

Assessment of Breastfeeding Problems Experienced by Mothers in the First Six Months Postpartum: A Process of Tool Development

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ABSTRACT

Introduction: Studies have found that breastfeeding problems are associated with negative breastfeeding outcomes. Unfortunately, assessing breastfeeding problems can be quite difficult. The objective of the paper is to share the process of tool development for the assessment of breastfeeding problem in an Indonesian setting. **Methods:** The development of the tool was a two-stage process, consisting of understanding the range and pattern of breastfeeding problems (through literature review, discussions with lactation experts, and in-depth interviews with nursing mothers) and the production of the tool (through discussions with graphic designers and communication practitioners, pre-testing the tools, and finalising a workable, viable tool). The process led the authors to use flash cards for assessing the breastfeeding problems. Each card consisted of information about age, a code number, an image and a description of the breastfeeding problem. Each set of the flash cards represented an age period of 0-1, 1-3, and 3-6 months. The final flash cards were used in a cross-sectional study of 205 mothers of infants aged 6-12 months in Maros District, South Sulawesi. **Results:** The flash cards captured patterns of breastfeeding problems experienced by mothers within the first month, such as sore nipple, no milk production, fatigue, breast engorgement, and sleepy baby, or those problems that persisted throughout the six-month period such as infants' refusal to breastfeed and mothers feeling fatigued. The decreasing or increasing magnitude of a problem over time was also reflected in the flash cards. **Conclusion:** Identification of the dynamic patterns and magnitude of breastfeeding problems was successfully captured with the use of flash cards.

Key words: Breastfeeding problems, flash cards, Indonesia, tools development

INTRODUCTION

Despite several efforts and programmes to improve breastfeeding practice, the state of breastfeeding practices in 33 countries compiled by the 2010 World Breastfeeding

Trends Initiative (WBTi) report suggests that infant and young children's feeding (IYCF) practices in the assessed countries are not optimal, contributing to high global rates of infant mortality and childhood malnutrition. The reports show that

initiation of breastfeeding within one hour after birth was 51.2% and exclusive breastfeeding for the first six months was 46% (WBTi, 2010). Data from the Indonesia national survey showed that breastfeeding initiation within one hour after birth was 49% and exclusive breastfeeding practice among children less than aged 6 months was 42% (BPS, BKKBN, Kemenkes-MOH & ICF International, 2013). These suboptimal figures suggest that though lactation is a natural act, encouraging more mothers to breastfeed is a complex and challenging task.

Hector, King & Webb (2005) suggest a conceptual framework which involves a three-level factor that influences breastfeeding practices. These levels are: (i) individual level of the mother-infant dyad, (ii) group level which includes home environment and health service provider, and (iii) societal level. The framework also serves as the basis for identification of challenges that are faced and potential support needed by the nursing mothers. Based on this framework, Februhartanty (2011) conducted a literature review with the objective of reviewing studies on breastfeeding topics and its potential determinants in Indonesia. The review noted that studies exploring the factors at the individual level (especially maternal attributes such as age, education level, knowledge about breastfeeding, confidence to breastfeed) on the breastfeeding outcomes have been extensively explored. However, studies that focus on challenges to breastfeeding encountered by Indonesian mothers are rather limited. Other studies from outside of Indonesia have consistently found that breastfeeding challenges are commonly faced by mothers in the first six-month postpartum period (Abou-Dakn, Schafer-Graf & Wockel, 2009; Lamontagne, Hamelin & St-Pierre, 2008; Mallikarjuna et al., 2002). A study in Jakarta found that the experience of at least one lactation-related problem was associated with a 2.1 risk

(95% CI: 1.1-3.8) of not practicing exclusive breastfeeding (Februhartanty, Bardosono & Septiari, 2006).

As breastfeeding challenges and its related problems are likely to negatively influence breastfeeding performance, knowledge on what the problem is and when the problem starts to occur as well as the kind of support needed is essential for planning strategies to promote breastfeeding. Moreover, efforts to best capture valid information about these challenges and problems is of equal importance because their assessment is based on recall which relies on the mothers' memory. Combined knowledge of these two aspects is likely to assist in more effective efforts to provide solutions to the perceived problems. Therefore, the aim of this paper is to share the process of tool development for assessing breastfeeding challenges and problems among nursing mothers in an Indonesian setting. This research is part of a larger study with the objective of identifying the actual experience of the breastfeeding problems encountered during the first six months after delivery among mothers of infants aged 6-12 months in South Sulawesi, Indonesia.

METHODS

For the purpose of achieving the objective of the study on the breastfeeding problems experienced by post-partum mothers, the need for an additional tool to the structured questionnaire was identified by the authors. The concern was to be able to portray the actual experience based on mothers' recall of the experience. The experience of problems was assumed to be complex as they span a period of six months and as suggested by Hector *et al.* (2005) are layered by individual, group, and societal factors.

Adopting the recall process used in dietary assessment (Gibson, 2005), the authors of this study were keen to use

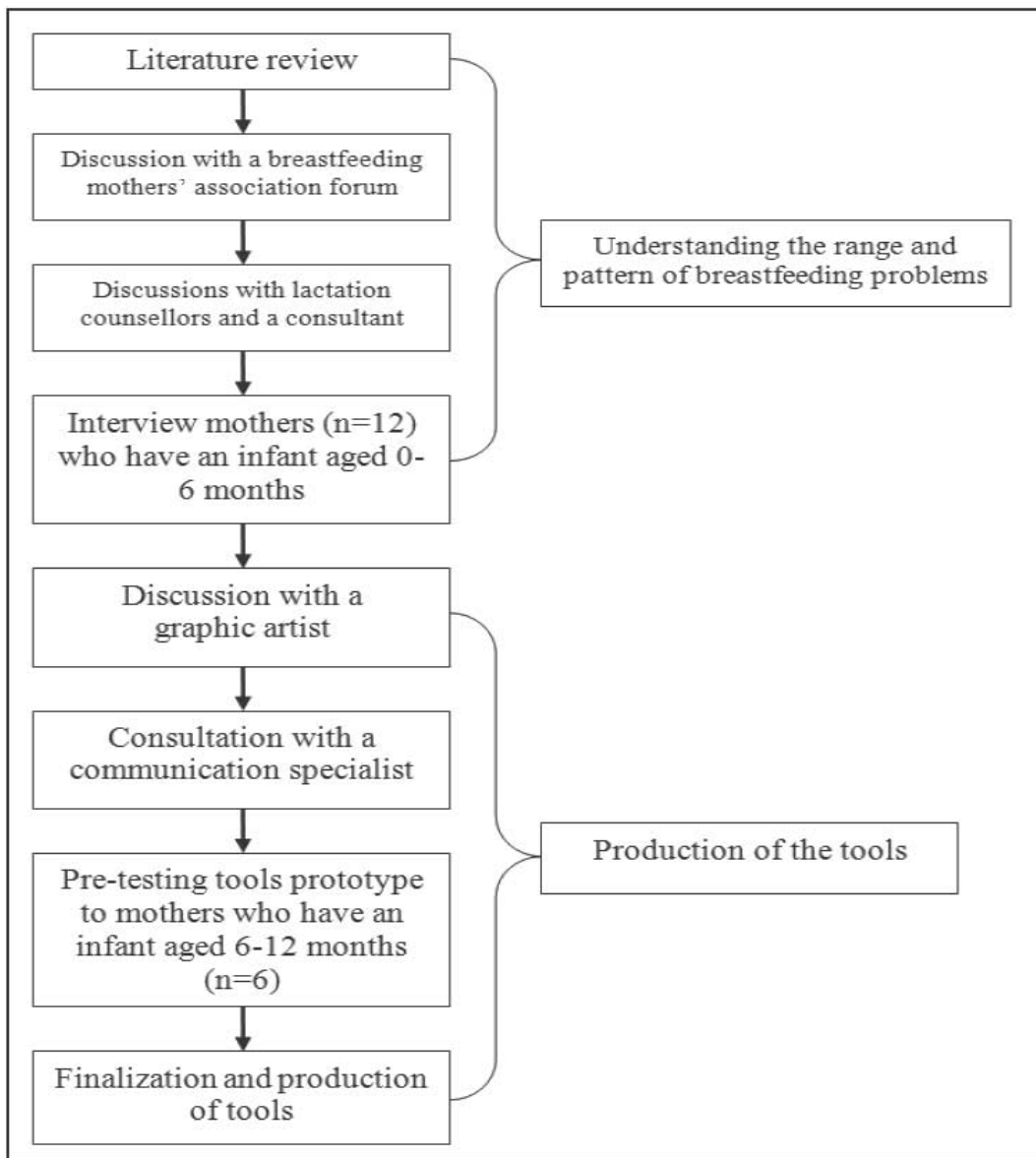


Figure 1. Two-stage development process of the flash cards

pictures to help the mothers recall their breastfeeding problems. No flashcards were available for the purpose required. The development of the tools involved two stages of preparatory work consisting of (1) understanding the range and pattern of breastfeeding problems, and (2) the production of the tools. Figure 1 shows in detail these steps.

Understanding the range and pattern of breastfeeding problems

The stage of understanding the concept of breastfeeding problems included undertaking a literature review, participating in a discussion about breastfeeding challenges in a forum organised by the breastfeeding mothers' association, talking to lactation counsellors,

Table 1. Range of breastfeeding problems gathered from literature review

<i>Problems related to physical and technical aspects</i>	<i>Problems related to psychological aspects</i>
1. Breast engorgement	1. Perception of low milk supply
2. Sore nipples or breasts	2. Feeling tired and fatigued
3. Plugged milk duct	3. Feeling emotionally upset
4. Nipple infection	
5. Mastitis	
6. Flat or inverted nipple	
7. Uncommon infant stools	
8. Insufficient infant weight gain	
9. Fuzzy baby	
10. Sleepy baby	
11. Sucking difficulties	
12. Latching on problems	
13. Breast refusal	

Source : Lamontagne *et al.* (2008); Abou-Dakn *et al.* (2009); Amir, Forster, Lumley *et al.* (2007); Februhartanty *et al.* (2006); Giugliani (2004); Mallikarjuna *et al.* (2002).

and carrying out in-depth interviews with a number of mothers of infants aged 0-6 months.

The information obtained from a literature review was used to prepare a list of the types of breastfeeding problems that occur within the first six months (Table 1). However, specific information which was related to when (or at what age of the infant) the problem was encountered was lacking. This was required to aid mothers' memory in recalling what and when the problems started to occur. In efforts to get detailed information about the type of breastfeeding problems based on the age of the infants, the first author participated in a discussion about breastfeeding challenges conducted by a prominent breastfeeding mother association in Jakarta called Asosiasi Ibu Menyusui Indonesia (AIMI) and had discussions with four lactation counsellors from Makassar, South Sulawesi where the main study was conducted and also with a lactation consultant (International Board Certified Lactation Consultant - IBCLC®) from Jakarta who is also the third author. Results of the discussions were used to further consolidate the listed problems in Table 1 with specific age-

group periods such as 0-1 month period, 1-3 month period, and 3-6 month period. As discussed with the third author, these three age categories are critical periods for breastfeeding. The period of 0-1 month is an adaptation stage between mother and infant, the period of 1-3 months is critical for maintaining breastfeeding practice especially when mother and infant must experience a separation for instance due to mother's returning to work and the period 3-6 months is a transition period between breastfeeding and introduction of complementary feeding. This period grouping was also considered helpful in facilitating mothers to recall their breastfeeding problems. In addition, problem types were categorised as either physical/technical or psychological. The problems were also categorised as either mother-centred or infant-centred. The pattern of breastfeeding problems based on age of the infant and categories of problems are presented in Table 2. The final step in this stage involved in-depth interviews with 12 mothers of infants aged 0-6 months (consisting of four mothers in each age group). The main purpose of the interviews was to gain an insight from

Table 2. Pattern of breastfeeding problems based on infant’s age and categories of problems

Categories of problems	Age of infants		
	Age 0-1 month	Age 1-3 months	Age 3-6 months
Related to physical and technical aspects	1. Sore nipple*	1. Sore nipple*	1. Sore nipple*
	2. Sick mother*	2. Breast engorgement*	2. Breast engorgement*
	3. No milk production*	3. Nipple infection*	3. Nipple infection*
	4. Icterus neonatum**	4. Sick infant**	4. Sick infant**
	5. Cesarean section*	5. Insufficient infant weigh gain**	5. Insufficient infant weigh gain**
	6. Breast engorgement*	6. Constipation**	6. Constipation**
	7. Fuzzy baby**	7. Flat or inverted nipple*	7. Flat or inverted nipple*
	8. Nipple infection*	8. End of maternity leave*	8. Busy mother *
	9. Sick baby **	9. Busy mother *	9. Sick mother*
	10. Not rooming-in*	10. Sick mother*	10. Improper breast feeding position*
	11. Sleepy baby**	11. Improper breastfeeding position*	11. Infant refusal to breastfeed**
	12. Flat or inverted nipple*	12. Infant refusal to breastfeed**	
	13. Improper breastfeeding position*		
	14. Latching difficulties*		
Related to psychological aspects	15. Tired and fatigued mother*	13. Low milk supply*	12. Low milk supply*
		14. Tired and fatigued mother*	

*Mother-centred; **Infant-centred

mothers on the actual challenges they had experienced within the continuum of breastfeeding practice. Mothers having infants with appropriate age groups who at least ever breastfed their current baby and lived in a nearby neighborhood of the first author were conveniently recruited for an in-depth interview. Based on the interviews, it was found that several problems were experienced only within the first month after delivery, while others occurred after the first month while several other problems persisted over the whole six months. These perspectives from the mothers were considered in line with the overall pattern of problems (Table 2), and therefore, confirmed the accuracy of our understanding on the range and pattern of the breastfeeding problems.

Production of the tools

After obtaining details on the type of breastfeeding problems, the next process was tools production. The stages of tools production involved discussions with graphic designers, consultation with communication practitioners, pre-testing the prototype of the tools, finalisation and production of the tools. Two graphic designers assisted the construction of the pictures about breastfeeding problems. Specific discussion was focused on how the breastfeeding problems should be addressed in the pictures and how the pictures should be culturally representative of the Indonesian setting. Furthermore, communication practitioners were also consulted on how to use the tools effectively. The communication

practitioners suggested that an explanatory text should be added to enhance the clarity of the breastfeeding problem depicted in the picture. To obtain optimum results, it was also suggested that each picture should be shown to each mother one by one according to each age period. Thus, accommodating the suggestions from the communication experts, the authors decided to use flash cards as additional tools during the interview.

Due to budget constraints, pretesting on six mothers with infants aged 6-12 months was conducted in Jakarta, and not in Maros District, South Sulawesi where the main study was conducted. However, since the experience of breastfeeding problems is common to most mothers as mentioned earlier and the objective of the pretesting was to understand the actual responses and inputs to the flash cards, this approach was considered acceptable. The results of the pretest suggested that mothers were able to identify the problems they experienced throughout the continuum of the first six-month period. The use of flash cards helped them to identify the actual problems they encountered. Mothers suggested that it would be easier to recall the experience of the breastfeeding problems if there was an explanatory text printed on each picture of the flash cards.

Based on all inputs, the final layout of the card was decided and flash cards were produced. The flash cards were divided into three parts consisting of breastfeeding problems in the period of 0-1 month, 1-3 months and 3-6 months. Each card had the following information:

- The title, the period of the breastfeeding problem
- Page number as the code of the breastfeeding problem
- Image of breastfeeding problems in the form of a visual
- Description of the breastfeeding problem placed below the visual

Figures 2-4 show flash cards for breastfeeding problems during the periods of 0-1 month (15 problems), 1-3 months (13 problems), and 3-6 months (13 problems) respectively in the Indonesian language with its English translation. Each set of the flash cards which represents an age period was distinguished from another age period by the use of different colour tones and different pictures of the child to show different age periods.

The flash cards were then used for actual data collection in a cross-sectional survey. The survey randomly recruited 205 mothers who had infants aged 6-12 months living in Maros District, South Sulawesi. The sample size was determined based on proportion of mothers experiencing breastfeeding problem from a previous study (Februhartanty, Bardosono & Septiari, 2006) with a confidence level of 95% and a precision of 5%. Four enumerators were trained on interview techniques using the structured questionnaire and in the use of the flash cards. Specific instructions on how to address the flash cards to the study subjects were given to each enumerator. These included showing each card for each subsequent age period to each subject and asking whether or not she experienced it, and allowing some time for the subject to recall the events.

Ethical approval

Ethical approval for the study was obtained from the Ethics Committee of the Faculty of Medicine, Universitas Indonesia. Permission from the local government as well as local health authority was solicited before the implementation of the study. As the involvement of the subjects and additional resource persons in this study was voluntary, strict confidentiality on their identity was maintained.

RESULTS

The subjects reported that the use of flash cards helped them to recall more easily the








 <p>MASALAH MENYUSUI PERIODE UMUR ANAK 0-1 BULAN</p>	 <p>UMUR 0-1 BULAN No. 1</p> <p>Nyeri saat menyusui</p>
<p>Breastfeeding problems during the period of 0-1 month</p>	<p>Sore nipple</p>
 <p>UMUR 0-1 BULAN No. 2</p> <p>Ibu lagi sakit</p>	 <p>UMUR 0-1 BULAN No. 3</p> <p>ASI tidak/belum keluar</p>
<p>Mother is ill</p>	<p>Breast milk does not flow out</p>
 <p>UMUR 0-1 BULAN No. 4</p> <p>Kulit bayi kekuningan</p>	 <p>UMUR 0-1 BULAN No. 5</p> <p>Ibu melahirkan dengan cara cesar</p>
<p>Baby gets jaundice</p>	<p>Baby delivered through caesarian section</p>
 <p>UMUR 0-1 BULAN No. 6</p> <p>Ibu capek dan letih</p>	 <p>UMUR 0-1 BULAN No. 7</p> <p>Ibu bingung atau tidak menemukan posisi menyusui yang nyaman</p>
<p>Fatigued mother</p>	<p>Improper breastfeeding position</p>

Figure 2 continued on next page

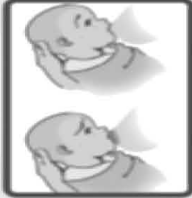







<p>UMUR 0-1 BULAN No. 8</p>  <p>Anak susah menetek (kesulitan pelekatan)</p>	<p>UMUR 0-1 BULAN No. 9</p>  <p>Payudara ibu bengkak</p>
<p>Latching difficulties</p>	<p>Breast engorgement</p>
<p>UMUR 0-1 BULAN No. 10</p>  <p>Bayi rewel/menolak menyusui</p>	<p>UMUR 0-1 BULAN No. 11</p>  <p>Puting lecet</p>
<p>Baby is restless and refuse to breastfeed</p>	<p>Nipple infection</p>
<p>UMUR 0-1 BULAN No. 12</p>  <p>Bayi lagi sakit</p>	<p>UMUR 0-1 BULAN No. 13</p>  <p>Waktu di RS, bayi dan ibu dipisah</p>
<p>Baby is ill</p>	<p>Mother and baby were separated after delivery in the hospital</p>
<p>UMUR 0-1 BULAN No. 14</p>  <p>Anak tidur terus</p>	<p>UMUR 0-1 BULAN No. 15</p>  <p>Puting terbenam</p>
<p>Sleepy baby</p>	<p>Flat or inverted nipple</p>

Figure 2. Flash cards for the period of 0-1 month






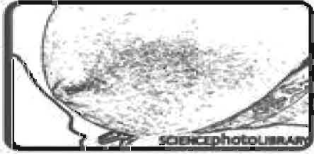


 <p>MASALAH MENYUSUI PERIODE UMUR ANAK 1-3 BULAN</p>	<p>UMUR 1-3 BULAN</p> <p>No. 1</p>  <p>ASI kurang</p>
<p>Breastfeeding problems during the period of 1-3 months</p>	<p>Low milk supply</p>
<p>UMUR 1-3 BULAN</p> <p>No. 2</p>  <p>Nyeri saat menyusui</p>	<p>UMUR 1-3 BULAN</p> <p>No. 3</p>  <p>Ibu capek dan letih</p>
<p>Sore nipple</p>	<p>Tired and fatigued mother</p>
<p>UMUR 1-3 BULAN</p> <p>No. 4</p>  <p>Ibu bingung atau tidak menemukan posisi menyusui yang nyaman</p>	<p>UMUR 1-3 BULAN</p> <p>No. 5</p>  <p>Payudara ibu bengkak</p>
<p>Improper breastfeeding position</p>	<p>Breast engorgement</p>
<p>UMUR 1-3 BULAN</p> <p>No. 6</p>  <p>Bayi rewel/menolak menyusui</p>	<p>UMUR 1-3 BULAN</p> <p>No. 7</p>  <p>Puting lecet</p>
<p>Infant is restless and refuse to breastfeed</p>	<p>Nipple infection</p>

Figure 3 continued on next page

<p>UMUR 1-3 BULAN</p> <p>No. 8</p>  <p>Bayi lagi sakit</p>	<p>UMUR 1-3 BULAN</p> <p>No. 9</p>  <p>Berat badan bayi tidak naik-naik</p>
<p>Baby is ill</p>	<p>Insufficient infant weight gain</p>
<p>UMUR 1-3 BULAN</p> <p>No. 10</p>  <p>Bayi susah buang air besar</p>	<p>UMUR 1-3 BULAN</p> <p>No. 11</p>  <p>Puting terbenam</p>
<p>Constipation</p>	<p>Flat or inverted nipple</p>
<p>UMUR 1-3 BULAN</p> <p>No. 12</p>  <p>Masa cuti sudah habis</p>	<p>UMUR 1-3 BULAN</p> <p>No. 13</p>  <p>Ibu sibuk bekerja</p>
<p>End of maternity leave</p>	<p>Mother is busy working</p>

Figure 3. Flash cards for the period of 1-3 months









 <p>MASALAH MENYUSUI PERIODE UMUR ANAK 3-6 BULAN</p>	 <p>UMUR 3-6 BULAN No. 1</p> <p>ASI kurang</p>
<p>Breastfeeding problems during the period of 3-6 months</p>	<p>Low milk supply</p>
 <p>UMUR 3-6 BULAN No. 2</p> <p>Nyeri saat menyusui</p>	 <p>UMUR 3-6 BULAN No. 3</p> <p>Ibu capek dan letih</p>
<p>Sore nipple</p>	<p>Fatigued mother</p>
 <p>UMUR 3-6 BULAN No. 4</p> <p>Ibu bingung atau tidak menemukan posisi menyusui yang nyaman</p>	 <p>UMUR 3-6 BULAN No. 5</p> <p>Payudara ibu bengkak</p>
<p>Improper breastfeeding position</p>	<p>Breast engorgement</p>
 <p>UMUR 3-6 BULAN No. 6</p> <p>Bayi rewel/menolak menyusui</p>	 <p>UMUR 3-6 BULAN No. 7</p> <p>Puting lecet</p>
<p>Infant is restless and refuses to breastfeed</p>	<p>Nipple infection</p>

Figure 4 continued on next page



Figure 4. Flash cards for the period of 3-6 months

event of the breastfeeding problems. Table 3 shows the dynamic characteristics of the problems and their magnitude. It shows that all mothers had experienced at least one breastfeeding problem in the first 6 months. It also reveals that the proportion of problems experienced gradually decreased with increasing age of infants, that is, 96.1% during the first month, 81.0% during 1-3 months and 79.5% during 3-6 months. An equal proportion (between 23.9% - 32.2%) of mothers had experienced a single problem throughout these age periods, but the proportion of mothers who reported more than three problems was 28.2% in the first month, but this figure decreased sharply during the 1-3 and 3-6 month periods (9.8% and 9.3% respectively). As many as 11 problems were reported during the first month, which was the

highest compared to those reported in the subsequent periods (9 vs 7 problems during 1-3 and 3-6 month periods). Table 3 also indicates the major type of breastfeeding problems reported by these mothers. The top five problems experienced within the first month included sore nipple, no milk production, tired and fatigued mother, breast engorgement, and sleepy baby. No milk production and sleepy baby were typically experienced only within the first month. Problems reported by mothers as persisting beyond the infant's age of one month were low milk supply, busy mother and constipation of infants. These three problems were reported at about similar proportions during the 1-3 month and 3-6 month periods suggesting the continuity of the problems. Problems like sore nipple, tired and fatigued mother,

Table 3. Characteristics and magnitude of the breastfeeding problems based on the flash cards

Description	Age		
	0-1 month	1-3 months	3-6 months
Total subjects experienced at least one problem (n=205), n (%)	197 (96.1)	166 (81.0)	163 (79.5)
Number of problems experienced (n=205), n (%)			
none	8 (3.9)	39 (19.0)	42 (20.5)
1 problem	49 (23.9)	65 (31.7)	66 (32.2)
2-3 problems	90 (43.9)	81 (39.5)	78 (38.0)
>3 problems	58 (28.3)	20 (9.8)	19 (9.3)
Maximum number of problems experienced	11	9	7
Major type of breastfeeding problems ¹ , n (%)	n=197	n=166	n=163
Sore nipple	113 (57.4)	21 (12.7)	15 (9.2)
No milk production	103 (52.3)	0	0
Mother fatigued	62 (31.5)	59 (35.5)	54 (33.1)
Breast engorgement	55 (27.9)	20 (12.0)	7 (4.3)
Sleepy baby	50 (25.4)	0	0
Sick baby	23 (11.7)	77 (46.4)	109 (66.9)
Low milk supply	0	53 (31.9)	51 (31.3)
Mother busy	0	25 (15.1)	22 (13.5)
Infant refusal to breastfeed	27 (13.7)	24 (14.5)	17 (10.4)
Infant constipation	0	20 (12.0)	19 (11.7)

¹Multiple response

breast engorgement, ill baby, infant refusal to breastfeed were reported to persist throughout the six months. However, the proportion of mothers who reported having experienced sore nipple and breast engorgement gradually decreased as the infant grew older. On the other hand, the proportion who reported of sick baby gradually increased with increasing age of the infants. In addition, problems which persisted throughout the 6-month period were fatigued mothers (31.5% - 35.5%) and infant refusal to breastfeed (10.4% - 14.5%). Both these problems reached their peak during the 1-3 month period (35.5% mother fatigue vs 14.5% infant refusal to breastfeed).

DISCUSSION

In the past, some breastfeeding studies focused on specific problems such as mastitis (Amir *et al.*, 2007), or psychological stress (Abou-Dakn *et al.*, 2009). Other studies used another approach of listing all possible breastfeeding problems and requested nursing mothers to respond 'yes' or 'no' to experiencing the listed problems (Februhartanty *et al.*, 2006; Lamontagne *et al.*, 2008). One study categorised any mother who had initiated feeds other than her milk as having breast feeding problems (Mallikarjuna *et al.*, 2002). The present study focused on listed breastfeeding problems gathered from a comprehensive process with the purpose of obtaining information about post-partum mothers experiencing breastfeeding problems within the continuum of the first six months. Previous studies (Mallikarjuna *et al.*, 2002; Giugliani, 2004; Februhartanty *et al.*, 2006; Amir *et al.*, 2007; Lamontagne *et al.*, 2008; Abou-Dakn *et al.*, 2009) offer a limited explanation on the pattern of breastfeeding problems in terms of the onset of such problems. By using flash cards as one of the research tools, this study was able to draw patterns of breastfeeding problems and identify problems typical of the 0-1 month period, or problems which persisted

throughout the whole six-month period.

It is important to be able to accurately document breastfeeding problems and challenges encountered by nursing women. Knowledge on what the problem is and when the problem started to occur is essential for further identification of the type of support needed to address the problem. Februhartanty *et al.* (2006) suggest that by identifying these problems more accurately, further recommendations on relevant support provided by health personnel or lay support people (i.e. husband, other family members, friends, etc.) may be addressed since not all problems require medical assistance. Giugliani (2004) and Februhartanty (2011) state that such problems if identified early may be prevented from occurring, or if a problem occurs, a solution may be promptly sought in order not to jeopardise the continuation of breastfeeding. According to Mallikarjuna *et al.* (2002), the first week to 1 month of an infant is the 'crucial period' for 'success or failure' of breastfeeding. Therefore, Lawrence and Lawrence (2005) note that understanding the time when a breastfeeding problem starts to occur and the duration the problem persists is significant if efforts are to be extended to minimise the likelihood that the problem encountered will negatively influence breastfeeding performance.

The experience of tools development involving expertise beyond nutrition and/or public health fields (i.e. graphic design and communication) was interesting yet challenging. It involved being critical yet open-minded for the different expertise to meet and accomplish tools development in a comprehensive manner. Too much of artistic work which may divert the focus of the pictures was common in the first stage of the sketching process. There was a clear need to ensure the artist focused on the main description of the picture. On the other hand, being open-minded to listen to inputs from an experienced communication media specialist was equally important to

be able to come up with useful tools for a sound process of data collection.

The use of flash cards to aid in the assessment of the dynamics of breastfeeding problems led to comprehensive information being gathered. However, one limitation of the study was that we cannot confirm the likelihood of over-reporting of breastfeeding problems by using the flash card method.

In conclusion, the present study successfully revealed the dynamics of the breastfeeding problems as well as the pattern of the problems over a six-month period. The present study offers the potential of using similar procedures to capture breastfeeding problems in the context of countries similar to Indonesia. Finally, information gathered through the use of the flash cards could be used by government and other stakeholders to develop better strategies to help nursing mothers overcome their breastfeeding problems.

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