



The Effect of Health Education on Oxytocin Massage and Exclusive Breastfeeding on the Motivation of Exclusive Breastfeeding Mothers in the Working Area of Karang Ayu Health Center, Semarang.

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Abstract. Breast milk is a baby's main food that should be given exclusively for 6 months. The thing that can increase breast milk production is by doing oxytocin massage. The purpose of this study was to determine the effect of health education on Oxytocin Massage and Exclusive Breastfeeding on the Motivation of Exclusive Breastfeeding Mothers in the Working Area of Karang Ayu Semarang Health Center. This type of research is a Quasi Experiment, using an extended Pretest-Posttest Group design approach involving one experimental group and one control group. The population in this study were all pregnant women at the Karang Ayu Semarang Health Center from January to March 2021. Samples were taken according to the inclusion and exclusion criteria. The results of the Wilcoxon test gave a P value of 0.000, meaning that there was an effect on the motivation of respondents before and after being given health education.

Keywords Oxytocin Massage , Exclusive Breastfeeding, Motivation

1. INTRODUCTION

What is the purpose of the study? Why are you conducting the study? The main section of an article should begin with an introductory section that provides detailed information about the paper's purpose, motivation, research methods, and findings. The introduction should be written in relatively nontechnical language, yet clear enough for an informed reader to understand the manuscript's contribution.

Breast milk is a baby's main food so there is no other type of food that can match the quality of breast milk, only breast milk that can be accepted by the baby's digestive system so breast milk must be given exclusively for 6 months. Babies who get exclusive breastfeeding for the first 6 months will experience optimal brain growth, and have abilities in language, motor skills, and emotions (Astuti et al, 2015: 152).

The phenomenon that occurs in the community is that postpartum visits are rarely carried out, often only twice or even once during the postpartum period, as long as there are no complaints in the mother or baby. Postpartum visits are often considered unimportant by the community because they are considered to feel good and then run smoothly. During this period, the mother actually needs direction and advice from the midwife so that the adjustment process after childbirth takes place properly.

One of the problems that often arises is the lack of milk production. This is due to the major changes that occur in postpartum women in terms of physical changes, emotions, and the mother's psychological condition (Astuti et al, 2015: 6).

Breast milk is produced by breast glands in the alveoli area. Each alveoli can produce breast milk as soon as it gets stimulated. prolactin stored in granules in the hypothalamus is released from the granules, into the systemic blood circulation. Prolactin hormone that flows in the blood reaches the breast tissue so that it can stimulate the initiation of breast milk production (Astuti et al, 2015: 149).

Although the benefits of breast milk are very good, there are still mothers who do not provide exclusive breastfeeding. Nationally, 68.74% of infants in Indonesia receive exclusive breastfeeding from zero to less than six months of age (Ministry of Health, 2018:163).

Low breast milk production and ejection in the first days after childbirth are obstacles to early breastfeeding. The decrease in breast milk production in the first days of childbirth can be caused by the lack of stimulation of prolactin and oxytocin hormones that play a role in the smooth production of breast milk (Apriliana, 2016).

Things that can increase breast milk production are by doing oxytocin massage, because it can increase the production of prolactin and oxytocin hormones after the delivery process which aims to increase breast milk production (Rahayu, D., Yunarsih, 2018: 11).

The benefits of stimulating the oxytocin reflex are very important in breastfeeding, the oxytocin reflex makes the flow of milk from the breast smooth, so that breastfeeding is smoother and reduces milk duct dams (Astuti et al, 2015: 201).

Many things affect milk production. Milk production and secretion are influenced by two hormones, prolactin and oxytocin. Prolactin affects the amount of milk produced, while oxytocin affects the process of milk ejection. Prolactin is related to the mother's nutrition, the better the nutrition intake, the more breast milk production. One of the nutrients that can increase breast milk production is by consuming katuk leaves (Situmorang and Singarimbun, 2019: 56).

According to the Directorate General of Public Health, Ministry of Health, 2016, the national coverage of exclusive breastfeeding for infants aged 0-6 months was 55.7% (Indonesian Health Profile, 2015). The percentage of exclusive breastfeeding for infants 0-6 months in Central Java in 2015 was 61.6%. The district with the highest percentage of exclusive breastfeeding was Cilacap, 86.3%. The district with the lowest percentage of exclusive breastfeeding was Semarang City at 6.72%. Surakarta was among the 10 lowest cities in exclusive breastfeeding with a percentage of 52.43% (Central Java Health Profile, 2015).

The low coverage of exclusive breastfeeding can impact the quality of life of the nation's next generation (IDAI, 2016). Lack of breast milk that occurs early in life can result in growth faltering so that the baby will grow into a shorter than normal child. In addition, lack

of breast milk can also affect cognitive development, morbidity and mortality of infants. Several studies have found that one of the factors that influence infant mortality is the low level of exclusive breastfeeding. (Fikawati et al, 2015).

If postpartum women have a great sense of interest or interest in seeking information about oxytocin massage and understand its purpose by being encouraged by the information obtained, mothers will definitely be more motivated to do oxytocin massage and give katuk leaves to increase their milk production (Elvira & Panjaitan, 2017).

Based on the description and data above, the authors are interested in making a study with the title "The Effect of Health Education on Oxytocin Massage and Exclusive Breastfeeding on the Motivation of Exclusive Breastfeeding Mothers in the Working Area of Karang Ayu Semarang Health Center".

2. LITERATURE REVIEW

Septiani's (2017) research showed that exclusive breastfeeding was more prevalent in the 20-35 age group (53.6%). However, there is a difference in age range with Rahmawati's (2010) research which shows that 57.1% of mothers aged >30 years who provide exclusive breastfeeding. Despite the difference in age range, it shows that most respondents are in the healthy reproductive age range. Healthy reproductive age in women is 20-35 years, besides that in this age range a woman has reached a level of mental maturity so that she can undergo the reproductive process properly (Manuaba, 2016). Mentally, biologically and psychologically mature in facing life processes, especially in reproductive functions such as breastfeeding babies. So that exclusive breastfeeding tends to be carried out by breastfeeding mothers with characteristics aged 20-35 years.

3. METHODS

The type and design of research used in this study is Quasi Experiment to support the results of the study. This study used an extended Pretest-Posttest Group design approach involving one experimental group and one control group. Research data collection was carried out in April 2021 by researchers by providing health education to pregnant women.

The population in this study were all pregnant women at Puskesmas Karang Ayu Semarang from January to March 2021. Samples were taken according to the inclusion and exclusion criteria.

The sampling technique in this study is to use the total sampling technique. According to Kerlinger (2016, p. 188), Total sampling is a method of drawing from a population or

universe by taking all members of the population or universe to have the same opportunity to be selected or taken. According to Sugiyono (2014, p. 57).

a. Case Inclusion Criteria

- 1) Sample of pregnant women.
- 2) The sample is in the Karang Ayu Health Center area, Semarang City.

b. Case Exclusion Criteria

- 1) Pregnant women with breast abnormalities
- 2) Pregnant women are not willing to be research samples.

4. RESULTS

Tabel 1

Characteristics of Respondents Based on Mother's Age in 2021 (n = 48)

Age	Mean	Median	min	maks	SD
	28,46	28,5	17	42	5,010

Based on table 1, the average respondent is 28 years old with a min age of 17 years and the oldest age of 42 years. Standard deviation 5.010 with a median of 28 years.

Tabel 2

Characteristics of Respondents Based on Education and Occupation in 2021 (n = 48)

Characteristics	category	n	%
Education	completed elementary school	1	2,1
	completed junior high school	3	6,2
	completed senior high school	33	68,8
	completed college	11	22,9
work	working	31	64,6
	not working	17	35,4

Based on table 2, most of the respondents' education graduated from high school (68.8%), graduated from college (22.9%), graduated from junior high school (6.2%) and graduated from elementary school (2.1%). Most respondents worked (64.6%) and 35.4% did not work.

Tabel 3 Statistical Description of Mother's Motivation to Provide Exclusive Breastfeeding Before and After Health Care Provided

Kelompok	N	Mean	Median	SD	Min-Maks	Uji normalitas Shapiro-Wilk	Ket	P value Wilcoxon
Before	28	3,25	3	0,957	1-5	0,001	abnormal	0,000
After	28	4,19	4	0,938	0-5	0,000	abnormal	

Based on table 3 above, it can be seen that the average motivation score before being given health care has a mean value of 3.25 with a standard deviation of 0.957. The minimum score is 1 and the maximum score is 5. The motivation score after being given health care has a mean value of 4.19 with a standard deviation of 0.938, a minimum score of 0 and a maximum score of 5.

Normality test using Shapiro wilk obtained p value of measurement score before 0.001 and p value of second score 0.000. The results show $<$ than 0.05, meaning that the data is not normally distributed. Because the data is not normally distributed, the bivariate test uses the Wilcoxon test to see the difference in respondents' motivation. The results of the Wilcoxon test gave a P value of 0.000, meaning that there was an effect on the motivation of respondents before and after being given health education.

5. DISCUSSION

Overview of respondent characteristics

Based on univariate analysis, the average respondent is 28 years old with a min age of 17 years and the oldest age of 42 years. Standard deviation 5.010 with a median of 28 years. Respondents' education data mostly graduated from high school (68.8%), graduated from college (22.9%), graduated from junior high school (6.2%) and graduated from elementary school (2.1%). Most respondents worked (64.6%) and 35.4% did not work.

This study is in accordance with research by Septiani (2017) which shows that exclusive breastfeeding is more in the age group 20-35% (53.6%). However, there is a difference in age range with Rahmawati's (2010) study which showed that 57.1% of mothers aged $>$ 30 years provided exclusive breastfeeding. Despite the difference in age range, it shows that most respondents are in the healthy reproductive age range. Healthy reproductive age in women is 20-35 years, besides that in this age range a woman has reached a level of mental maturity so that she can undergo the reproductive process properly (Manuaba, 2016). Mentally,

biologically and psychologically mature in facing life processes, especially in reproductive functions such as breastfeeding babies. So that exclusive breastfeeding tends to be carried out by breastfeeding mothers with characteristics aged 20-35 years.

Menurut variabel pendidikan sebagian besar ibu yang memberikan ASI eksklusif memiliki tingkat pendidikan menengah ke atas sebesar 68,8 %,.. Penelitian ini sesuai dengan penelitian Rahmawati (2015) yang menunjukkan bahwa ibu yang memberikan ASI eksklusif adalah ibu dengan pendidikan menengah atas sebesar 45,5. Bertentangan dengan penelitian Mabud (2014) yang menunjukkan sebanyak 76,2% responden dengan tingkat pendidikan tinggi dapat memberikan ASI secara eksklusif dibandingkan dengan responden yang berpendidikan lebih rendah.

Menurut Notoatmojo (2016) seseorang yang memiliki tingkat pendidikan tinggi akan lebih mudah menerima hal baru sehingga informasi lebih mudah diterima yang akan berdampak terhadap perilakunya. Dalam penelitian ini dimaksudkan perilaku ibu dalam memberikan ASI eksklusif, selain itu dalam buku Azwar (2016) juga menyatakan pendidikan merupakan salah satu faktor yang mempengaruhi perilaku seseorang dan dapat mendewasakan seseorang serta berperilaku baik sehingga dapat memilih dan membuat keputusan dengan lebih tepat. (Sari, 2017)

Berdasarkan variabel pekerjaan , mayoritas ibu yang memberikan ASI eksklusif dalam penelitian ini merupakan ibu yang tidak bekerja sebesar 64,6 %. Penelitian ini sesuai dengan Rahmawati (2016) yang menunjukkan 57,9% respondennya yang bekerja memberikan ASI eksklusif . Hal tersebut juga sesuai dengan teori Varney (2017) yang menyatakan bahwa ibu yang memiliki pekerjaan penuh waktu akan dapat menurunkan durasi menyusui jika dibandingkan dengan ibu yang tidak bekerja di luar rumah. (Setiowati, 2017)

Overview and analysis of mothers' motivation to provide exclusive breastfeeding before and after being given health education

Based on bivariate analysis, it is known that the average motivation score before being given health care has a mean value of 3.25 with a standard deviation of 0.957. The minimum score is 1 and the maximum score is 5. The motivation score after being given health care has a mean value of 4.19 with a standard deviation of 0.938, a minimum score of 0 and a maximum score of 5.

Normality test using Shapiro wilk obtained p value of measurement score before 0.001 and p value of second score 0.000. The results show < than 0.05, meaning that the data is not normally distributed. Because the data is not normally distributed, the bivariate test uses the Wilcoxon test to see the difference in respondents' motivation. The results of the Wilcoxon test

gave a P value of 0.000, meaning that there was a difference in the motivation of respondents before and after being given health education.

The description of respondents' motivation regarding extrinsic factors is mostly included in the factor of providing health education. Human relations are the ability to recognize the nature, behavior, personality of someone. The scope of human relations in a broad sense is the interaction between a person and other people in a life to obtain satisfaction. While other extrinsic factors, namely Rewards, namely someone can be motivated because of a reward so that the person wants to do something, for example, mothers carry out exclusive breastfeeding because they can save costs because there is no need to buy formula milk. Positive rewards will further motivate mothers to implement exclusive breastfeeding and breastfeed their babies. Environmental conditions are all objects and conditions including humans and their activities, which are found in where humans are and affect human survival and welfare (Afiani, 2018).

This shows that the majority of breastfeeding mothers at the Karang Ayu Semarang Health Center in 2021 have considerable motivation to provide exclusive breastfeeding to their babies so that respondents answered agree or strongly agree about the point of motivation based on human relations factors, especially in the statement on the questionnaire that I will provide exclusive breastfeeding because breast milk production is always sufficient for babies according to the theory that several obstacles cause a mother to be unable to breastfeed exclusively, one of which is that the mother feels that breast milk production is lacking even though breast milk has been designed according to the needs of the baby, the more often it is sucked, the more it will produce (Anggorowati & Nuzulia F. 2015).

This level of knowledge is obtained by oneself or the experience of others and the level of education of a person, the higher the level of education of a person, the higher the knowledge of a person, the more rational the response will be and also the higher the awareness to participate, encouraging someone to do better and more advanced, for example, a mother provides exclusive breastfeeding based on knowledge and experience of how exclusive breastfeeding benefits the baby, mother and family. Work is an activity to obtain a reward for services or wages. A good income will make it easier for individuals to get information through mass media and through sophisticated communication tools, as well as sufficient economic conditions so that they are more motivated to meet all the needs needed in life compared to families with low economies also have low motivation, but a mother who has a lot of free time for the family will have good motivation to pay attention to all family needs compared to working mothers (Astuti, 2015).

6. CONCLUSION

Based on the results of research on the Effect of Health Education on Oxytocin Massage and Exclusive Breastfeeding on the Motivation of Exclusive Breastfeeding Mothers in the Karang Ayu Semarang Health Center Working Area, it can be concluded as follows:

1. The average respondent was 28 years old with a min age of 17 years and the oldest age of 42 years. Standard deviation 5.010 with a median of 28 years.
2. Education of respondents mostly graduated from high school (68.8%), graduated from college (22.9%), graduated from junior high school (6.2%) and graduated from elementary school (2.1%). Most respondents were employed (64.6%) and 35.4% were not employed.
3. The results of the Wilcoxon test gave a P value of 0.000, meaning that there was an influence on the motivation of respondents before and after being given health education.

7. LIMITATION

Research on the Effect of Health Education on Oxytocin Massage and Exclusive Breastfeeding on the Motivation of Exclusive Breastfeeding Mothers in the Working Area of Karang Ayu Semarang Health Center has several obstacles and limitations. The barriers and limitations of this study are:

1. The obstacles in this study are the difficulty in finding respondents so that they still need a companion, such as a midwife.
2. This research was conducted during independent PPKM during the covid 19 pandemic so that researchers had difficulty collecting respondents and where the research was held because there could not be too many respondents and could not crowd, finally we made several stages for collecting research data using health protocols in each activity.

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