
- Hull, Valerie J. 1984. Breastfeeding and Fertility in Yogyakarta. Population Study Centre: Gadjah Mada University, Yogyakarta. Monograph Series No. 5.
- Hull, Valerie, Thapa, Syam and Pratomo, Hadi. 1990. Breast-feeding in the Modern Health Sector in Indonesia: The Modern Health Sector in Indonesia: the Mother's Perspective. Social Science and Medicine 30(5), 625-633.
- Jerome, NW, Kandel RF, Pelto GH. 1980. Nutritional Anthropology: Contemporary Approaches to Diet and Culture. New York: Redgrave Publishing Company.
- Kusin, JA & Kardjati S. 1994. Maternal and Child Nutrition in Madura Indonesia. Amsterdam: Royal Tropical Institute
- Maynard, Mary. 1994a. Methods, Practice and Epistemology: The Debate about Feminism and Research. Maynard, Mary & Purvis, June (ed) Researching Women's Lives from a Feminist Perspective. London: Taylor & Francis Ltd, 10-26.
- Nordenhall, Charlotta & Ramberg, Sophie. 1998. The Relationship between Socioeconomic Standard, Knowledge about Breastfeeding and Prevalence of Exclusive Breastfeeding in the Purworejo district. Gadjah Mada University: Community Health and Nutrition Research Laboratory, Faculty of Medicine. Reprints of the Community Health and Nutrition Research Laboratory No. 25.

- Sharma. 1999. Anthropometric Status is Associated with Child Feeding Practices of Young Indonesian Children. Working Paper
- Untoro, Rachmi. 2004. Experience on Exclusive Breast-feeding Promotion. Presented on Panel Discussion on 'the Roles of Communication on Exclusive Breast-feeding Promotion' SEAMEO – TROPMED, Jakarta: January 15, 2004.
- UNICEF. 2000. Challenges for a New Generation: The Situation of Children and Women in Indonesia, 2000. Draft paper.