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Research Article**Knowledge on Breastfeeding and Breastfeeding Behavior among Working Mothers and Housewives : A Cohort Study**

Nurhasmadiar Nandini ^a, Novia Handayani ^b, Djazuly Chalidyanto ^c, Widodo Jatim Pujirahardjo ^c, Nuzulul Kusuma Putri ^c

^aFaculty of Public Health, Diponegoro University, Semarang, Indonesia.

Corresponding author. Email : diarnandini@gmail.com

^bFaculty of Public Health, Diponegoro University, Semarang, Indonesia.

^cFaculty of Public Health, Universitas Airlangga, Surabaya, Indonesia

Abstract

Background : Surabaya is one of the cities with low coverage of exclusive breastfeeding in East Java. The average rate of babies who got exclusive breastfeeding in Surabaya from 2012 to 2015 was 63.13% (target 80%). Decision about whether to breastfeed or not is a challenge for every mother, especially for working mothers. This research aimed to identify breastfeeding behavior among working mothers and housewives.

Methods : This was descriptive observational research with prospective cohort study design. The sample size was 79 mothers in the eastern part of Surabaya chosen by purposive sampling technique.

Results : Result showed that 56.6% of housewives have low knowledge on breastfeeding. Both working mothers (100%) and housewives (90.6%) already give colostrum right after baby born. However, There were 54.7% of housewives and 46.2% of working mothers already give formula milk during the first month after baby born.

Conclusion : There were not much difference between working mothers and housewives in knowledge, feeding colostrum and skin to skin contact aspects. But, working mothers mostly give formula milk during the first month of baby born than housewives.

Keywords : *breastfeeding, decision, working mother, housewife*

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Background

Breastfeeding has an important role in a baby's growth. However, the coverage of infants that get exclusive breastfeeding was still low in Indonesia ¹. Surabaya is one of the cities with low coverage of exclusive breastfeeding in East Java. The average rate of babies who got exclusive breastfeeding in Surabaya from 2012 to 2015 was only 63.13% from target 80% ². The decision

about whether to breastfeed or not is a challenge for every mother, especially for working mothers which need to go back to work during the breastfeeding period.

There were several factors affecting mother's decision and practice to breastfeed, such as knowledge about breastfeeding ^{3,4}, mother's employment status ^{5,6} support from family member ⁴, and else.

Research showed that mother's knowledge related to breastfeeding have significant influence towards mother's decision to breastfeed. Other factor affecting breastfeeding is mother's employment status. For working mother, breastfeeding or especially exclusive breastfeeding is a big challenge. Research showed that there was significant relationship between mother's employment status and exclusive breastfeeding ⁵. Research showed that percentage of exclusive breastfeeding of housewives were higher than working mothers. Research in Depok showed that only 1,4% of working mothers which continuously breastfeeding their babies ⁶. Therefore, this research aimed to identify knowledge on breastfeeding and breastfeeding behavior among working mothers and housewives.

Methods

This research aimed to identify breastfeeding behavior among working mothers and housewives This was a descriptive observational research with prospective cohort study design. The sample size was 79 mothers from the eastern part of Surabaya which fit the inclusion criteria. Sample was chosen by purposive sampling technique.

Data collection was done in 2 steps. The first step was during the third trimester of

pregnancy and the second step conducted around one or two weeks after the baby born. The first step was to identify mother's knowledge related to breastfeeding, and the second step was to identify mother's behavior on breastfeeding.

Results

This research analyzed knowledge and breastfeeding behavior of mother in East part of Surabaya based on their employment status. There were 79 respondents which consist of 53 housewives and 26 working mothers.

Employment Status and Knowledge of Breastfeeding

Employment status categorized as 2 category, working mother and housewife. Knowledge on breastfeeding identified with several questions about breastfeeding, such as definition of exclusive breastfeeding, early breastfeeding initiation, benefit of breastfeeding, breastfeeding technique, breastfeeding booster, breastmilk pumping and storage, also the method to give pumped breastmilk to the baby. Knowledge on breastfeeding identified during the third pregnancy period and categorized into two categories, low and high.

Table 1. Employment Status and Knowledge of Breastfeeding.

Employment Status	Knowledge					
	Low		High		Total	
	n	%	n	%	n	%
Housewife	30	56.6	23	43.4	53	100
Working Mother	12	46.2	14	53.8	26	100

Result showed that 56.6% of housewives have low knowledge on breastfeeding, while 53.8% of working mothers have high knowledge on breastfeeding. Even though there were a lot of mothers have low knowledge on breastfeeding, they stated that they did not need high knowledge on breastfeeding because they already experienced in breastfeeding before and they also said their parents and relatives already told them about breastfeeding. However several mothers might have some misunderstanding related to breastfeeding.

“I think I don’t need to do information search about breastfeeding, I’ve breastfeeding my previous child.”[MR04] breastfeed

“I think it’s fine to give formula milk to my baby even though my baby still a few

weeks old. I’ve done that to my previous child and she was fine and grow up well.” [KJ17] low knowledge

Narration above showed that knowledge related to breastfeeding is important and need to be educated to the mother although the mothers said they did not need any information related to breastfeeding.

Employment Status and Breastfeeding Behavior

In this research, breastfeeding behavior identified were colostrum feeding, skin to skin contact and formula milk feeding. These variables identify a few days after baby born. Result will be presented in cross-tabulation table with the mother’s employment status.

Table 2. Employment Status and Colostrum Feeding

Employment Status	Colostrum Feeding				Total	
	Yes		No		n	%
	n	%	N	%		
Housewife	48	90.6	5	9.4	53	100
Working Mother	26	100	0	0	26	100

High percentage of both working mothers (100%) and housewives (90.6%)

already give colostrum right after baby born.

Table 3. Employment Status and Skin to Skin Contact

Employment Status	Skin to Skin Contact				Total	
	Yes		No		n	%
	n	%	N	%		
Housewife	30	56.6	23	43.4	53	100
Working Mother	17	65.4	9	34.6	26	100

Related skin to skin contact after labor, there were 56.6% of housewives and 65.4%

working mothers already did the skin to skin contact right after the baby was born.

Table 4. Employment Status and Formula Milk Feeding

Employment Status	Formula Milk Feeding					
	Yes		No		Total	
	n	%	n	%	n	%
Housewife	29	54.7	24	45.3	53	100
Working Mother	12	46.2	14	53.8	26	100

There were 54.7% of housewives and 46.2% of working mothers already give formula milk during the first month after baby born. They said, it's because of various reason.

"I need to train my baby to drink formula milk as soon as possible because I only have short maternal leave. I need to go back to work soon in Surabaya and I will leave my baby with my parents in my parent's house (different city)." [KR31] low knowledge

"My mother insisted to mix the feeding with formula milk, so that my child can be healthier and fat." [GA75] low knowledge

"The baby keep crying, the midwife and my mother said it was due to lack of my breast milk production, therefore the midwife suggest me to mix the feeding with formula milk. But after a few days, I produced a lot of breast milk, so now I only give my baby breast milk." [MA44]

The interview result showed that most mothers tend to feed formula milk since the first week after baby born because of influence from people around them. The irony was, there were a few health professionals which also suggest mother to give formula milk without decent clinical reasons. Some mothers stated that after a few days the baby born, she produced a lot of breastmilk for their baby, but she already give formula milk a few hours after the baby born because the midwife told her to give formula milk.

However, there were also mothers stated that they keep breastfeeding because they were supported by people around them.

"My mother and husband always help me so I can keep breastfeeding my baby" [TM58]

"The midwife already told me about breastfeeding since I was pregnant and she said it's good to keep breastfeed my baby until 2 years old" [MR09]

Discussion

Breastfeeding is not only an act of feeding the baby, but in the process there is a psychological bonding from mother and the baby. Exclusive breastfeeding has been proven to have many benefits for the baby and mother. The benefits that affect the baby are best nutrition for the baby, improved immune system, and improved intelligence⁷. Breastfeeding need to be practiced exclusively for six months. However, there are many factors that affect the breastfeeding practice, especially in Surabaya, Indonesia. Some research showed factors that affect breastfeeding practice are knowledge of breastfeeding and employment status of mother⁸⁻¹⁰.

The result of this research showed that as much as 56.6% housewife have low knowledge on breastfeeding and 53.8% of working mother have high knowledge of breastfeeding. Working mothers tend to have more access to find any knowledge about

breastfeeding, such as from their co-workers, friends, internet, and many others. However, some low knowledgeable respondents thought that they already have enough knowledge about breastfeeding. Even some of them thought that it is fine to feed formula milk to their babies without any decent clinical reasons.

Some previous research showed that knowledge is related to the breastfeeding practice. Previous research found that there is a significant relation between knowledge and exclusive breastfeeding practice ($p=0.001$)⁸⁻¹⁰. This result is supported by the result of Isoni Astuti's research in 2013, which found that knowledge of breastfeeding is very related to breastfeeding practice ($p=0.0001$)⁹. Therefore, it is important to educate mothers about the importance of breastfeeding especially exclusive breastfeeding.

The result above explains the breastfeeding practice of respondents. Even though only 43.3% housewife have high knowledge on breastfeeding, there was 90.6% housewife who did colostrum feeding, 56.6% housewife who did skin to skin contact, and 45.3% housewife who did not feed formula milk to their babies. However, working mothers have higher percentage on colostrum feeding (100%), skin to skin contact (65.4%) and did not feed formula milk to their babies (53.8%).

The result above showed that the differences of breastfeeding practice among working mother and housewife is only a little. However, a research in Northwestern Pennsylvania found that as much as 29.4% mothers did not breastfeed their babies due to "had to return to work" reason¹⁰. Some previous research found that employment status is significantly related to breastfeeding

practice. Such as the research of Isoni Astuti in 2013 which found that there is a relationship between employment status and exclusive breastfeeding practice ($p=0.0001$). Other research from Meiyana Dianning Rahmawati in 2010 also found the same result with $p=0.0001$ and $OR=4.137$, which means housewives are 4 times more likely to breastfeed their babies exclusively than working mothers¹¹.

Some other researchs found opposite result about employment status to breastfeeding practice. Such as the research of Tesy Mamonto in 2015 which found that there was no relationship between employment status and exclusive breastfeeding practice ($p=0.059$)¹². The same result also found in other research which was conducted by Lestari et.al in 2013. There was no relationship between employment status and exclusive breastfeeding practice ($p=0.754$)⁸.

Housewife tend to have more time to breastfeed the baby, however they have other reasons that reinforced them to not breastfeed the baby exclusively. The most reason that was found in this study was lack of support from significant others, such as husbands and their mothers. Some respondents also experienced lack of support from health professionals. They were asked to feed the baby with formula milk by the midwives because the baby kept crying or even without any clinical reason (just hours after giving birth). However, return back to work can not be justified as a right reason to stop breastfeeding the baby. There are technologies that can ease the breastfeeding process. Working mother can pump their breastmilk with machined-breastpump, non-machined-breastpump, or even with their hands only. Therefore, education and support

from significant others are the most important factors that need to be reinforced to mothers in order to implement exclusive breastfeeding.

Conclusion

There were not much difference between working mothers and housewives in knowledge, feeding colostrum and skin to skin contact aspects. But, there were more working mothers than housewives who already give formula milk during the first month of baby born.

Ethics Approval and Consent to Participant

This research has been approved by the Health Research Ethics Committee of Faculty of Public Health Universitas Airlangga Number 396-KEPK on 20 June 2016. All of the participant agreed to participate in this research and signed the informed consent,

Availability of Data and Materials

The datasets generated and/or analysed during the current study are not publicly available due to agreement to keep data confidential with the respondents but are available from the corresponding author on reasonable request.

Competing Interest

The authors declares that there is no competing interest in regard to this research or its funding.

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Authors Contribution

Nurhasmadiar Nandini, Djazuly Chalidyanto and Widodo J. Pudjirahardjo designed the study. Nurhasmadiar Nandini collected the data and analyzed under the supervision and assistance from Djazuly Chalidyanto, Widodo J. Pudjirahardjo and Nuzulul Kusuma Putri. Nurhasmadiar Nandini and Novia Handayani prepare the first draft of the manuscript which approved by all authors and finished the draft. All authors approved the final manuscript.

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