




The Relationship Among Knowledge, Mothers' Occupation, and Support of Health Workers to Exclusive Breastfeeding in Ngajum Public Health Centre, Malang

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Abstract. Exclusive breastfeeding is a nutritional intake that must be given to babies aged 0–6 months to help maximize their growth and development and also to prevent babies from getting sick. Mothers' knowledge, mothers' occupation, and support of health workers are some factors identified affecting the pattern of exclusive breastfeeding. According to data from Malang Health Office in 2020, Ngajum Public Health Center reached the lowest position in exclusive breastfeeding's coverage. This study aimed to show the relationship among mothers' knowledge, mothers' occupation, and health workers' support to exclusive breastfeeding. The study was a cross sectional study using questionnaire to collect data. The population were mothers with babies aged 7 to 12 months that were listed in Ngajum Public Health Centre's data with sampling technique using cluster random sampling so that found 91 respondents participated. The bivariate analysis using Chi-square found that there was no significant relationship between mothers' knowledge and exclusive breastfeeding ($p = 0.837$). Furthermore, there also was no significant relationship between mothers' occupation and exclusive breastfeeding ($p = 0.274$), while support of health workers on exclusive breastfeeding had also no significant relationship ($p = 0.211$).

Keywords: mothers' knowledge · mothers' occupation · health workers' support · exclusive breastfeeding

1 Introduction

Development policies in the health sector lead to efforts to improve health services that focus on improving preventive and promotive health services, including improving children's health by considering their nutritional quality [1]. World Health Organization together with UNICEF (United Nations Children's Fund) had planned a global strategy on feeding practices in order to improve children's nutritional health. One of their strategy

is that exclusive breastfeeding must be met from the beginning of the baby's life up to the age of 6 months. Exclusive breastfeeding can have an important effect on the incidence of morbidity (such as stunting) and infant mortality [2].

Breast milk is the main source of nutrition for early birth baby and must be given exclusively within a period from 0–6 months old. The breast milk is useful for baby which it can prevent baby easily get sick and also can optimize babies' growth [3]. Exclusive breastfeeding is also has beneficial effect for the mother which it can overcome trauma, prevent breast cancer, and can be used as a natural family planning (called amenorrhoea lactation method) [4].

Based on the 2020 Strategic Plan target, the target of exclusive breastfeeding coverage in Indonesia is 40% and until the end of 2020 this target succeed in the rate of 66.06%. But, unfortunately, the coverage of exclusive breastfeeding was still unequal among Provinces in Indonesia. The highest achievement of exclusive breastfeeding coverage was achieved by DKI Jakarta Province (91.1%), while the lowest achievement was in Maluku Province (52.1) [5].

Meanwhile, in East Java Province, exclusive breastfeeding data in 2020 declined compared to 2019. In 2020, the coverage of exclusive breastfeeding was 61% compared to 68.2% in 2019 [6]. According to data from Department of Health Malang in 2020, the average achievement of exclusive breastfeeding coverage in 39 sub-districts in Malang Regency in 2020 was 63.7%. Wonosari Public Health Center (PHC) had the highest percentage (98.1%), while Ngajum PHC reached the lowest with percentage 3.8% [7].

Data from the Department of Health Malang in 2020 stated that there were 481 babies from Ngajum PHC registered on exclusive breastfeeding examination. As many as 463 babies didn't get exclusive breastfeeding, while only 18 babies were exclusively breastfed. The lack of exclusive breastfeeding also has an impact on child development disorders, such as stunting [8]. In 2019, Ngajum PHC was ranked 17th out of all Public Health Centre in Malang Regency as there were 406 children who were stunted. Meanwhile, in 2020, the incidence of stunting in Ngajum PHC was increasing to 540 children and the rank in stunting was also increasing to become the 5th of all Public Health Centre in Malang Regency [7].

There are several factors that can influence exclusive breastfeeding. According to Lawrence Green Theory, these factors can be divided into: enabling factor, predisposing factors, and reinforcing factor [9]. Based on research from Siska in 2021, it is known that exclusive breastfeeding influenced by the support of health workers and knowledge of mothers. Knowledge of exclusive breastfeeding can affect how mothers perceive the pattern of giving exclusive breastfeeding for babies. Whereas education, as well as monitoring from health workers, is very related to the awareness of mothers in giving exclusive breastfeeding [10]. Another research done by Septyasrini (2018) explains that mother's occupation and knowledge had significant relationships with exclusive breastfeeding [11]. While Koba (2019) explained that there was a relationship between mother's occupation and exclusive breastfeeding because the breastfeeding mothers had limitation in breastfed their children due to their work [12].

Based on the explanation that has been explained, researchers are interested in doing a research in the coverage area of Ngajum Public Health Centre Malang to know the relationship among knowledge, mothers' occupation and support of health workers to exclusive breastfeeding. The purpose of this study is to analyze the relationship between health workers and mothers' behavior that affects the coverage of exclusive breastfeeding in the Ngajum PHC's area. Meanwhile, the specific objectives of the study was to determine the relationship among knowledge, mothers' occupation and support of health workers to exclusive breastfeeding in Ngajum Public Health Centre.

2 Method

The research was carried out in June 2022 in the coverage area of Ngajum Public Health Centre, Malang. The population were mothers who had babies aged 7 to 12 months old and were listed in Ngajum PHC's datas, with total of 603 mothers as population. Sample were 91 mothers counted using the Lemeshow formula and taken by the sampling technique using cluster random sampling. The inclusion criterias for sample were: 1) Mother's data was recorded at Ngajum PHC; 2) Mothers had babies aged 7–12 months; 3) Willing to be respondent. While exclusion criterias were: 1) Moved from Ngajum PHC's area; 2) Draw their willingness to be respondent. This research had received a certificate of ethical acceptance from the Health Research Ethics Commission of Indonesian STRADA Health Sciences Institute with number 2936/KEPK/IV/2022.

This research procedure began with compiling questions on the questionnaire. The second step is to conduct a validity test which is consulted and tested by experts by calculating the value using the AIKEN formula and getting a score of 1 (very high). While the reliability test was carried out at the Bululawang PHC that have the same regional characteristics with Ngajum PHC, and got a value of Cronbach Alpha 0.702 which meant reliable. So based on the validity test and reliability test the questionnaire was feasible to use.

The third step in collecting data was to provide a series of questions or written statements. The fourth step, namely data processing y which was done after the questionnaire was filled in by the respondent (editing, coding, cleaning). This study produced quantitative data obtained from the calculation of scores in the questionnaire sheet and analyzed using SPSS using the Chi-Square test.

3 Results

3.1 Univariate Analysis

The respondents were mothers who had babies aged 7 to 12 months old and were listed in Ngajum PHC's datas as many as 91 mothers. Ngajum Public Health Center covers 9 villages so that the sample size with a total of 91 divided into 9 villages as follows (Table 1):

1. Ngajum Village: 10 sample
2. Palaan Village: 10 sample

Table 1. Primary Data, 2022

Characteristic	Frequency	Percentage
Mothers' Age (Year)		
< 20	5	5.5
20–25	32	35.2
26–30	27	29.7
> 30	27	29.7
Children's Age (Month)		
7–8	36	39.6
9–10	22	24.2
11–12	33	36.3
Exclusive Breastfeeding		
Non exclusive breastfeeding	46	50.5
Exclusive breastfeeding	45	49.5
Knowledge		
Less	13	14.3
Sufficient	18	19.8
Good	60	65.9
Occupation		
Working	65	71.4
Not working	26	28.6
Health worker's support		
Less	33	36.3
Sufficient	22	24.2
Good	36	39.6

3. Ngasem Village: 10 sample
4. Banjarsari Village: 10 sample
5. Kranggan Village: 10 sample
6. Kesamben Village: 10 sample
7. Babadan Village: 10 sample
8. Balesari Village: 10 sample
9. Maguan Village: 11 sample

The respondents' characteristics in Ngajum PHC was dominated by mothers aged 20–25 years with a total of 32 samples with a percentage of 35.2%. Meanwhile, in the children's age characteristics was dominated by 7–8 months old with total 36 children (39.6%). It is known that 46 mothers have exclusively breastfed, while 45 other mothers have not exclusively breastfed their babies. A total of 18 respondents with a percentage

Table 2. Bivariate Analysis

Variable	Exclusive Breastfeeding				P-value
	No		Yes		
	n	%	n	%	
Knowledge					0.837
Less	7	8	6	7	
Sufficient	10	11	8	9	
Good	29	32	31	33	
Mother's occupation					0.274
Not working	30	33	35	38	
Working	16	18	10	11	
Health worker's support					0.211
Less	20	22	13	14	
Sufficient	8	9	14	15	
Good	18	20	18	20	

of 19.8% were known to have sufficient knowledge, while most respondents with a percentage of 65.9% (60 respondents) were known to have good knowledge. There were 65 respondents with a percentage of 71.4% known not to work, while there were 26 respondents with a percentage of 28.6% known to be working. There were 33 respondents with a percentage of 36.3 known to get lack support from health workers, and there were 22 respondents with a percentage of 39.6% were known to get sufficient support from health workers. Meanwhile, there were 36 respondents with a percentage of 39.6% getting good support from health workers.

3.2 Bivariate Analysis

Next, a bivariate analysis was carried out as a continuation of the univariate analysis to determine the correlation between the independent variables on the dependent variable. Method of analysis by test Chi-square using SPSS and a significance degree of 95% which is used to prove the hypothesis for each variable.

From Table 2, it explained that there was a rejection of the hypothesis because the value of is obtained *p-value* on the knowledge variable of 0.837 ($p > 0.05$), so there was no relationship that exists between mother's knowledge and exclusive breastfeeding in Ngajum PHC. According to survey data, there were 13 mothers who were less knowledgeable with percentage of 7% were exclusively breastfed and 8% not giving exclusively breastfed. Also from the data, mothers who had sufficient knowledge, as much as 11% registered not giving exclusive breastfeeding and 9% registered exclusively breastfed. Meanwhile, mothers with good knowledge found 32% did not exclusively breastfeed and 33% gave exclusive breastfeeding. Based on the statistic test result, it can be concluded that there was no relationship between mothers' occupation with exclusive breastfeeding

in Ngajum PHC (p -value > 0.05). Statistic test also found that there was no relationship between the support of health workers and exclusive breastfeeding in Ngajum PHC (p -value > 0.05).

4 Discussion

Other research results from Septyasrini (2018) in the Banyusono 1 Public Health Centre, Boyolali, showed different results. This research showed that there was a relationship between the level of knowledge in mothers with exclusive breastfeeding (p -value = 0.022) [11].

However, there were also studies that had similar results from Ramli (2020) [13]. The results obtained that there was no correlation between mother's knowledge with exclusive breastfeeding in Sidotopo village. This research also used Chi-Square test and gained p -value 0.346, so it can be concluded that H_0 is accepted. Research from Rahmadani (2019) also obtained similar results. They found no correlation between the level of mothers' knowledge with exclusive breastfeeding at the Muara Labuh Health Center. The research was analyzed by test Chi-Square and get p -value 0.549 so that H_0 is accepted [14].

Knowledge is the result obtained from the process of human experience produced by sensing on a particular object [15]. Knowledge can also affect the changes in human behavior, one of which is the pattern of exclusive breastfeeding. Based on Lawrence Green's theory, knowledge is included as a predisposing factor that has influence in the process of exclusive breastfeeding [9].

Based on the results of the tests that have been carried out, almost all mothers who give exclusive breastfeeding to their babies have good knowledge. However, based on the results of the analysis, it proves that there is no correlation between knowledge and exclusive breastfeeding. So, the researchers argue that there are other factors affect exclusive breastfeeding in Ngajum PHC. Therefore, other research is needed to identify factors and other aspects that influence the process of mothers giving exclusive breastfeeding in Ngajum PHC.

There were different analysis results from Septyasrini (2018) that found that there was a correlation between the mothers' occupation and exclusive breastfeeding in Banyudono 1 PHC, Boyolali (p -value = 0.023) [11]. However, there was also studies with similar results regarding exclusive breastfeeding from (Ramli, 2020) in Sidotopo village. This study showed that exclusive breastfeeding was not influenced by mothers' occupation (p -value of 0.60) [13]. Research from Rahmadani (2019) also obtained similar results, that there was no correlation between work and exclusive breastfeeding at Muara Labuh Health Center. The study was analyzed using the test Chi-Square with value acquisition p -value 0.207, so based on the analysis it can be concluded that H_0 is accepted.

Work is an activity that people carry out to achieve certain goals in a good way [14]. The condition of the mother who is working will provide a few obstacles in the process of exclusively breastfed their babies. This condition happen because the mother has to divide the time between working and breastfeeding the baby. Companies or institutions where mothers work also play a major role in influencing the pattern of exclusive breastfeeding. In addition, mothers are required to return to work because mothers are only

given maternity leave for a period of approximately 3 months. The return of a mother's work guidance will be the main factor that causes mothers to be unable to exclusively breastfeed their babies [11].

This result was similar with a result conducted by (Idris et al., 2020) in Bajeng Public Health Center. This research found that there was no relationship between health workers' support and exclusive breastfeeding. By using Chi-Square test with p-value 0.05, it concluded that the hypothesis was rejected [16]. Another similar result was conducted by (Mony et al., 2021) that stated that there was no relationship between the support of health workers with breastfeeding patterns in Malang city. Research analyzed by Kolmogorov-Smirnov test with p-value 0.058, so it could be concluded that H_0 is accepted [17].

Based on Government Regulation (PP) No. 13 of 2012 states that the supporting role of health workers is very much needed as an effort to increase mother's knowledge in giving exclusive breastfeeding. This knowledge must be given since the early process of pregnancy until the delivery process, starting from providing education about exclusive breastfeeding and exclusive breastfeeding monitoring [18]. The example of activities for providing education and knowledge during pregnancy is through Antenatal Care (ANC). One of education topic for pregnant women is about exclusive breastfeeding [17]. According to Lawrence Green's theory, the support of health workers can affect health behaviors such as breastfeeding patterns. And this support of health workers is included in reinforcing factor [9].

In this study, the proportion of mothers who received good and poor support from health workers was almost the same and it was found that there was no relationship to exclusive breastfeeding. The researcher argues that there are other factors or causes that influence exclusive breastfeeding in Ngajum PHC. In theory, Lawrence Green explains that there are many factors that can influence changes in health behavior in society, such as culture.

5 Conclusion

This research concluded that there is no significant relationship among knowledge, mothers' occupation, and health workers' support to exclusive breastfeeding in Ngajum Public Health Center. Meanwhile, further researchs are expected to find other factors that can affect the pattern of exclusive breastfeeding.

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