

# Finding The Needs of Breastfeeding Mother Accompaniment for Successful Exclusive Breastfeeding Until 6 Months in Semarang City: A Mixed Method

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**Abstract.** Exclusive breastfeeding for the first 6 months of life is important to prevent nutritional problems. WHO has recommended that all babies should be exclusively breastfed for the first 6 months of life. However, its practice in Indonesia is not optimal yet (38%). The aim of this study to assess the characteristics of breastfeeding accompaniment needed by exclusive breastfeeding mothers for the success of exclusive breastfeeding until 6 months. This study used mixed methods, both a cross-sectional survey of 148 mothers breastfeeding infants aged over six months in five PHCs with low level of exclusive breastfeeding coverage and unstructured interviews were conducted by ten PHC midwives in five PHC areas. Most of breastfeeding mothers were housewives, multipara, secondary education, and only (33,8%) breastfeed exclusively. The characteristics of accompaniment needed included scheduled home visits by companion (73.0%), providing information with direct practice by companion and according to the problems experienced by the mothers (77.8%), and accompaniment conducted 0-6 postpartum (85.8%). The qualitative findings that home visits to postpartum mothers by companion carried out only once or twice during the postpartum period with a focus on infant health. In conclusion, most of breastfeeding mothers still need accompaniment during the breastfeeding exclusive period or until 6 months postpartum.

## 1 Introduction

Based on WHO data, it is known that less than half of infants worldwide are exclusively breastfed [1]. In Indonesia, data revealed that babies aged 4-5 months after birth who are exclusively breastfeed have only reached 38% [2,3]. The study results have indicated several critical success factors for exclusive breastfeeding, including knowledge [4,5], attitudes, and support for breastfeeding [4,6]. Knowledge is also a determining factor for successful breastfeeding in several other countries, such as Myanmar [7] and Sri Lanka [8]. In addition,

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a systematic review found that inadequate support was a factor in the failure of exclusive breastfeeding [9,10].

Although breastfeeding is a natural behavior possessed by postpartum mothers, its implementation has many obstacles. The quite long of breastfeeding period makes mother need adequate support for the success of exclusive breastfeeding [11]. Adequate accompaniment can also increase the likelihood of exclusive breastfeeding for up to six months [12]. Primary Health Care, as a primary health care provider, has attempted to provide breastfeeding education through the establishment of pregnancy class [13,14] and postnatal home visits. However, due to the limited number of health workers, the period and frequency of accompaniment provided are still very limited [14].

On the other hand, the recent COVID-19 pandemic has impacted changes to the health care system. One of them is postpartum maternal health services. Health services are done through online communication, and limited visits to health care facilities are carried out when necessary during the postpartum period [15,16]. Previously, health services for postpartum mothers were conducted through direct home visits. Breastfeeding mothers also felt that adequate accompaniment provided during breastfeeding could increase their self-confidence [17]. Moreover, the accompaniment provided could give satisfaction to mothers during breastfeeding [18]. Therefore, an overview is needed to find the characteristics of breastfeeding accompaniment needed by breastfeeding mothers to increase for successful exclusive breastfeeding.

## 2 Material and methods

This study used a mixed method design with an explanatory-sequential approach, where data collection was carried out quantitatively and complemented qualitatively [19]. Quantitative data collection was carried out in a survey with a cross-sectional approach, while qualitative data collection was carried out with unstructured interviews. The study was conducted in Semarang City, in five selected PHC areas with the lowest exclusive breastfeeding coverage, below the target of achieving exclusive breastfeeding coverage and experiencing a decline in the last two years [20].

The population in this study was breastfeeding mothers with infants older than 6 months. The minimum sample calculation used binominal proportions with an unknown population [21], using proportion of exclusive breastfeeding 49,3% [4], with an alpha value of 0.05 and 95% confidence level. After the calculation, the minimum sample size in this study was 148 respondents. Then, the sampling technique employed purposive sampling, with inclusion criteria: a minimum of secondary education, ability to read and write, previous breastfeeding experience, and were willing to be respondents in the study. Meanwhile, the informants involved in qualitative data collection were ten PHC midwives.

The research variable in this study was the accompaniment breastfeeding needed by breastfeeding mothers for the success of exclusive breastfeeding, defined as a process of accompaniment activities provided by the breastfeeding companion that are needed by mothers in identifying their needs and supporting the success of exclusive breastfeeding until 6 months. Breastfeeding accompaniment needed was identified through four aspects, namely breastfeeding accompaniment method, breastfeeding accompaniment period, breastfeeding accompaniment media, and breastfeeding accompaniment subject.

Breastfeeding accompaniment method is defined as mother's needs regarding the breastfeeding accompaniment method through home visit provided by the companion:

scheduled or unscheduled home visit. Breastfeeding accompaniment period is defined as mother's needs regarding the duration of breastfeeding accompaniment provided by the companion: during puerperium or during 3 months postpartum or during 6 months postpartum. Breastfeeding accompaniment media is defined as mother's needs regarding the media that is used the companion to provide accompaniment: direct practice or online media communication or leaflet or module. Breastfeeding accompaniment subject is defined as mother's needs regarding some subjects of breastfeeding accompaniment provided by the companion: exclusive breastfeeding or correct breastfeeding position and attachment or breastfeeding problems and how to overcome them, etc.

Questionnaires and unstructured interview guidelines were used as instruments to collect data. The instruments were compiled and developed based on a literature review to identify the characteristics of accompaniment needed by breastfeeding mothers. Meanwhile, unstructured interview guidelines were used to review the postpartum mother's accompaniment provided previously by PHCs health workers consisting of breastfeeding accompaniment method, accompaniment period, accompaniment media, and accompaniment subjects given to breastfeeding mother. Quantitative data were collected by filling out a questionnaire that was given directly to breastfeeding mothers at the same time of health service visits at PHC. Where the researcher had previously coordinated with the PHC. After the quantitative data collection is complete, the qualitative data collection is then carried out. Qualitative data retrieval was carried out by unstructured interviews with the PHCs midwives as health workers who provided maternal and child health accompaniment. All interviews were recorded for further data analysis

Data analysis was performed utilizing SPSS 26.00. Quantitative data analysis used descriptive statistical analysis to calculate the percentage, minimum, and maximum values. On the other hand, qualitative data analysis was carried out with the stages of data collection, data reduction, and data presentation.

The present study was approved by the Research Ethics Committee of the Faculty of Public Health Diponegoro University No. 22/EAK/KEPK-FKM/2022

### **3 Results**

#### **3.1 Characteristics of Breastfeeding Mothers**

Table 1. shows the characteristics of breastfeeding mothers in Semarang city. Most of breastfeeding mothers were housewives, multipara, have secondary education, and only 33,8% mothers have been breastfed exclusively until 6 months. Meanwhile the characteristics of breastfeeding behavior, it was found that pre-lacteal feeding with the most type of fluid given was water (66.7%). Breastfeeding mothers had also experienced breast problems while breastfeeding (64.9%), where most of them were sore nipples (64.6%) and swollen breasts (34.4%). In addition, only 33.8% of mothers gave exclusive breastfeeding, and the rest (66.2%) did not give exclusive breastfeeding.

**Table 1.** Characteristics of Breastfeeding Mothers in Semarang City (n=148)

<b>Characteristics of Breastfeeding Mothers</b>	<b>Category</b>	<b>f (%)</b>
Age	< 20 years	1 (0.7)
	20-35 years	134 (90.5)
	>35 years	13 (8.8)
Education	Elementary education	12 (8.1)
	Secondary education	107 (72.3)
	Higher education	29 (19.6)
Occupation	housewives	87 (58.8)
	Working	61(41.2)
Parity	Primipara	63 (42.6)
	Multipara	85 (57.4)
Colostrum feeding	Given to baby	146 (98.6)
	Not given to baby	2 (1.4)
Pre lacteal feeding	Yes	15 (10.1)
	No	133 (89.9)
Type of liquid other breastmilk given?	Water	10 (66.7)
	Formula milk	4 (26.7)
	Honey	1 (0.6)
Have experienced breast problems while breastfeeding	Yes	96 (64.9)
	No	52 (35.1)
Types of breast problems	Sore nipples	62 (64.6)
	Swollen breasts	33 (34.4)
	Flat nipples	1 (1.0)
Exclusive breastfeeding until 6 months	Yes	50 (33.8)
	No	98 (66.2)

### 3.2 Characteristics of Breastfeeding Accompaniment Needed by Breastfeeding Mother

**Table 2.** Characteristics of Breastfeeding Accompaniment Needed by Breastfeeding Mother (N=148)

Characteristics of Breastfeeding Accompaniment needed by breastfeeding mother	Category	f (%)
Breastfeeding Accompaniment method	Scheduled home visits	108 (73.0)
	Unscheduled home visit	40 (27.0)
Breastfeeding Accompaniment Media	Module	43 (29.1)
	Leaflet	78 (52.7)
	Booklet	52 (35.1)
	Props	71 (47.9)
	Direct practice	115 (77.8)
Breastfeeding Accompaniment Period	0-1 months postpartum	0 (0.0)
	0-3 months postpartum	21 (14.2)
	0-6 months postpartum	127 (85.8)
Breastfeeding Accompaniment Selected Subject	Exclusive breastfeeding	137(92.8)
	Recognizing the condition of the mother's breast	81(54.7)
	Building self-confidence for successful breastfeeding	85(57.4)
	Correct breastfeeding position and attachment	135 (91.2)
	About why babies cry while feeding	52(35.1)
	Breastfeeding problems and how to overcome them	132(89.2)
	Bonding benefits	61(41.2)
	Increasing milk production	112(75.6)
	Family support for breastfeeding mothers	103(69.6)
	Breastfeeding preparation for working mothers: how to squeeze, store, and use squeezed breast milk	129(87.2)

A total of breastfeeding mothers enrolled in this study for quantitative data collections. Its data collections were complemented by qualitative data collection. Qualitative data were collected through unstructured interviews with ten midwives willing to become research informants. Like the quantitative topics, four main topics in the interview were determined to identify the need of breastfeeding accompaniment, including the accompaniment period, method, media, and subjects

### 3.2.1 *Breastfeeding accompaniment method needed by breastfeeding mother*

Regarding to accompaniment method, it was found that most of breastfeeding mothers choose scheduled home visits (73.0%) in the breastfeeding accompaniment provided. As well as all of midwives said that they do home visit when mother had return home.

[...] "I always make a home visit after the mother returns home from the health care facility" (Midwife, #2)

[...] "home visit was given to mothers after delivery by midwife or the other health worker, because there is not enough midwife" (Midwife, #5)

### 3.2.2 *Breastfeeding accompaniment period needed by breastfeeding mother*

The results of identification of accompaniment period needed by breastfeeding mother shows that most respondents require the duration of accompaniment provided until 6 months postpartum (85.8%). The rest (14.2%) those who need accompaniment for 3 months after delivery. Meanwhile the result qualitative study indicates that home visits were carried out during the puerperium or one month after delivery.

[...] "I make postnatal home visits to mothers, which are usually twice during the puerperium period." (Midwife, #3)

[...] "We do not provide special visits to help to breastfeed mothers with breastfeeding problems, so it coincides with postpartum visits." (Midwife, 7#)

### 3.2.3 *Breastfeeding accompaniment subject needed by breastfeeding mother*

According to the table 1. shows that the five majority subjects had been chosen by breastfeeding mothers, as subjects provided by companion during breastfeeding accompaniment (Exclusive breastfeeding: 92.8%, Correct breastfeeding position and : 91.2%, Breastfeeding problems and how to overcome them: 89.2%)

However not all subjects needed by breastfeeding mothers were provided by health worker during home visit. Several midwives stated that the subjects given to breastfeeding mothers during home visits were related to the health condition of the baby, the mother's health, and the smooth production of breast milk.

[...] "During the visit, we asked the mother: is breastfeeding going well? Has the baby started feeding yet?" (Midwife, 4#)

### 3.2.4 Breastfeeding accompaniment media needed by breastfeeding mother

Most of breastfeeding mother need booth direct practice during the accompaniment breastfeeding provided and leaflet. Leaflets are used as reading material for mothers, after receiving accompaniment with direct practice by companion. Meanwhile midwife do not carry breastfeeding media when making home visit.

[...“We do not carry breastfeeding media when we making home visit, because breastfeeding mother already have Maternal and Child Health MCH book” (Midwife, 4#)].

**Table 3.** Illustrate The Midwives’ Answers for Each Question for Characteristic of Accompaniment Breastfeeding Mothers That Has Been Given

Themes	Subthemes	Examples
Characteristic of accompaniment breastfeeding mothers that has been given	Method of accompaniment	Home visit, always home visit, appointment home visit, home visit when mother had returned home
	Period of accompaniment	We make home visits when mother returns home, we do visit her during puerperium period, puerperium period, during a month postpartum
	Media of accompaniment	Mother already have Maternal and Child Health MCH) book, we don’t carry breastfeeding media
	Materials of accompaniment	Mother’s health, has the baby able to breastfeed yet, baby’s health, has the breast milk come out smoothly?

## 4 Discussion

The results of the mixed method study related to the type of method and the period of accompaniment needed by breastfeeding mothers revealed that mothers need accompaniment with a scheduled home visit method and the visit periods were given during the exclusive breastfeeding period or until 6 months postpartum. These findings were supported by previous research that the accompaniment provided during breastfeeding period can increase self-confidence and satisfaction for breastfeeding mothers. While the length of time and the type of support provided to breast-feeding mothers were very important in the success of exclusive breastfeeding. These findings align with a previous study, where it was found that the limited number of health workers and a fairly high workload are one of the obstacles in accompaniment breastfeeding mothers [22]. Meanwhile, breastfeeding mothers feel satisfied and discussion with close people could influence breastfeeding decisions [23].

Meanwhile, the subjects needed by mothers during the provision of accompaniment were exclusive breastfeeding, correct breastfeeding techniques and positions, breastfeeding problems and how to overcome them, and breastfeeding preparation for working mothers. These findings were also aligned with a previous study, where it was found that the lack of

skills regarding the correct breastfeeding position and proper placement while breastfeeding [24] and the preparation of breastfeeding for working mothers become obstacles to the success of exclusive breastfeeding [25]. In addition, mothers with a high level of breastfeeding knowledge with a high score had a greater potential to give exclusive breastfeeding for six months [26].

## 5 Conclusion

In conclusion, it can be noted that the four aspects of breastfeeding accompaniment characteristics, that still have obstacles were both the short period accompaniment and incomplete subject provision, meanwhile breastfeeding mothers require a long duration of accompaniment during the exclusive breastfeeding period by providing complete subjects according to the mother's needs.

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