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**Effectiveness of Couple Class in Increasing Breastfeeding and Prevention of
Breastfeeding in the Pandemic Era**

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ABSTRACT

Background: Exclusive breastfeeding still often experiences obstacles. At the beginning of childbirth, especially in the first 7 days, breastfeeding problems often arise. The first 7 days of childbirth are a critical period for Lactation problems that often arise in the first 7 days after childbirth are the lack of knowledge of couples about lactation. One alternative solution to this problem is through couple classes. Couple classes provide education to couples since pregnancy. Education is not only about knowledge but also breast care practices. The purpose of this study was to analyze the effectiveness of couple classes in increasing breastfeeding and preventing breast engorgement. Method: The research design was a quasi-experiment with a pretest -posttest with control group design. The population was pregnant women in their third trimester and their partners. The sample was pregnant women and their partners who met the inclusion criteria of pregnant women and husbands living in the same house and were willing to be studied. The exclusion criteria were that the husband worked outside the city, did not participate in the entire series of research and experienced an emergency during research. The number of samples for each group was 25 people using a simple random sampling technique. The intervention group was given treatment in the form of a couple class given online via WAG and uring assistance once in the first 7 days after giving birth, the control group received treatment according to the applicable SOP at private midwife clinic. Before the treatment, a pretest was given regarding knowledge and attitudes about breastfeeding, then a couple class was followed for the intervention group, then a posttest was continued. Breastfeeding in the first 7 days used a checklist. Analysis: Differences in knowledge of breastfeeding using independent t-test (normally distributed data). Breastfeeding alone in the first week using chi square test. Differences in the incidence of breast milk stagnation between the couple class group and the control group using chi square test. Results: There was a difference in increasing knowledge and attitudes between the intervention and control groups (sig. value of each 0.000). There was a difference in giving breast milk only in the first 7 days between the two groups with a sig. value of 0.034. There was a difference in preventing breast milk engorgement in the two groups with a sig. value of 0.017. Conclusion and suggestions: Couple class effectively increases breastfeeding, infant sufficiency, and prevention of breast milk stagnation. Couple class materials provided online are quite effective and efficient during the Covid-19 pandemic.

Keywords: Couple class; breastfeeding; adequate breast milk; prevention of breast milk engorgement

INTRODUCTION

Breast milk (ASI) is the most important food for babies, especially in the first 6 months of a baby's life. Many problems arise in the first days of breastfeeding that often make mothers feel

confused and finally choose other alternatives to meet the baby's needs. One of the problems is the lack of husband support for exclusive breastfeeding.

Basic Health Research (Riskedas) Data 2018 shows that the coverage of

breastfeeding in Indonesia is only 68.74%⁽¹⁾. Data from the Magetan Health Office shows that the achievement of exclusive breastfeeding was 67.27% in 2017. This figure is still below the target (95%).

The importance of breastfeeding babies is reflected in the recommendations of the World Health Organization (WHO) which urges every mother to exclusively breastfeed until her baby is six months old. According to data from UNICEF, children who are exclusively breastfed are 14 times more likely to survive the first six months of life than children who are not breastfed. Starting breastfeeding on the first day after birth can reduce the risk of newborn death by up to 45%. Research conducted by Melina Mongan et al., in Kilimanjaro Tanzania showed that EBF (Exclusive Breastfeeding) is effective in preventing infant mortality by up to 13% - 15%⁽²⁾.

Failure in the breastfeeding process is often caused by several factors, including maternal factors, infant factors, husband's support factors, psychological factors, health worker factors, socio-cultural factors. Husband's support is a support that plays a role in determining the emotional state or feelings of the mother so that it affects the smoothness of the reflex of breast milk release⁽³⁾.

Several methods can be developed to empower families, one of which is empowering husbands/partners to support exclusive breastfeeding. Husbands can play an active role in supporting exclusive breastfeeding if their partners understand about exclusive breastfeeding. This understanding can be obtained by providing education to husbands⁽⁴⁾. In this study, education to husbands was in the form of couple classes. Couple class is a class consisting of 20 couples of husbands and pregnant women, who are given education about exclusive breastfeeding, problems that often arise during breastfeeding and breast care techniques during postpartum.

Based on the explanation above, the

researcher is interested in knowing the effectiveness of Couple Class in increasing mothers' knowledge about breastfeeding, increasing breastfeeding, and preventing breast milk stagnation. The purpose of the study was to analyze the effectiveness of Couple Class in increasing breastfeeding (knowledge, behavior), and preventing breast milk stagnation. This study analyzed the differences in breastfeeding between the intervention group and the control group, analyzed the differences in preventing breast milk stagnation between the intervention group and the control group.

RESEARCH METHOD

This design is a *quasi-experiment with a posttest only with control group design*. The population of this study were all couples of pregnant women in their 3rd trimester and their husbands at the Independent Midwife Practice (PMB) Santi, Widiastuti, Sri Wahyuni in the period February - September 2021. The determination of quantitative samples was carried out using a sample size for simple experimental research, which used an experimental group and a control group, so the number of sample members in each group was 25.

The sampling technique used *simple random sampling*, namely pregnant women and their husbands who met the selection criteria were randomly selected and included in the study until the number of subjects required was met. The inclusion criteria in this study were: pregnant women in the 3rd trimester with their partners, willing to be studied. The exclusion criteria were: husbands did not work outside the city, husbands/mothers did not participate in the entire series of research activities, unhealthy conditions of mothers and babies in emergency cases.

Before the intervention, a pretest was given regarding breastfeeding (knowledge and attitudes about lactation), then the intervention group was given a couple class and the control group was given actions

according to the procedures of each PMB. Couples class was given to the intervention group. Couple class is an educational class consisting of pregnant women and their partners, given education about exclusive breastfeeding, problems that often arise during breastfeeding and its care. This couple class is given through WAG which lasts for 1 month and is accompanied once in the first seven days of postpartum. This assistance is carried out by researchers assisted by enumerators with midwife qualifications. This class is held online because it is still in the Covid-19 pandemic. After the intervention was given, a posttest was given regarding breastfeeding (knowledge, attitudes and breastfeeding only in the first 7 days), and prevention of breast milk stagnation.

The research instrument was a questionnaire about mothers' knowledge about breastfeeding and a checklist for breastfeeding and preventing breast milk stagnation. The knowledge questionnaire had been tested for validity and reliability first.

The analysis used in this study used an independent t-test to compare the

increase in knowledge, a chi-square test for breastfeeding behavior, using the Mann Whitney test to determine the difference in breast milk adequacy in the two groups, and a chi-square test to determine the difference in the incidence of breast milk stagnation in the two groups.

RESULT AND DISCUSSION

The study was conducted at PMB in Magetan area. The respondents of the study were patients from PMB Widiastuti, PMB Sri Wahyuni, PMB Santi, PMB Umi Habibah. These PMBs have similar initial characteristics in terms of breastfeeding. There are no special classes discussing lactation. Education is provided during ANC and postpartum visits. The respondents numbered 50 postpartum mothers, 25 for the intervention group and 25 for the control group. Respondents participated in the entire series of research activities.

Respondent characteristics including parity, age and education will be displayed in the following table.

Table 1. Respondent Characteristics

No.	Respondent Characteristics	Intervention Group		Control Group		Total		Homogeneity
		f(x)	%	f(x)	%	f(x)	%	
1	Age (years)							0.185
	20-25	5	20	10	40	15	30	
	26-30	12	48	4	16	16	32	
	31-35	7	28	8	32	15	30	
	36-40	0	0	2	8	2	4	
	40-45	1	4	1	4	2	4	
3	Education							0.874
	Junior high school	1	4	2	8	3	6	
	Senior high school	19	76	18	72	37	74	
	College	5	20	5	20	10	20	
4	Parity							0.405
	P1	8	32	2	8	19	38	
	P2	11	44	18	72	19	38	
	P3	5	20	5	20	10	20	
	P4	1	4	0	0	2	4	

The age of respondents was 16 people (32%) aged 26-30, the highest education

was high school education as many as 37 respondents (74%), parity 1 and 2 were the

highest parity, each as many as 19 people (38%). Respondents in both groups were homogeneous (significance value >0.05).

The following is a description of breastfeeding in respondents. Breastfeeding

includes knowledge, attitudes and behavior of breastfeeding in the first 7 days of a baby's birth.

Table 2. Respondents' Knowledge and Attitudes about Lactation

Variables	Group	Pre Test (Mean±SD)	Min- Max	Post Test (Mean±SD)	Min- Max
Knowledge	Intervention	65.28±6.484	58-81	89.64±6.396	81-100
	Control	63.32±9.109	50-81	75.28±5.683	62-85

In the table above, it can be seen that the average knowledge of respondents before participating in the intervention was 65.28 in the intervention group and 63.32 in the control group. As for the post-test, the intervention group obtained an average

knowledge value of 89.64 and 75.28 in the control group.

An overview of providing only breast milk in the first 7 days can be seen in the following table.

Table 3. Overview Breastfeeding in the Intervention Group and Control Group in PMB Magetan Region in 2021

group		Breastfeeding					
		Breast Milk	%	Breast Milk + Food	%	Total	%
group	Intervention	23	92	2	8	25	100
	Control	17	68	8	32	25	100
Total		40	80	10	20	50	100

From the table above, it can be seen that breastfeeding in the intervention group was 92% while in the control group it was 68%.

The occurrence of breast milk dams can be seen in the following table.

Table 4. Breastfeeding engorgement in respondents at PMB Magetan Region in 2021

group		Breast Milk Dam				Total
		No	%	breast milk dam	%	
group	Intervention	23	92	2	8	25
	Control	16	64	9	36	25
Total		39	78	11	22	50

Based on the table above, we can see that the incidence of breast milk engorgement in the intervention group was 8% and 36% in the control group.

The research data, especially the breastfeeding variable, will be tested for

normality first. The results of the normality test are displayed in the following table.

Table 5. Results of Normality Test on Breastfeeding Variable

Variables	Group	p value
Increase in Knowledge	Intervention	0.110
	Control	0.91

Data is said to be normally distributed if it has a sig value > 0.05. Based on the table above, the variable for increasing knowledge has a sig. 0.110 in the intervention group and 0.91 in the control group so that the data is said to be normally distributed and the analytical test can use the independent t-test.

The effectiveness of *Couple Class* in increasing breastfeeding (increasing knowledge and attitudes) will be tested using an independent t-test.

Table 6. Increase in Knowledge and Attitude after Participating in Couple Class in the Intervention Group and Control Group in PMB Magetan Region in 2021

Variables	Group	Pre Test (Mean±SD)	Min- Max	Post Test (Mean±SD)	Min- Max	Delta	p value
Knowledge	Intervention	65.28±6.484	58-81	89.64±6.396	81- 100	24.36	0.000
	Control	63.32±9.109	50-81	75.28±5.683	62-85	11.96	

Based on the table above, the sig. value is 0.000 (<0.05) on the knowledge and attitude variables. These results indicate that there is a difference in

increasing knowledge about lactation between the group given *the couple class* and the control group.

Table 7. Breastfeeding in the Intervention Group and Control Group in the PMB Magetan Region in 2021

group		Breastfeeding				Total		Sig.
		breast milk	%	breast milk + food	%		%	
Intervention		23	92	2	8	25	100	0.034*
	Control	17	68	8	32	25	100	
Total		40	80	10	20	50	100	

*Chi-square test

Based on the table above, the sig. value is 0.034 (<0.05). Based on these results, it can be concluded that there is a difference in giving breast milk only between the intervention group (*couple*

class) and the control group.

The effectiveness of *Couple Class* in preventing breast milk engorgement was tested using Chi square. The results are presented in the following table.

Table 8. Breast Milk Dam in the Intervention Group and Control Group in PMB Magetan Region in 2021

group		Breast Milk Dam				Total	Sig.
		No	%	breast milk dam	%		
Intervention		23	92	2	8	25	0.017
	Control	16	64	9	36		
Total		39	78	11	22	50	

Based on the table above, the sig value is 0.017 (sig value <0.05) so it can be concluded that there is a difference in the incidence of breast milk engorgement between the intervention group and the control group. *Couple Class* is effective in preventing breast milk engorgement.

The Effectiveness of Couple Class in Increasing Breastfeeding

Based on this study, it can be

concluded that couples class is effective in increasing breastfeeding. Breastfeeding in this study includes knowledge about lactation and breastfeeding without PASI in the first 7 days.

One of the factors that influence the success of breastfeeding is knowledge and attitude about breastfeeding. Not only pregnant women but also their husbands. Sufficient husband knowledge will create a

positive attitude towards the breastfeeding process and ultimately increase husband support. Husband support is one of the factors that influences the success of breastfeeding (5).

Couple Class uses a health promotion method in the form of WAG which is the core of educational intervention, using the WAG application which is quite familiar in the community (6). WhatsApp can be used as an educational medium. The following are some of the advantages when we use WAG as one of the health promotion media.

When using WhatsApp, we can send picture and educational texts. This is one of the breakthroughs that most often applied in social media as efforts to improve cognitive aspects (7). Learning materials in the form of text and images facilitate respondents to understand the material provided. Based on Wisnu's research in 2020, the use of WAG was significant in increasing knowledge, attitudes and behavior of giving only breast milk to mothers. Pregnant women and husbands can more easily understand the material provided, thereby increasing their knowledge, attitudes and then their behavior in giving only breast milk to their babies (8).

Educational program through WhatsApp can be optimized through sending educational text messages and picture messages. In *Couple Class* there is also active learning. Active learning (accept and participate as well as doing) as mentioned in Edgar Dale's Cone of experience has a retention rate that higher. In this study, participants invited to play an active role (9). Some empirical evidence has explained evidence based positive impacts of sending picture and text messages educational on social media to increase knowledge. Discussion aspects on the features WhatsApp own significant opportunity to increase interest learner (6).

When participating in the *Couple Class Online*, respondents are also allowed to discuss the material so as to increase

knowledge that influences attitudes so as to change the husband's behavior to support mothers in providing breast milk. *Couple class* members can discuss the obstacles they encounter so that it is possible to receive input or alternative solutions to problems both from the facilitator and from other group members. There is a relationship of mutual support between members so that this also affects the increase in husband's support.

In this study, only a few did not give breast milk (exclusive breastfeeding) to their babies. This is because the mother's breast milk production is only small, the mother experiences anxiety about the condition of her baby who does not get breast milk so that the baby is given formula milk by her mother. Failure to provide exclusive breastfeeding is influenced by several factors including the level of knowledge.

Some people still think that breastfeeding is a matter between the mother and her baby. In fact, in breastfeeding activities, interaction between the mother and husband is needed. Interaction can be in the form of husband's support for the breastfeeding mother. This interaction has an impact on the practice of exclusive breastfeeding. Therefore, the support of the husband in providing exclusive breastfeeding to breastfeeding mothers is very much needed, so that the role of the husband / husband's support in providing exclusive breastfeeding to breastfeeding mothers is very much needed.

To increase husband's support in the success of breastfeeding, the *couple class* method is a modification of the pregnant mother's class by involving the couple at each meeting, so that this *couple class* is expected to result in changes in belief in the results, belief in norms and motivation to act (in this case exclusive breastfeeding), and have direct or indirect experience (from other members) about breastfeeding.

The role and support of the husband can improve the perception, motivation, emotions and attitudes of the mother. So

far, the husband considers himself only as a passive observer in the process of exclusive breastfeeding, whereas their support has a role in the attitude and behavior of the mother in breastfeeding her baby. The greater the support a mother gets from her husband to breastfeed, the higher the mother's ability and willingness to breastfeed her baby

The couple class method places mothers and husbands in their respective roles to support the success of exclusive breastfeeding. By receiving information from midwives/counselors, mothers and husbands have the same decision to support the breastfeeding process. The interaction obtained during the *couple class process* can cause a positive reaction to the role of both mothers and husbands after the baby is born. The role played by the husband during the breastfeeding process can help the mother in taking care of the baby(5,10). Breastfeeding mothers drain a lot of energy, this requires the role of the husband to look after and care for the child while the mother rests.

Couple class can improve harmonious relationship between mother and husband so that it can create a feeling of mutual love. This happens because during the *couple class process*, both mother and husband can respect each other's point of view. During the couple class process, different knowledge about exclusive breastfeeding can create the same understanding about exclusive breastfeeding and the same decision in providing exclusive breastfeeding to their babies(11). This feeling of mutual respect can strengthen the relationship between mother and husband. Midwives/Counselors facilitate mothers and husbands to discuss all kinds of problems in providing breastfeeding with an open attitude of mutual respect and a loving attitude, without cornering either party.

The effectiveness of couple classes in preventing breast milk engorgement

In this study, the results showed that *couple class* is effective in preventing

breast milk engorgement. The incidence of breast milk engorgement in the intervention group was less than in the control group.

Apart from the adequacy of breast milk, this study shows that *couples class* also prevents breast milk engorgement problems that often occur in postpartum mothers. When taking an online couple class, mothers and husbands receive material on preventing breast milk engorgement. Mothers and husbands already understand the things that must be done to prevent breast milk engorgement. During offline assistance, mothers are accompanied to do breast care. This makes mothers more confident in doing breast care themselves(12). Husbands are also accompanied to do massages to facilitate breast milk.

With *couple class* can increase the role / support of the husband who provides motivation and confidence of the mother to breastfeed her baby as often as possible so that there is no dam of breast milk. Husband / father has a very important role in the success of breastfeeding, namely as a breastfeeding father who will provide support to breastfeeding mothers for exclusive breastfeeding, so that the process of exclusive breastfeeding by the mother can run successfully.

The use of WAG in couple classes has one advantage, namely it is effective and cheap compared to counseling activities. Delivery of materials can be done at one time and covers a wide segment of society. The use of illustrated health information makes it easier for message recipients with low literacy levels. Delivering information through images can increase interest in learning. Online *couple classes* can be said to have a minimal budget because they utilize media that is already familiar to the community. This is different from conventional counseling where pregnant women and their partners must come and gather in a place which is certainly not more efficient and effective in terms of time and funding, especially in the Covid-19 pandemic. In the Online couple

class, participants do not need to come and gather, thus minimizing the transmission of the Covid-19 virus. Online couple class participants are one of the alternative health promotions offered during the Covid-19 pandemic(13). However, *online couple classes* are not suitable for areas with difficult internet access.

CONCLUSION

Couple class is effective in increasing breastfeeding (mother's knowledge about lactation and only giving breast milk to her baby in the first 7 days). Couple Class is effective in preventing breast milk stagnation. Couple class can be used as an alternative health promotion during the Covid-19 pandemic. This activity is carried out online through WAG for the delivery of materials and discussions. In addition, they also get one-time offline assistance. This method is more effective and efficient. Mothers and husbands do not need to gather in person, thus minimizing the transmission of Covid-19.

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