



Common Reasons for Discontinuing Early Breastfeeding Initiation

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Abstract

Breastfeeding confers numerous benefits for mother and infant, but regrettably, most mothers discontinue breastfeeding before their babies achieve six months of age due to subjective reasons. This study aims to identify several problems and constraints in promoting exclusive breastfeeding in South Sulawesi, Indonesia from January until June of the year 2013. This study used a cross-sectional study among 218 mothers using purposive sampling method. The correlation among variables was analyzed using chi-square test and logistic regression. Descriptive analysis was used to identify the reasons why mothers ceased breastfeeding and choose formula milk. Based on the regression analysis, it was shown that early breastfeeding initiation was the most influential variable to breastfeeding (OR:3.43, 95% CI:1.95-6.05). The most common reason to discontinue breastfeeding was nipple problem due to lower knowledge in giving breastfeeding and breast care. The main problem is not all birth attendants could support the initiation of early breastfeeding as the routine health activity. Several strategies should be conducted to change their behavior by increasing skills of counseling and knowledge on breastfeeding through the implementation exclusive breastfeeding policies at the Primary Health Care Clinics.

Keywords: Early breastfeeding initiation; Exclusive breast-milk; Discontinuing Breastfeeding.

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1. Introduction

There is extensive evidence of the benefits of breastfeeding for infants and mothers, particularly exclusive breastfeeding for the first six months of life, provides better health for both infants and mothers by preventing diseases and promoting health in the short and long term [1]. Exclusive breastfeeding for the first 6 months of life is the best nutrition for infants [2], improving child survival and it is a cost-effective public health measure that significantly impacts infant morbidity and mortality in developing countries [3]. Breastfeeding behaviour had its own complexity regarding interactions between psychological, socio-demography, and fisiological. Remained gap between exclusive breastfeeding practices and recommendations, challenges on the sidelines of the process given a risk for mother to stop breastfeeding before six month.

The reasons for discontinuing breastfeeding are caused by internal and external factors. Internal factor consist of mother-centered factors and baby-centered factors. On the contrary, external factor is caused by social environment. Mother-centered factors include breast problems such as sore nipples or mother's perceptions that she is producing inadequate milk [4-8]; nipple shape, pain, or damage [4]; birth related pain, type of pain relief used in labour and fatigue [9]; societal barriers such as employment and length of maternity leave [10]; type of delivery, parity, alcohol consumption, occupation, education, and breast problems [11]; inadequate breastfeeding knowledge [5]; maternal mobility limitations, positioning difficulties, and frustration at the need for assistance [12]; and lack of family and social support, lack of guidance and encouragement from health care professionals [8, 13, 14]. On the other hand, baby-centered factors can include sleepiness, poor or disorganized suck, demanding behaviour, dehydration evidenced by excessive birth weight loss, and hypoglycaemia [4, 15].

Besides internal factor as stated above, the reasons for discontinuing breastfeeding are affected by external factors, especially the increased marketing of formula and non-formula milk [16]. The advertising, though attractive, highly convincing and sometimes subtle, is thoroughly misleading. Mothers choose feeding their children are attracted by the new products on display. They may not be able to tell the difference between appropriate and inappropriate products. This is an old but well-known problem that has not been resolved. The advertising and use of breast-milk substitute (BMS) has a strong negative impact on child survival [16]. The attractiveness of BMS is of concern in low income countries as these products become increasingly available [17].

Breastfeeding issues at the global level among mothers corresponding to the national level in Indonesia. To date, the figures of breastfeeding mothers in Indonesia are not good enough, as shown in the report of national health survey of the year 2010 regarding the pattern of breastfeeding among mothers since postpartum until babies achieve 23 months of age based on the analysis of composite questions on exclusive breastfeeding among mothers.

There are three categories of the breastfeeding pattern stated in the report of Riskesdas of the year 2010, i.e. exclusive, predominant, and partial breastfeeding that refer to the WHO's definition. The percentages of babies (0 month of age) for exclusive, predominant, and partial breastfeeding are 39.8%, 5.1% and 55.1% respectively. The number of babies given by exclusive breastfeeding is lower in line with the increase of age among groups of

babies. Exclusive breastfeeding among babies for 5 months of age is only 15.3%, predominant breastfeeding is 1.5% and partial breastfeeding is 83.2% respectively. At the regional level, South Sulawesi Province, the initiation of early breastfeeding lower than 1 hour is 30,1% and the 1-6 hour interval is 34.9% [18].

Promoting early breastfeeding initiation requires an assessment of why mothers cease early breastfeeding initiation based on internal and external factors to seek the effective method in resolving problems and constraints in implementing early breastfeeding among mothers. Concerning to this issue, this study aims to identify the reasons for discontinuing the exclusive breastfeeding among mothers in South Sulawesi, Indonesia.

2. Method

This study used a cross-sectional analysis concerning the reasons for discontinuing breastfeeding among mothers and their decisions chose formula milk as the breastfeeding alternative for their babies.

The study was conducted among 218 breastfeeding mothers at the Primary Health Care Clinics at Bajoe in South Sulawesi Province. The subject were selected purposively, mothers who enrolled in this study were eligible to be included in the analysis and fulfilled the criteria of normal child-birth, attended by midwives, fulfill a minimum antenatal care visit, and without anatomical defects of breast.

The babies at the 6-to-12 month age interval were not exhibit anatomical problem of mouth after birth such as labioschisis, they were not born in either premature or dismature condition with birth weight <2500 gram. This study was carried out from January until April of the year 2013. The data were gathered using the structured questionnaires regarding breastfeeding. Socio-demographic variables analyzed in this study were sosio-demography of respondents. viz., marital age, maternal age, parity, educational background, working mother, place to stay, family structure, gender of baby, place of birth, delivery attendant, initiation of early breastfeeding, and onset of lactogenesis.

The data were analyzed using bivariate that applied chi-square test and multivariate multiple logistic regression models. Descriptive analysis was used to analyze the reasons among mothers discontinued breastfeeding and choose formula milk to identify their motives why they choose formula milk as the breast-milk substitute.

3. Result

Of the 243 mothers who were screened for eligibility, 25 participants were not eligible (16 participants changed their residence, 9 participants did not completely fill the structured questionnaires) and other participants who accomplished the the structured questionnaires were 218 mothers.

All participants enrolled in the study had surpassed the breastfeeding period for 6 months, and most of them did not give breast-milk. Only a few of all participants attempted to fulfill breastfeeding for 6 months derived from the recommendation of health practitioners. Based on in-depth interviews conducted in this study, there were several reasons why mothers discontinued breastfeeding and preferred choosing formula milk.

Table 1: Socio-demographic characteristics of the cohort stratified based on the classification of exclusive breastfeeding (EB) and breast-milk substitute (BMS).

Characteristics	Overall (n=218)	Exclusive Breastfeeding (n=107)	Breast-milk Substitute (n=111)	P value*
Marital Age				
Lower Risk (≥ 17 th)	194(100.0)	91(46.9)	103(53.1)	0.068
Higher Risk (≤ 16 th)	24(100.0)	16(66.7)	8(33.3)	
Maternal Age				
≤ 19	20(100.0)	14(70.0)	6(30.0)	0.074
20-34	170(100.0)	77(45.3)	93(54.7)	
≥ 35	28(100.0)	16(57.1)	12(42.9)	
Parity				
Multiparous	100(100.0)	60(50.8)	58(49.2)	0.589
Primiparous	118(100.0)	47(47.0)	53(53.0)	
Educational Background				
Basic	160(100.0)	82(51.3)	78(48.8)	0.322
Middle	37(100.0)	14(37.8)	23(62.2)	
Higher	21(100.0)	11(52.4)	10(47.6)	
Working Mother				
Housewife	189(100.0)	91(48.1)	98(51.9)	0.481
Outside Worker	29(100.0)	16(55.2)	13(44.8)	
Place to Stay				
Own House	121(100.0)	57(47.1)	64(52.9)	0.515
Parent/In Law/Rent	97(100.0)	50(51.5)	47(48.5)	
Family Structure				
Nuclear	107(100.0)	50(46.7)	57(53.3)	0.495
Extended	111(100.0)	57(51.4)	54(48.6)	
Gender of Baby				
Male	107(100.0)	48(45.7)	57(54.3)	0.495
Female	111(100.0)	59(52.2)	54(47.8)	
Place of Birth				
Home Birth	176(80.7)	89(50.6)	87(49.4)	0.464
Primary Health Care Clinic	7(3.2)	2(28.6)	5(71.4)	
Hospital	35(16.1)	16(45.7)	19(54.3)	
Delivery Attendant				
Midwife	192(100.0)	99(51.8)	93(48.4)	0.047
Traditionals Birth Attendant	26(100.0)	8(30.8)	18(59.2)	
Initiation of Early Breastfeeding				
Yes	103(38.1)	45(20.6)	38(17.4)	0.234
No	135(61.9)	62(28.4)	73(33.5)	
Onset Lactogenesis				
Within 24hr	106(48.6)	53(24.3)	53(24.3)	0.892
After 24hr	112(51.4)	54(24.8)	58(26.6)	

* p value correspond to chi-square test

It was observed that there were statistically significant differences of the socio-demographic characteristics among respondents when they were grouped on the basis of the classification of exclusive breastfeeding and breast-milk substitute chosen. Overall, most marital age among respondents was above 17 years old as an inadequate immature period for their emotional balance and physical maturity, especially in taking roles as a mother. Generally, respondents got married above 17 years old, and they were relatively classified an immature age period in bearing household and social responsibilities. Young married women present poor ability in giving birth when they come close to the pregnancy period. Young pregnant women who had immature reproduction

organs might cause several problems during giving birth such as BBLR and long partum. Although respondents generally got pregnant at the normal reproduction age, approximately 9% of them had higher risk during their pregnancy. Nearly 12.8% of the respondents achieved pregnancy at 35 years of age or older where the older age of respondents during pregnancy could reduce the function of female reproductive organs that might cause potential problems during parturition such as hemorrhaging and complication of fetus position. Nevertheless, the availability of health labor forces and the improvement of nutrition status, the risk for older pregnant women could be resolved. The number of babies born by primiparous mothers who chose both exclusive breastfeeding (50.8%) and breast-milk substitute (49.2%) was almost equivalent with those born by multiparous mothers (2 to 4 babies) who chose both exclusive breastfeeding (47.0%) and breast-milk substitute (53.0%) referred to the maternal age, duration of birth and marital age. The number of respondents as the outside worker (either civil servant or non-government labor) showed higher proportion chose exclusive breastfeeding (55.2%) than those as housewives (48.1%) and lower proportion chose breast-milk substitute (44.8%) than those as housewives (51.9%). Household financial self-sufficiency was shown at the average number of respondents who had their own houses. The Number of respondents who chose both exclusive breastfeeding (46.7%) and breast-milk substitute (53.3%) was approximately equals with those of extended family who chose both exclusive breastfeeding (51.4%) and breast-milk substitute (48.6%) respectively. Referring to the gender of baby, the number of male babies who had both exclusive breastfeeding (45.7%) and breast-milk substitute (54.3%) approximately equals with female babies who had both exclusive breastfeeding (52.2%) and breast-milk substitute (47.8%) respectively. Most respondents chose parturition at home assisted either by midwife and traditional attendant. Decision to decide parturition at home not only considering better physiological condition, but also reducing costs of hospital services outside the national social security, such as transportation cost and other extra costs during child-birth at the hospital. The number of respondents who conducted the initiation of early breastfeeding was higher chose exclusive breastfeeding (20.6%) than those who chose breast-milk substitute (28.4%), whereas, the number of respondents who did not perform the initiation of early breastfeeding was lower chose exclusive breastfeeding (28.4%) than those who chose breast-milk substitute respectively. The number of child-birth through the initiation of early breastfeeding was much lower than as hoped, the duration for the initiation of early breastfeeding with 15.45 minutes at an average which means the implementation of early breastfeeding initiation was not equivalent with 30-60 minutes as the minimum duration of early breastfeeding initiation [19]. Production of breast-milk occurred at the second day of postpartum. Based on the analysis of this study, it was found that delivery attendant was the significant variable correlated to both the initiation of early breastfeeding and exclusive breastfeeding. The analysis of multivariate using multiple regression models consisted of three steps, i.e. all variables were clustered into single analysis unit, each variable with significant value ($p > 0.25$) was eliminated from the analysis and then the backward method was used after the analysis of the resulted confounder and interactions among variables to express the final equation, as shown in Table 2. Based on the data in Table 2, the initiation of early breastfeeding for one hour of postpartum affected both the continuation of exclusive breastfeeding and its duration. Giving birth with the initiation of early breastfeeding had 3.4 times more likely to be success than without the initiation of early breastfeeding. Place to stay gave also the effect of breastfeeding pattern for babies. The failure rate was higher among mothers who carried out breastfeeding, whereas, the crowdedness of family members who stay at home had 0.7 higher more likely failure for mothers who conducted exclusive breastfeeding.

Table 2: Results of the analysis of multiple logistic regression models

No	Variable	B	SB	Wald	P value	OR (95%CI)
1.	Early breastfeeding initiation	1.235	0.289	18.269	0.001	3.437(1.951-6.054)
2.	Place to stay	-0.265	0.157	2.839	0.092	0.767(0.564-1.044)
3.	Constant	-1.408	0.494	8.122	0.004	

p<0.05

Table 3: The reasons for discontinuing early breastfeeding and choosing breast-milk substitute

Reason for Discontinuing Breastfeeding	(n=218)
Reason to stop breastfeeding	
Small amount of breast-milk	54(24.8)
Squirt breast-milk	91(41.7)
Breast-milk ejection stop	67(30.7)
Flat nipple	71(32.6)
Large nipple	101(46.3)
Nipple crack	90(41.3)
Swollen breast	81(37.2)
Mother under medication treatment	76(34.9)
Time to stop	79(36.2)
Anxiety	78(35.8)
Back to work	29(13.3)
Poor lactation technique (position)	76(34.9)
Breastfeeding is time-consuming	83(38.1)
Household work-over burden	82(37.6)
Reason for using formula feed	
Babies refusal	77(35.3)
Babies under medication treatment	79(36.2)
Baby cries (unable to calm the baby)	79(36.2)
Unsatisfied baby	73(33.5)
Not enough babies weight gain	77(35.3)
Recommendation in giving formula derived from	
Midwife	78(35.8)
Members of family	47(21.6)
Friend (among mothers)	53(24.3)
The way mother treat pacifier used	
The pacifier must be sterilized	55(25.2)
Frequent of formula feed	
According to packaging instruction	43(19.7)
Following doctors recommendation	40(18.3)
Depends on babies appetite	31(14.2)
Following friends recommendation	49(22.5)
Mother perception to formula	
Similar to breast-milk	40(18.3)
Formula feed babies smarter than breastfed babies	56(25.7)
Formula feed babies have better weight gain	53(25.2)
The more expensive it price the more prestige they get	63(28.9)

As shown in Table 3, the frequent reasons cited for the cessation of early breastfeeding were “large nipple” (43.6%), “squirt breast-milk” (41.7%) and “nipple crack” (41.3%) respectively. Other reasons found to be associated with the discontinuation of early breastfeeding were “time-consuming” (38.1%), “household work-over burden” (37.6%), “time to stop breastfeeding” (36.2%), “anxiety” (35.8%) and “mother under medication treatment” (34.9%). Several respondents expressed their opinions at least three reasons why they discontinued breastfeeding.

4. Discussion

Midwife has an important role in counseling mothers in the process of lactation and giving nutrition for their baby. Although this role is significantly important, midwife should be supported by adequate education and training, especially on the issues of breastfeeding, up-date knowledge, strategies in handling patients and other health skills. The initiation of early breastfeeding at the level of district government as depicted in this study should be realized through their competency to do socialization, but this activity was represented by senior midwives only. After socialization, there was not any follow-up action on the monitoring, seeing that they did not realize various new policies, especially the common policies concerning the support to conduct responsibilities at the initiation of early breastfeeding.

As a public health servant, services conducted by a midwife plays main role at the “*Primary Health Care Clinics*” (Puskesmas) as the prime mover to implement the health program for mothers and babies in resolving the deprivation of health care services for the whole society at both the middle and lower social levels. Regarding the health role represented by traditional birth attendants who have the role for traditional perspectives, bearing the role connected to the traditional truth among local people, especially for saving life mothers and their babies during parturition. The role of traditional birth attendant in assisting baby-birth is still considered important as the main choice [20]. To fill the gap of preference among people, the collaboration should be created between midwife and traditional birth attendant to achieve the same perception in giving health services, especially in performing the counseling of breastfeeding.

The initiation of early breastfeeding gives the main effect in choosing exclusive breastfeeding and duration of breastfeeding. Several studies [21, 22] also give evidences that early breastfeeding can increase the outflow of breast-milk and prevent late lactogenesis II. It is also the important factor whether the mother will give either longer or shorter duration of breastfeeding. Besides the socio-demographic factor such as place to stay and the number of families who lived with her, her tendency stayed with their parents or parents-in law at home showed much higher failure to carry out exclusive breastfeeding. It is not denying that parents especially grandmother plays a central role as an adviser to younger mothers in nurturing their children as an experienced caregiver, especially when the younger mother back outside to work without asking her consideration. This fact is stated in several studies that the grandmother has role as a culturally designated caregiver [23].

Those reasons could be deeply analyzed into three main effecting factors, viz., physical nuisances, subjective perception of the mother and external factors. Physical nuisances are affected by poor lactation technique (position), swollen breast, nipple crack and these factors can be resolved by performing right breastfeeding

position due to poor latch of nipple during breastfeeding that lumps the transfer of breast-milk [24]. During parturition and breastfeeding, the breastfeeding mother shows her emotional and physiological instability for confused information derived from her parents that weaken her commitment to do regular breastfeeding. Moreover, she may entrust her parents to bring up her baby, and such a condition the grandmother sometimes unexpectedly gives formula milk to her baby as the mother forgets supplying its stock or its stock is indeed exhausted.

Generally, the mother does not have adequate knowledge and competence to find an alternative way to drain and supply her breast-milk [25]. Support from the father enhances decisions of the mother to sustain breastfeeding at postpartum, replacing her role to do household maternal activities, or interchangeably bear duties keeping her baby to give sufficient time for her to rest. The support derived from the father is an important factor in the transition phase to do dual roles as the wife and the household mother [26, 27]. Mistaken perception of the mother on the small amount of breast-milk or the cessation of breast-milk production at the early postpartum can be resolved by performing the education and counseling during pregnancy. One of the supports conducted by midwife is sharing available and precise information as the social support to correct long-established mistakes as an effective approach to enhance breastfeeding practices [28, 29]. But however, this social support was not properly conducted considering several midwives as proven in this study just exactly recommended formula milk among mothers who moaned their breastfeeding. The decision of respondents to chose formula milk was sustained for their reasons that breast-milk was not satisfied for their babies, their babies cried (unable to calm them) and respondents took decision by giving formula milk. In a qualitative study, the most reason why mothers choose formula milk before their babies achieve 6 months of age is her perception that her breast-milk is small amount of breast-milk, unsatisfied babies in demanding breast-milk [30]. Several mothers perceived formula milk has equal quality with breast-milk and even considered more expensive it price the more quality than breast-milk. Many mistaken perceptions among breastfeeding mothers are considered as the important problems in promoting breast-milk. Correcting the mistaken perception is the main target to be resolved seriously to change the knowledge and truth of the mother although maternal health programs are properly designed in cautious decisions. Whole intervention is needed in resolving both internal and external problems to embody the implementation of breastfeeding, where society health-based intervention is the effective way in giving the number of breast-milk and its duration [31]. If all efforts are conducted are not satisfied as hoped, then the alternative way is consuming formula-milk by giving good education and counseling on how to give healthy food, hygiene diet before babies achieve 6 months of age. It is also important to give directions on how to prepare extra diet for babies who achieve more than 6 months of age [16].

5. Conclusion

The initiation of early breastfeeding should be conducted at every normal birth of baby. This approach should be focused on the assistance of delivery attendants, and they should showing positive perception and commitment at the initiation of early breastfeeding. The common reasons derived from the mother and external pressures should be resolved by increasing the counseling of lactation at the *Primary Health Care Clinics* during pregnancy involving her family members.

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