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Original Research

The Effect of Brainstorming Method on Giving Exclusive Breastfeeding to Attitudes, Subjective Norms, Perceived Behavioral Control, and Breastfeeding Intention Among Pregnant Women

Dyah Rohmatussolichah, Mira Triharini, Nadia Rohmatul Laili

Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia

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CORRESPONDING AUTHOR

Dyah Rohmatussolichah
dyahreicha63@gmail.com
Faculty of Nursing,
Universitas Airlangga,
Surabaya, Indonesia

ABSTRACT

Introduction: Breastfeeding behavior is effected by breastfeeding intention. The intention of breastfeeding is formed by three main factors, which are attitude, subjective norms, and perceived behavioral control. The purpose of this study was to analyze the effect of health education with a brainstorming method about exclusive breastfeeding toward attitude, subjective norms, perceived behavioral control, and mother's intention on giving exclusive breastfeeding.

Methods: This study used a quasi-experiment with a pretest-posttest of control group design. The variables in this study were brainstorming method, attitude, subjective norms, perceived behavioral control, and breastfeeding intention. The population of this study was second and third-trimester pregnant women at the working area of the public health center in Klampis Ngasem and Pacarkeling Surabaya, with 48 respondents selected using simple random sampling. The instrument used a questionnaire and analyzed using Wilcoxon Signed Rank and Mann Whitney U test with significance values $\alpha=0,05$.

Results: The Wilcoxon Signed Rank test showed significant differences in the attitudes ($p=0.000$), subjective norms ($p=0.000$), perceived behavioral control ($p=0.000$), and intentions ($p=0.000$) before and after brainstorming intervention. Mann Whitney U post-test showed significant differences in the attitudes ($p=0.000$), subjective norms ($p=0.000$), perceived behavioral control ($p=0.000$), and intentions ($p=0.000$) between treatment and control group.

Conclusion: The intervention of health education with the brainstorming method has a significant effect of increasing attitude, subjective norms, perceived behavioral control, and mother's intention on giving exclusive breastfeeding. Further research should be to analyze the impact of brainstorming toward breastfeeding intention in postpartum mothers.

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1. INTRODUCTION

World Health Organization (WHO) reported that in 2017 there were around 5.4 million children under five years old (toddlers) died, 2.5 million of them lost their lives in the first month of their life. 45% of infant mortality is related to nutritional factors, where malnutrition is at greater risk of death than other diseases such as diarrhea, pneumonia and malaria (WHO, 2018a). More than half of these under-five deaths are actually caused by diseases that can be prevented and treated in an easy way, and one way is to increase the defense of the immune system. The simplest way to increase the immunity of infants and toddlers is exclusive breastfeeding for six months (WHO, 2018b).

The prevalence of exclusive breastfeeding in East Java Province in 2017 was only 75.7% (Dinas Kesehatan Propinsi Jawa Timur, 2017). Whereas in the Surabaya city only 71.53% of babies who received exclusive breastfeeding and there were still some community health centers with lower than average exclusive breastfeeding prevalence, some of these community health centers were Klampis Ngasem community health center and Pacarkeling community health center (Dinas Kesehatan Kota Surabaya, 2018). According to interviews obtained from health workers on duty in maternal and child health polyclinics and nutrition polyclinics, the main cause of failure of exclusive breastfeeding in the working area of the Klampis Ngasem community health center is due to the breast milk that does not come out on the first day, encouragement from the closest people especially parents to provide other food to the baby because they think breast milk is not enough, also the mother's uncertainty to be able to breastfeed her baby because the mother works. These factors indicate the inability of attitude, subjective norms, and perceived behavioral control of breastfeeding mothers. The powerlessness of attitude, subjective norms, and perceived behavioral control will form a weak intention to breastfeed, so the resulting behavior is the mother will not exclusively breastfeed. This is in accordance with the Theory of Fishbein and Ajzen that a person's behavior is determined from the intention or intention formed by three main factors,

namely attitudes, subjective norms, and perceived behavioral control (Fishbein and Ajzen, 1975). Intention of breastfeeding in mothers that appears during prenatal period is the strongest predictor of a mother to breastfeed her baby (Donnan *et al.*, 2013).

Adults tend to use emotions in receiving information, so the brainstorming method is considered appropriate because it prevents mothers from feeling only lectured and only given information (Effendi and Makhfudli, 2013). Based on interviews conducted with health workers at the maternal and child health polyclinic and nutrition polyclinic at the Klampis Ngasem community health center, it has provided counseling lectures once a month on exclusive breastfeeding to pregnant women in the pregnant women class. This should make pregnant women have sufficient knowledge about exclusive breastfeeding. However, the fact is sufficient knowledge does not always make a mother have a strong breastfeeding intention, because breastfeeding intentions are also affected by many things such as beliefs or values, social support, and previous breastfeeding experiences (Permatasari *et al.*, 2018). Brainstorming is not only carried out to increase knowledge, but also to rectify the beliefs of pregnant women that are not appropriate so that attitudes, subjective norms, and perceived behavioral control of pregnant women become stronger and it is hoped that breastfeeding intentions will form stronger. The purpose of this study was to analyze the effect of health education with a brainstorming method about exclusive breastfeeding toward attitude, subjective norms, perceived behavioral control, and mother's intention on giving exclusive breastfeeding.

2. METHOD

2.1 Design

This type of research was a quasi-experimental study with a pretest-posttest control group design. The treatment group in this study was given a brainstorming method, while the control group was not. Both groups began with a pre-test. After being given intervention, the measurement was repeated. This research aimed to study the differences of attitudes, subjective norms, perceived

behavioral control, and the intentions of pregnant women to provide exclusive breastfeeding between the control group and treatment group. The study was carried out in Surabaya, East Java, Indonesia, from May to June 2019.

2.2 Population, Samples, and Sampling

The population in this study were all pregnant women who registered at the Klampis Ngasem community health center as many as 139 pregnant women. The target population in this study were 50 pregnant women who had fulfilled the inclusion and exclusion criteria. Samples selected using a simple random sampling technique. The research sample obtained as many as 48 respondents who were divided into control groups and treatment groups.

2.3 Variables

The independent variable in this study was the brainstorming method. The dependent variables in this study were attitudes, subjective norms, perceived behavioral control, and breastfeeding intentions.

2.4 Instruments

The instrument in this study used a questionnaire of attitudes, subjective norms, perceived behavioral control, and intentions adopted from Puspita (Puspita, 2015) and Counseling Event Unit or Health Education Operational Procedure.

2.5 Procedure

The researcher conducted a research Researchers came to the maternal and child health polyclinic after obtaining a research permit from the East Java Provincial Unity Nation and Politics council, Surabaya Health Office, Klampis Ngasem community health center, and Pacarkeling community health center to find information about the number of pregnant women registered in the community health center register. Selecting respondents using a simple random sampling technique of 24 pregnant women at the Klampis Ngasem community health center (treatment group) and 24 pregnant women at the Pacarkeling community health center (control group) obtained from data available at the community health center. Sample selection by drawing lots and taking names of

pregnant women randomly according to the specified number of samples. After getting the name of the pregnant woman according to the specified amount, the researcher invited the candidate of respondents by visiting their homes one by one. After obtaining approval from the respondents, the researcher then conducted a pre-assessment (pre-test) to the control group and the treatment group in each community health center using a questionnaire with questions that included attitudes, subjective norms, perceived behavioral control, and breastfeeding intentions.

The brainstorming was conducted on 24 and 26 May 2019 and was carried out in Kelurahan Klampis Ngasem. The treatment group consisted of 24 pregnant women, who were further divided into three groups, each totaling eight pregnant women and carried out simultaneously. Each group will be accompanied by one facilitator, one observer, and one secretary. The researcher was assisted by eight student friends from the Faculty of Nursing, Airlangga University, who had previously been briefed to equalize perception. The next step is that the facilitator will explore as many ideas as possible from all participants on a predetermined topic, then the secretary will record the ideas and opinions delivered by the brainstorming participants. All ideas that have been submitted are then collected and selected according to the topic given. Furthermore, clarification and verification are carried out to correct the incorrect ideas. Next is the conclusion, where the facilitator and participants conclude the results of the discussion. At this conclusion stage the researcher as a facilitator will be assisted by the midwife of the community health center. The last step is evaluating each participant by asking questions about the material that was discussed earlier. The time gap between the first and second brainstorming is 2 days.

The control group in this study was pregnant women at the Pacarkeling community health center were not given the intervention brainstorming method, but only given lectures and leaflets containing material about exclusive breastfeeding. The post-test was conducted at a distance of 2 days after the second brainstorming was completed. The treatment group post-test

was carried out by bringing in and reassembling the participants, while the control group carried out the post-test by visiting their home.

2.6 Analysis

After the data is collected, the data were analyzed to determine the effect of the brainstorming method intervention on increasing attitudes, subjective norms, perceived behavioral control, and maternal intention to breastfeed. Measurements in this study were conducted twice, before treatment (pre test) and after treatment (post test). Data analyzed using statistical calculations with Wilcoxon signed rank test and Mann Whitney U test. Wilcoxon signed rank test was conducted to determine differences in results before and after the intervention in control group and treatment group with significance $\alpha = 0.05$. Meanwhile to find out the difference between the results of the treatment group and the control group, the Mann Whitney U test was performed with significance $\alpha = 0.05$. If the result is obtained value of $p < 0.05$ then H1 is accepted.

2.7 Ethical Clearance

This study received research ethics approval from the Health Research Ethics Committee of Faculty of Nursing, Universitas Airlangga, Surabaya, East Java, Indonesia. Information about the objective of the study, procedures, potential risks, and benefits, was given to participants before enrolment in the study. Participation in this study was voluntary and participants' full right to refuse participation was explained.

3. RESULT

Based on table 1, it is known that the majority of respondents in the treatment group were in the age range of 20-30 years, as many as 20 people (83.3%), where this age is a safe reproductive age with an average education status as high school graduates as many as 11 people (45.8%). A total of 13 pregnant women (54.2%) were pregnant women who had never been pregnant before and 14 pregnant women (58.3%) were housewives (not working).

In the control group, the majority of respondents were in the age range of 20-30

years, as many as 18 people (75%) and half of the respondents were high school graduates as many as 12 people (50%). As many as 13 pregnant women (54.2%) were multiparous pregnant women who had previously been pregnant and half of the respondents or 12 pregnant women (54.1%) were working mothers.

The equality test of the treatment group and the control group used the test of homogeneity of variances. The results obtained p value > 0.05 , this proves that the characteristics of respondents from both groups are homogeneous.

3.1 The Attitude of Pregnant Women

Based on table 2 it is known that pregnant women in the treatment group before being given a brainstorming intervention, the majority already have a good breastfeeding attitude, as many as 10 people (41.7%) and increased to 18 people (75%) after being given a brainstorming intervention. Wilcoxon signed ranks test results obtained α value < 0.05 ($p = 0.000$) which means there is a significant difference between breastfeeding attitudes of pregnant women before and after giving the intervention.

In the control group, the pre-test results showed that the majority of pregnant women had moderate breastfeeding attitudes, as many as 11 people (45.8%). The post-test results showed that the majority of pregnant women still have moderate breastfeeding attitudes, as many as 10 people (41.7%). There was an increase in the number of respondents with good breastfeeding attitudes, from 6 people (25%) to 8 people (33.3%). Wilcoxon signed ranks test results obtained $p = 0.004$, which means there is a difference between the attitude of pregnant women when pre-tested and post-test.

The attitude of breastfeeding in the two groups, both the control group and the treatment before being given the intervention did not have significant differences. Mann Whitney test results obtained $p = 0.853$, which means there is no significant difference between the two groups and it can be said the attitude of the two groups before being given intervention is homogeneous. The results of the mann whitney test after the post test results

Table 1. Distribution of demographic characteristics of pregnant women in Klampis Ngasem and Pacarkeling community health center Surabaya in June 2019

Characteristics	Treatment		Control		p Value
	n	%	n	%	
Age					
<20	1	4.2	2	8.3	0.473
20-30	20	83.3	18	75	
>30	3	12.5	4	16.7	
Total	24	100	24	100	
Education					
College education	7	29.2	6	25	0.601
Senior High School	11	45.8	12	50	
Junior High School	5	20.8	6	25	
Elementary School	1	4.2	0	0	
Total	24	100	24	100	
Parity					
1	13	54.2	11	45.8	1.000
≥2	11	45.8	13	54.2	
Total	24	100	24	100	
Occupation					
Working	10	41.7	12	50	0.422
Housewives	14	58.3	12	50	
Total	24	100	24	100	

obtained $p = 0,000$, which means that there are significant differences in the two groups after being given a brainstorming intervention.

3.2 The Subjective Norms of Pregnant Women

Based on table 3 it is known that pregnant women in the treatment group before being given a brainstorming intervention, the majority had subjective norms that were weak, as many as 14 people (58.3%). A total of 21 pregnant women (87.5%) in the treatment group had strong subjective norms after being given a brainstorming intervention. Wilcoxon signed ranks test results obtained $\alpha < 0.05$ ($p = 0,000$) which means that there are significant differences between the subjective norms of breastfeeding pregnant women before and after giving the intervention.

In the control group, the pre-test results showed that the majority of pregnant women as many as 15 people (62%) had subjective norms that were weak. Post test results showed an increase in pregnant women with strong subjective norms to 12 people (50%) from initially only 9 people (38%). Wilcoxon signed ranks test results obtained $p = 0.001$, which means there is a difference between subjective norms of breastfeeding pregnant women when pre-test and post-test is done.

The subjective norms of breastfeeding in the two groups, both the control group and the treatment before being given the intervention did not have significant differences. Mann Whitney test results obtained $p = 0.877$, which means there is no significant difference between the two groups and it can be said the subjective norms of the two groups before being given an intervention is homogeneous. The results of the mann whitney test after the post test results obtained $p = 0,000$, which means that there are significant differences in the two groups after being given a brainstorming intervention.

3.3 The Perceived Behavioral Control of Pregnant Women

Based on table 4 it is known that pregnant women in the treatment group before brainstorming intervention were given, as many as 12 pregnant women (50%) had weak perceived behavioral control. A total of 23 pregnant women (95.8%) in the treatment group had a strong perceived behavioral control after being given a brainstorming intervention. Wilcoxon signed ranks test results obtained $\alpha < 0.05$ ($p = 0,000$), which means there is a significant difference between perceived behavioral control of breastfeeding pregnant women before and after giving the intervention

Table 2. Distribution of attitude of pregnant women in Klampis Ngasem and Pacarkeling community health center Surabaya in June 2019

Variable	Treatment				Control			
	Pre		Post		Pre		Post	
	n	%	n	%	n	%	n	%
Attitude								
Good	10	41.7	18	75	6	25	8	33.3
Moderate	6	25	5	20.8	11	45.8	10	41.7
Low	8	33.3	1	4.2	7	29.2	6	25
Total	24	100	24	100	24	100	24	100
Wilcoxon	p=0.000				p=0.004			
Mann Whitney pretest					p=0.853			
Mann Whitney posttest					p=0.000			

Table 3. Distribution of subjective norms of pregnant women in Klampis Ngasem and Pacarkeling community health center Surabaya in June 2019

Variable	Treatment				Control			
	Pre		Post		Pre		Post	
	n	%	n	%	n	%	n	%
Subjective Norm								
Strong	10	41.7	21	87.5	9	38	12	50
Weak	14	58.3	3	12.5	15	62	12	50
Total	24	100	24	100	24	100	24	100
Wilcoxon	p=0.000				p=0.001			
Mann Whitney pretest					p=0.877			
Mann Whitney posttest					p=0.000			

In the control group, the pre-test results showed that the majority of respondents or 14 pregnant women (58.3%) had weak perceived behavioral control. Post test results showed an increase in respondents with a strong category from 10 people (41.7%) to 11 people (45.8%). Wilcoxon signed ranks test results obtained $p = 0.007$, which means there is a difference between perceived behavioral control of breastfeeding pregnant women when pre-tested and post-test. This is also shown from the increase in the average value of the perceived behavioral control parameters of the control group pregnant women.

Perceived behavioral control in the two groups, both the control group and the treatment before being given an intervention did not have a significant difference. Mann Whitney test results obtained $p = 0.934$, which means there is no significant difference between the two groups and it can be said that the perceived behavioral control of the two groups is homogeneous. The results of the mann whitney test after the post test results obtained $p = 0,000$, which means that there are significant differences in the two groups after being given a brainstorming intervention.

3.4 The Breastfeeding Intention of Pregnant Women

Based on table 5 it is known that pregnant women in the treatment group before being given a brainstorming intervention, the majority had moderate breastfeeding intentions, as many as 10 people (41.6%). Post test results showed an increase in the intention of pregnant women, as many as 24 people (100%) or all respondents in the treatment group had high breastfeeding intentions. Wilcoxon signed ranks test results obtained α value <0.05 ($p = 0,000$) which means there is a significant difference between breastfeeding intentions of pregnant women before and after giving the intervention.

In the control group, the pre-test results showed that the majority of pregnant women had moderate breastfeeding intentions, as many as 11 people (45.8%). Post test results showed an increase in the number of pregnant women with high breastfeeding intentions from 7 people (29.2%) to 11 people (45.8%). Wilcoxon signed ranks test results obtained $p = 0.014$, which means there is a difference between breastfeeding intentions of pregnant women when pre-test

Table 4. Distribution of perceived behavioral control of pregnant women in Klampis Ngasem and Pacarkeling community health center Surabaya in June 2019

Variable	Treatment				Control			
	Pre		Post		Pre		Post	
	n	%	n	%	n	%	n	%
Perceived Behavioral Control								
Strong	12	50	23	95.8	10	Strong	12	50
Weak	12	50	1	4.2	14	Weak	12	50
Total	24	100	24	100	24	Total	24	100
Wilcoxon	p=0.000				p=0.007			
Mann Whitney pretest					p=0.934			
Mann Whitney posttest					p=0.000			

Table 5. Distribution of breastfeeding intention of pregnant women in Klampis Ngasem and Pacarkeling community health center Surabaya in June 2019

Variable	Treatment				Control			
	Pre		Post		Pre		Post	
	n	%	n	%	n	%	n	%
Intention								
High	7	29.2	24	100	7	29.2	11	45.8
Moderate	10	41.6	0	0	11	45.8	8	33.4
Low	7	29.2	0	0	6	25	5	20.8
Total	24	100	24	100	24	100	24	100
Wilcoxon	p=0.000				p=0.014			
Mann Whitney pretest					p=0.645			
Mann Whitney posttest					p=0.000			

and post-test. This was also shown from the increase in the average value of breastfeeding intention in the control group pregnant women.

The intention of breastfeeding in the two groups, both the control group and the treatment before being given an intervention, had moderate breastfeeding intentions. The mann whitney test results obtained $p = 0.645$, which means there is no significant difference between the two groups and it can be said that the intention to breastfeed in the two groups before being given intervention is homogeneous. The results of the mann whitney test after the post-test results obtained $p = 0,000$, which means that there are significant differences in the two groups after being given a brainstorming intervention.

4. DISCUSSION

4.1 The Effect of Brainstorming Methods on Giving Exclusive Breastfeeding to Attitude of Pregnant Women

The increase in the attitude of pregnant women became significantly strong in the treatment group after being given an intervention showed that the brainstorming

method of exclusive breastfeeding had an effective effect of improving breastfeeding attitudes in pregnant women. This is reinforced by the results of the Wilcoxon signed-rank test that showed a significant difference between the attitudes of breastfeeding pregnant women before and after brainstorming interventions.

During the brainstorming session, the first topic for discussion was general knowledge about breastfeeding and exclusive breastfeeding and how to resolve breastfeeding problems. Participants are given the opportunity to express their ideas and opinions related to how they deal with the problem. Participants who are primipara pregnant women are also allowed to convey what makes them afraid and hesitant to give exclusive breastfeeding. Not only primiparous mothers, multiparous mothers also expressed their doubts to giving breastfeeding again because of previous unpleasant breastfeeding experiences, for example due to nipples that are chafed because of breastfeeding. Other participants are allowed to provide solutions to the problems presented. So that participants who have successfully resolve these problems can share their success experiences with other

participants and make other participants more confident if they have to experience similar problems. During the conclusion phase, the facilitator assisted by the midwife of community health center provided an explanation and rectified the ideas of the participants which were not quite right, so that the participants' knowledge about breastfeeding and exclusive breastfeeding became more precise. It also added solutions related to breastfeeding and exclusive breastfeeding based on scientific Theory. The method that has been implemented not only makes general knowledge about breastfeeding of respondents increase, but also makes respondents more positive in facing obstacles when breastfeeding thereby increasing breastfeeding attitudes in pregnant women.

Another factor that can influence someone's attitude is the level of education, in this case including the attitude to give exclusive breastfeeding (Notoatmodjo, 2014). The level of education of respondents varies, but the majority of respondents, both from the control and treatment groups have a moderate level of education, which is high school. This is in line with Nasution's research (Nasution and Liputo, 2016) which states that exclusive breastfeeding is more for mothers with higher education than mothers with low education. The increase in the attitude of pregnant women towards breastfeeding is also in line with research conducted by Buanasari (Buanasari, 2016) which shows an increase in the knowledge and attitude of breastfeeding mothers after brainstorming methods.

4.2 The Effect of Brainstorming Methods on Giving Exclusive Breastfeeding to Subjective Norms of Pregnant Women

The increase in subjective norms of pregnant women became significantly strong in the treatment group after being given an intervention showed that the brainstorming method about exclusive breastfeeding had an effective effect to improve subjective norms of breastfeeding in pregnant women. This is reinforced by the results of the Wilcoxon signed rank test that showed a significant difference between the subjective norms of breastfeeding pregnant women before and after brainstorming interventions.

The increase in subjective norms in the treatment group was due to the fact that during the brainstorming session, pregnant women were invited to tell what myths they had known and believed that were related to exclusive breastfeeding. It turns out that there are still many myths believed by pregnant women about improper breastfeeding and can harm both mother and baby. Some of the most believed myths conveyed by pregnant women during brainstorming are removing the first milk that comes out and is yellowish (colostrum) because it is stale breast milk, applying honey or feeding a newborn baby with a banana, and forbid pregnant/nursing mothers from consuming fish because it is feared that it will cause the mother's milk to smell fishy/rancid.

In addition to the influence of the closest people who are considered important, subjective norms are also influenced by norms or myths that circulate in society and have been believed for generations (Puspita, 2015). These myths that have been believed for generations include giving prelacteal food to infants with a specific purpose and causing a "feel bad" or uncomfortable for the mother if you have to leave the habit. Norms in this community certainly become an obstacle to the success of exclusive breastfeeding. This is in line with research conducted by Burhan (Burhan, Hardianti and Nugraheni, 2018) which showed that there was a significant relationship between the tradition of providing prelacteal food and the failure of exclusive breastfeeding in Bengkulu City.

At the end of the brainstorming session, which is the verification and conclusion session, the facilitator together with the cadres and the midwife of community health center provide an explanation and correct the wrong beliefs but are already attached to the community with an explanation according to scientific Theory, so that in the end it can rectify the beliefs of pregnant women who are wrong and harm both mother and baby. This results in an increase in subjective norms of pregnant women when a post-test is carried out in the treatment group.

4.3 The Effect of Brainstorming Methods on Giving Exclusive Breastfeeding to Perceived Behavioral Control of Pregnant Women

The increase in perceived behavioral control of pregnant women became significantly stronger in the treatment group after being given an intervention showed that the brainstorming method about exclusive breastfeeding had an effective effect to increase perceived behavioral control of breastfeeding in pregnant women. This is reinforced by the results of the Wilcoxon signed rank test that showed a significant difference between perceived behavioral control of breastfeeding pregnant women before and after brainstorming interventions.

The post-test results showed that there was only 1 respondent who had weak perceived behavioral control. After the researcher conducted an interview with the respondent, it turns out that the respondent plans to leave her child with her parents in the village because she wants to continue working in Surabaya so that she does not have the opportunity to breastfeed. This is consistent with what was said by Glanz (Glanz, Barbara and Viswanath, 2008) that perceived behavioral control is not only influenced by the will, but also the presence or absence of opportunity.

Perceived behavioral control is determined by past experiences and someone's predictions about the ease or difficulty of carrying out certain behaviors. This behavior control is closely related to self-confidence (self efficacy). So that self efficacy will determine someone to be able to do a behavior (Edberg, 2010). There are 4 main factors that influence breastfeeding self efficacy, namely the experience of breastfeeding mothers in the past (direct experience), breastfeeding experience of others (indirect experience), verbal persuasion, and emotional conditions (Dennis, 2010).

Direct experience or the experience of success that has been experienced can increase self-confidence, beliefs, and strong desires in a person. The experience of success in the past is also able to make someone more diligent and persistent in undergoing a process, so as to reduce the risk of failure. A mother who has direct breastfeeding experience will feel more confident to continue breastfeeding (Pradanie, 2015). While indirect experience is the result of observing and studying the behavior or

experience of people who have successfully carried out and completed certain behaviors. Someone's self efficacy will increase if she feels confident that she can do a certain behavior after knowing someone else has succeeded in doing it (Wardani, 2012). In this study, the confidence of breastfeeding primiparous mothers who had no experience at all increased after hearing the success stories of multiparous mothers who had breastfed and experienced obstacles in breastfeeding but could succeed through it.

Telling success experiences and sharing solutions about problems on giving exclusive breastfeeding from multipara mothers to primiparous mothers will have a positive impact because a primiparous mother is more prone to experience obstacles / problems when breastfeeding due to ignorance about the correct methods / techniques of breastfeeding, especially if primipara mothers hearing unpleasant breastfeeding experiences from others, of course this will make primipara mothers increasingly hesitant to breastfeed their babies exclusively. This is consistent with Mabud's research (Mabud, Mandang and Mamuaya, 2015) which states that there is a relationship between parity and exclusive breastfeeding.

Words and suggestions about the importance of giving exclusive breastfeeding from the facilitator, the support of fellow brainstorming members, as well as cadres and staffs of community health center become verbal persuasion for pregnant women to be more confident in giving exclusive breastfeeding. The provision of verbal persuasion is believed to increase the ability of individuals to do a large and sustainable effort (Bandura, 1997). Feelings or moods of pregnant women who take part in brainstorming sessions also get better, because learning is done not only in one direction that makes pregnant women feel bored, but also involves them actively. Sharing experiences and sharing enthusiasm with fellow pregnant women also makes them more confident and confident to give exclusive breastfeeding. The increase in the four factors forming breastfeeding self-efficacy is the cause of the increased perceived behavioral control of pregnant women in the treatment group.

4.4 The Effect of Brainstorming Methods on Giving Exclusive Breastfeeding to Breastfeeding Intention of Pregnant Women

The increase in breastfeeding intention of pregnant women became significantly stronger in the treatment group after being given an intervention showed that the brainstorming method about exclusive breastfeeding had an effective effect to increase intention of breastfeeding in pregnant women. This is reinforced by the results of the Wilcoxon signed rank test that showed a significant difference between intention of breastfeeding pregnant women before and after brainstorming interventions.

The results showed an increase in attitudes, subjective norms, and perceived behavioral control which eventually contributed to a significant increase in the intention of pregnant women in the treatment group after brainstorming interventions were given. This is in accordance with the Theory of planned behavior that was first said by Ajzen (Ajzen, 1988) who said that intentions are formed from 3 factors, namely attitudes, subjective norms, and perceived behavioral control. The results of this study are also in line with the research of Jamei et al (Jamei, Ostovar and Javadzade, 2017) which showed that attitudes, subjective norms, and behavioral control correlate significantly with breastfeeding intention in nullipara mothers in Iran. Likewise, research conducted by Permatasari (Permatasari et al., 2018) which shows that the perception of behavioral control is the most dominant factor associated with the intention of exclusive breastfeeding.

The strength of intentions can fluctuate, so to maintain the intention to breastfeed in pregnant women remains high and stable, the role of support from the husband, family, and those closest to the pregnant woman are needed. The role of health workers in maintaining the stability of breastfeeding intentions in pregnant women is equally important. Health workers must continue to provide motivation and encouragement to pregnant women every time a pregnant woman visits a health facility or contacts with health workers, one of which is when a pregnant woman visits for antenatal care.

The stability of breastfeeding intentions is important because the intention is a picture of how strong their desire to conduct a behavior and in this case is behavior for exclusive breastfeeding for 6 months. This is confirmed by Sulaeman's research (Sulaeman *et al.*, 2018) which showed that breastfeeding intentions relate to exclusively breastfeeding behavior. Likewise with the study of Walingo & Mutuli (Walingo and Mutuli, 2014) who said that intention was a strong predictor of breastfeeding behavior in post partum mothers in Kenya, Africa.

5. CONCLUSION

Brainstorming methods effective to improve attitudes, subjective norms, perceived behavioral control, and breastfeeding intentions among pregnant women.

6. ACKNOWLEDGEMENT

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7. REFERENCES

- Ajzen, I. (1988) *From Intentions to Actions, Attitudes, Personality and Behavior*. London: Open University Press, England.
- Bandura, A. (1997) 'Self-Efficacy: Toward a Unifying Theory of Behavioral Change', *Psychological Review*, 84(2), pp. 191-215.
- Buanasari, L. (2016) *Pengaruh Metode Brainstorming Terhadap Pengetahuan dan Sikap Ibu Tentang Pemberian ASI Eksklusif*. Universitas Airlangga.
- Burhan, R., Hardianti, G. and Nugraheni, D. E. (2018) 'Pengaruh Pengetahuan, Jenis Persalinan dan Tradisi Terhadap Pemberian Makanan Prelakteal di Wilayah Kerja Puskesmas Jalan Gedang Kota Bengkulu Tahun 2017', *Jurnal Bahan Kesehatan Masyarakat*, 2(1), pp. 13-20.
- Dennis, C. L. (2010) *Breastfeeding Self-Efficacy*.

- Dinas Kesehatan Kota Surabaya (2018) Profil Kesehatan Kota Surabaya Tahun 2017. Surabaya: Dinas Kesehatan Kota Surabaya.
- Dinas Kesehatan Propinsi Jawa Timur (2017) 'Profil Kesehatan Propinsi Jawa Timur 2017'.
- Donnan, P. T. et al. (2013) 'Prediction of initiation and cessation of breastfeeding from late pregnancy to 16 weeks: the Feeding Your Baby (FYB) cohort study', *BMJ Open*, 3(8), p. e003274. doi: 10.1136/bmjopen-2013-003274.
- Edberg, M. (2010) Buku Ajar Kesehatan Masyarakat: Teori Sosial & Perilaku. Jakarta: Buku Kedokteran EGC.
- Effendi, F. and Makhfudli (2013) Keperawatan Kesehatan Komunitas: Teori dan Praktik dalam Keperawatan. Jakarta: Salemba Medika.
- Fishbein, M. and Ajzen, I. (1975) *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Massachusetts: Addison-Wesley Publishing Company.
- Glanz, K., Barbara, K. and Viswanath (2008) *Health Behavior and Health Education*. United States of America: John Woley & Sons, Inc.
- Jamei, F., Ostovar, A. and Javadzade, H. (2017) 'Predictors of Exclusive Breastfeeding among Nulliparous Iranian Mothers: Application of the Theory of Planned Behavior', *International Journal of Pediatrics-Mashhad*, 5(3), pp. 4457-4467. doi: 10.22038/ijp.2016.20815.1748.
- Mabud, N. H., Mandang, J. and Mamuaya, T. (2015) 'Hubungan Pengetahuan , Pendidikan , Paritas dengan Pemberian ASI eksklusif di Puskesmas Bahu Kecamatan Malalayang Kota Manado', pp. 51-56.
- Nasution, S. I. and Liputo, N. I. (2016) 'Faktor-Faktor yang Berhubungan dengan Pola Pemberian ASI Eksklusif di Wilayah Kerja Puskesmas Bungus Tahun 2014', 5(3), pp. 635-639.
- Notoatmodjo, S. (2014) *Ilmu Perilaku Kesehatan*. 2nd edn. Jakarta: Rineka Cipta.
- Permatasari, T. A. et al. (2018) 'Exclusive Breastfeeding Intention among Pregnant Mothers', *Kesmas: National Public Health Journal*, 12(3), pp. 134-141. doi: 10.21109/kesmas.v12i3.1446.
- Pradanie, R. (2015) 'Paket Dukungan Terhadap Breastfeeding Self Efficacy dan Keberhasilan Menyusui Pada Ibu Postpartum', *Jurnal Ners*, 2(1).
- Puspita, Y. A. (2015) 'Perbedaan Persepsi Kontrol Diri Ibu Hamil Terhadap Intensi Ibu Untuk Memberikan Asi Eksklusif Pada Kelas Ibu Hamil Plus Di Puskesmas Muara Teweh Kabupaten Barito Utara', *Jurnal Edu Health*, 5(2), pp. 123-130.
- Sulaeman, E. S. et al. (2018) 'Exclusive Breastfeeding Behavior Model in Rural Central Java, Indonesia: The Application of Theory of Planned Behavior', *Global Journal of Health Science*, 10(10), p. 35. doi: 10.5539/gjhs.v10n10p35.
- Walingo, M. K. and Mutuli, L. A. (2014) 'Influence of Maternal Beliefs, Attitude, Perceived Behavior on Breast-Feeding among Post Partum Mothers in Western Kenya', *Pakistan Journal of Nutrition*, 13(5), pp. 250-254.
- Wardani, M. A. (2012) *Gambaran Tingkat Self-Efficacy untuk Menyusui pada Ibu Primigravida*. Universitas Indonesia.
- WHO (2018a) *Children Reducing Mortality*.
- WHO (2018b) *Infant and Young Child Feeding*.