



## Developing Sharing Breastmilk Program: Survey Communities toward Intention in Breastmilk Donor Practice

Krisdiana Wijayanti<sup>1\*</sup>, Murti Ani<sup>2</sup>, Novita Ika Wardani<sup>3</sup>

<sup>1,2,3</sup> Poltekkes Kemenkes Semarang

### ARTICLE INFO

#### Article history:

Received 21 November 2022

Accepted 1 April 2023

Published 10 June 2023

#### Keyword:

breastmilk bank  
survey intention  
breastmilk donor  
breastmilk donor recipie

### ABSTRACT

Not all mothers can breastfeed directly or provide sufficient breast milk to their babies. This condition makes sharing breastmilk a solution to fulfill the baby's need in breastmilk. This study aimed to survey the public's knowledge and intention to donate breast milk or receive breast milk donors. The research design used an analytical survey with the general population being man and women of productive age ( $\geq 20$  years). The sampling technique used survey sampling, with a sample of 140 respondent's. Measurement of knowledge and intension using pre- and post-questionnaires after the respondents participated in the mini-workshop sharing breast milk in perspective of religion, humanism and health. Data was analized using paired t-test. The result of the knowledge test was  $p=0.003$  ( $p<0.05$ ), the intention test were  $p = 0.043$  ( $p<0.05$ ), which means that there was a difference between pre and post mother's knowledge and intention after attending a mini-workshop. The survey results showed that there is an increase in interest when respondents are given knowledge become the basis for doing second phase of research, which is Study Management in Breastmilk Bank di Dr. Jose Fabella Memorial Hospital Philippines dan Lactashare Malang Indonesia.

This open access article is under the [CC-BY-SA](#) license.



### Kata kunci:

Bank ASI  
survey minat  
Donor ASI  
penerima donor ASI

#### \*) corresponding author

Dr. Krisdiana Wijayanti, M.Mid

Poltekkes Kemenkes Semarang  
Jl. Gelatik V/4 RT 04 RW 05, Karangjati,  
Blora, Jawa Tengah, Indonesia 58219

Email: wijayanti.k@hotmail.com

DOI: 10.30604/jika.v8i2.1341

Copyright 2023 @author(s)

### ABSTRAK

Tidak semua ibu dapat memberikan ASI secara langsung atau memberikan cukup ASI kepada bayinya. Kondisi ini membuat program berbagi ASI menjadi salah satu solusi untuk memnuhi kebutuhan bayi akan ASI melalui penyediaan ASI donor. Tujuan penelitian ini adalah mengetahui pengetahuan dan minat masyarakat untuk mendonorkan ASI atau menerima ASI donor. Desain penelitian menggunakan survey analitik dengan populasi adalah masyarakat umum laki laki maupun perempuan usia produktif ( $\geq 20$  tahun). Teknik sampling menggunakan survey sampling, dengan jumlah sampel 140 respondent. Pengukuran pengetahuan dan minat menggunakan kuisioner pre dan post setelah responden mengikuti kegiatan mini workshop tentang berbagi ASI dalam perspektif agama, humanisme dan kesehatan. Analisis data penelitian menggunakan uji paired t-test. Hasil uji pengetahuan  $p=0,003$  ( $p<0,05$ ), minat  $p=0,043$  ( $p<0,05$ ), yang berarti ada beda pre dan post pengetahuan dan minat setelah mengikuti mini workshop berbagi ASI. Hasil survei yang menunjukkan ada peningkatan minat ketika responden diberikan pengetahuan menjadi dasar peneliti melanjutkan penelitian tahap kedua, yaitu Studi Manajemen di Breastmilk Bank di Dr. Jose Fabella Memorial Hospital Philippines dan Lactashare Malang Indonesia

This open access article is under the [CC-BY-SA](#) license.



## INTRODUCTION

Breastmilk is a normal food for infants recognized by the world as the first optimal source of nutrition. (Yadav, 2015). Not all mothers can breastfeed directly or provide enough breastmilk to their babies. Sick or hospitalized babies especially premature babies are the cause of mothers not being able to breastfeed their babies directly and subsequently causing breast milk stopped in production. The cause of breast milk insufficiency may also be because of the mother in sick or infected condition (Wijayanti, 2019). In somehow the mother's medication makes the mother's milk is not allowed to be given for babies. In addition, breast milk may not be available for other social and emotional reasons of the mother. Breastfeeding failure also occurs due to breastmilk insufficiency on malnourished mothers. (Gabay, 2012)

Barriers in breastfeeding may occur in working mothers especially full-time employee then there is no support from the workplace in providing opportunities and facilities to manage breastfeeding. The low frequency of breastfeeding ends with the cessation of milk production because prolactin is formed due to the baby's sucking on the mother's nipple. Work and workplace contribute to the coverage of exclusively breastfeeding babies in 6 months worldwide, only around 37%. (Du Plessis, 2020)

Babies at risk would be better off still getting breast milk, and donor breast milk from healthy mothers is the main consideration to be given as supplementation. (Yadav, 2015) A systematic review by Cochrane on the effects of formula feeding on premature infants showed that breastfeeding (from both mother and donor breastmilk) successfully reduced several disease complications. This meta-analysis study involved 1017 premature infants <32 weeks with a birth weight <1800gr. In this study, infants who drank breast milk from both mothers and donors were compared with infants who drank formula milk. The study showed that the incidence of necrotizing enterocolitis increased in the infant formula-fed group (OR 2.46 and  $p=0.015$ ). Intolerance to formula milk was also higher in formula-fed infants (OR 4.92,  $p=0.03$ ) (Ramli, 2010)

WHO and UNICEF made a joint statement that when a biological mother cannot give her breastmilk, breastfeed the baby from other sources. This condition makes the breastmilk depot or breastmilk bank very important because it can provide donor breast milk. The breastmilk depot or breastmilk bank is a place to storage breastmilk. Therefore, the need of breastmilk can be fulfilled anytime. (Yadav, 2015)

Donor breast milk is milk that is expressed by the mother and then processed by the breast milk bank or breast milk depot for used by other babies. In its implementation, donor breast milk requires a quality control system in terms of collecting, testing, processing, storing, and transporting the breastmilk. Potential donors can be obtained through a variety of promotions with written information left in health care practices: general practitioners, postnatal wards, clinics, volunteers, or organizations dealing with maternal and child health. Information on the need for breast milk donors can also be conveyed to other breastfeeding mothers by mothers who have been donors or are currently breastfeeding donors. Antenatal classes at the primary health care or hospital are also the right places to socialize the need for breastfeeding donors to benefit babies who are not getting breast milk from their mothers. (Place, 2010)

Different cultures and religions have different perspectives on the issue of breastmilk banking. Christianity,

Buddhism, and Hinduism do not show any controversial issues. This group tends to support sharing breast milk rather than prohibiting it. In Islam, breastfeeding sharing is still under debate, there are several potential ways to solve this problem. Some rules that must be considered when initiating breastfeeding sharing are one baby only gets breastmilk from one donor, making sure there is no mixing of breastmilk from one donor with others, there is information about both the identity of the donor and donor-recipient. The information above is related with the name, address and gender. Mothers of babies who receive donors must try to immediately breastfeed themselves so that donor breast milk is only given in minimal quantities. Only infants whose mothers died or mothers who had contraindications to breastfeeding were allowed to receive donor breast milk for a long time. Strive to give breast milk to babies of the same sex as donor babies. (Ramli, 2010)

Philippines is one of the countries that has succeeded in developing a Breastmilk Bank. With the belief that "Mother's milk, time-tested for millions of years, is the best nutrient for babies because it is nature's perfect food, Breastmilk Bank in the Philippines is supported by many parties. Three Breastmilk banks operate in 3 hospitals, namely Dr. Jose Fabella Memorial Hospital (DJFMH), the Philippine Children's Medical Center (PCMC and the Philippine General Hospital (PGH). Breastmilk Bank operates according to the Philippine Human Milk Banking Manual of Operations issued by the Philippine Department of Health. (DoH, 2011).

A study visit at Dr. Jose Fabella Memorial Hospital in November 2019 revealed that screening was carried out on donor breast milk. The donor mother was interviewed to determine the presence of diseases. Every day, there is an increase in donor breast milk, which is used by both premature babies in the hospital and by the general public in need. A replacement fee for storing donor breast milk while in the breast milk bank is applied to users. It was found at the breastmilk bank that there was significant weight gain in premature infants who were breastfed nor from a breastmilk bank, no different from premature babies who get breast milk from their own mothers.

Seeing the problem and the potential for solving the problem, the researcher intends to conduct a multiyear research on the Development of Breastmilk Sharing Program, which consist of Survey community intention, study management followed by implementation and expansion of the program.

To strengthen the basis for carrying out a study on the development of breast milk sharing program, the first stage of this research is a survey of intention to donate breast milk or receive donor breast milk. Dr. Jose Fabella Memorial Hospital Philippines success in managing a breast milk bank, furthermore a collaboration is needed to carry out a study on the management of the Breastmilk bank's operational system. Indonesia also has Lactashare Indonesia, a non-profit foundation that organize breastmilk donor and breastmilk donor recipient in related with in collecting and delivering breastmilk donor. Activities of study management in both will be carried out in the second year of the study. In the third year of research, the implementation of the Breastfeeding Sharing Program will be carried out, program evaluation and program expansion will be conducted. Another source information related with management of sharing breastmilk was Lactashare Malang Indonesia, a non-profit foundation which active

## METHODS

The first stage research design is an analytical survey method. Survey was conducted to get information of community intention toward breastmilk donor and donor recipient. Online survey was conducted in 2021 toward 140 respondents spread from Indonesia territory. Respondents were men and women of productive age (20-35 years) and willing to participate in survey activities until they were completed. The number of 140 respondents was measured their knowledge and their intention in breastmilk donor using pre and post-questionnaires via google forms before and after participated in the online mini-workshop sharing breastmilk. The four hours mini-workshop on breastfeeding sharing contains material on breastfeeding sharing in perspective of religion, health, and humanism. Workshop materials were delivered by the Founder of Lactashare Foundation Malang Indonesia, religion teacher of senior high school, and breastfeeding counselors who were three members of researchers. Various medias were used which were video activities of Lactashare, power points regarding sharing breastmilk related to religion, and e-booklets of Sharing Breastmilk Program. The e-Booklet was designed in interesting colours and consist of information about Breastmilk and its values, rule of sharing breastmilk, breastmilk donor from religion, humanism and health point of views, management of Breastmilk donor related with quality, storage and distribution.

Question & Answer session was opened to give opportunities for respondents who need detail explanation of material given. Information about mini workshop sharing breastmilk program had been spread for around 1 months. Registration process was done using google drive including name of participant, occupation, age, gender, religion and contact number then developed as a characteristic data of respondents.

Pre-test was conducted in order to measure the level of knowledge and intention of respondents regarding breastmilk, breastfeeding, breastmilk donor, recipient donor and sharing breastmilk and breastmilk bank. The number of 20 false true question was used to measure the knowledge and 15 agree and disagree statements were delivered to measure the intention level of respondents. Measurement knowledge and intention post intervention was carried out after 2 days of mini-workshop activities using the new link. The similar questionnaire of knowledge consists of 20 fals and true questions about the important of breastmilk for infant, Breastfeeding problems, donor breastmilk processing, health screening for breastmilk donor (mothers and breastmilk), breastmilk donor storage, breastmilk donor labeling and religious view toward sharing breastmilk. The intention questionnaire consists of 15 agreements, involved being a breastmilk donor, donor recipient, health screening and showing an identity. Test the validity and reliability of the instrument using product-moment and alpha Cronbach's, with valid and reliable results. Analysis of research data using paired t-test. Knowledge and intention level of respondents were analyzed using mean whitney because the data was in normal distribution.

## RESULTS AND DISCUSSION

### Survey Knowledge toward Donate or Receive Breastmilk Donors

This survey was involving 140 respondents who answered 20 questions related with knowledge of breastfeeding and sharing breastmilk donor. In order to increase the knowledge, respondents attended an online mini workshop which provide information regarding sharing breastmilk in the perspective of religion, humanism and health. Some questions raised in the Q&A were: is there any screening for donor mothers? what kind off screening needed in mothers who want to donor their breastmilk? how to assure that the breastmilk donor is mycobacterial free? Who pay for laboratory screening test? Is it allowed if the breastmilk donor given to baby in difference religion? How much does it cost the breastmilk per pack? What is the method to make the breastmilk free from the bacteria? Do we can do pasteurized the breastmilk by ourselves? All question during workshop was answered directly by the speakers based on their expertise

**Table 1.**  
**Characteristic of Respondent' s**

Characteristic	N = 140	
	N	%
Gender		
Men	2	1,43
Woman	138	98,57
Age		
20-35 years	85	60,71
>35 year	55	39,29
Education		
Senior High School	3	2,14
Diploma	39	27,86
Bachelor	56	40
Master	41	29,29
Doctor	1	0,71
Occupation		
Work	116	82,86
Does not work	24	17,14
Religion		
Islam	135	96,43
Christian	5	3,57

Table 1. showed that the respondents are dominated by women with the age category above 20 years, 97% of respondents are high educated and >80% of respondents are in work status and Moslem. The data was related with the fact that online system tend to be recognized by people in middle and high education, then Indonesia is dominated by moslem and young mothers in high education now is mostly working mothers.

**Table 2**  
**Knowledge Level Score**

Knowledge	Min	Max	Average±SD	p
Pretest	14	20	17.49±1.101	0,003
Posttest	15	20	18.00±1.189	
Δ knowledge scor	1	0	0.513±1.465	

Based on the output table of the paired sample t-test, it is known that the value of Sig.(2-tailed) is  $0.003 < 0.05$ , then  $H_0$  rejected and  $H_a$  accepted. It can be concluded that there is a difference in the average pretest and posttest knowledge of respondents, which means that there is an effect of mini-workshops on breastfeeding sharing in increasing knowledge about breastfeeding sharing programs. Research participants with higher education have a good ability to receive knowledge provided through mini workshops, so that it has a positive effect on changes in interest in receiving and giving donor breast milk. Working mothers also have the opportunity to interact with other people so that it is easy for these respondents to receive knowledge and further increase their interest in receiving and giving donor breast milk.

In detail, the following is an explanation of the knowledge questions along with the analysis of the results. On the question of whether breast milk is the most important main food for infants because it has the most appropriate nutritional value and provides disease protection to infants, all respondents both in the pre-test and post-test answered that breast milk is the most important main food for babies because of its values. This shows that respondents know that breast milk is the best food for babies so it must be given to babies (Nugroho, 2014). For the question that every mother can definitely give breast milk to her baby some respondents answered incorrectly, but after the knowledge delivered they answered correctly. Some respondents thought that some mothers cannot give breast milk to their babies because of breastmilk insufficiency. Actually, breastfeeding can be done by all mothers because all women have hormones to produce and secrete breast milk. The main factor that affects milk production is the baby sucking that have to in frequent. The more often mothers breastfeed their babies, the more the mother's milk production increases (WHO, 2011).

Most respondents did not understand that drink breast milk reduce the risk of obesity and allergies toward babies, but after attended the mini workshop there was only three participants answered incorrectly. The cause of babies experiencing the risk of obesity and allergies is formula milk because the content of formula milk is different from breast milk. Formula milk-fed babies are more likely to suffer from diarrhea, ear infections and other infections and high risk of obesity. Breastfeed Baby tend to be in proportional weigh gain (WHO, 2011). Respondents in this survey already understand that babies who drink breastmilk are protected from some infections. Breast milk is the best food because it has content that can increase the body's immune. Breast milk is the best food for babies because it contains all the nutrients in an ideal composition and immune factors (Nugroho, 2014).

In related to question that premature babies must continue to get breast milk because premature babies really need breast milk to survive, the knowledge score was increased in post-test. It was because the speakers explained that breastmilk contains complete nutrient in both macro or micro nutrient. All Low Birth Weight (LBW) babies need iron from the age of 6 weeks after birth. If the mother cannot express enough breast milk, it is better to give the baby additional breast milk donor that has been pasteurized until the mother can express enough milk. Even in a small number, fresh breastmilk from donor provides anti infection that provide valuable protection in some diseases (WHO, 2011).

Some respondents thought that mothers with premature babies do not have problems with breastmilk production

even though they received information during the mini workshop. Actually, mothers who give birth of premature babies will affect milk production. In immature age of pregnancy, the prolactin hormone has not worked, then it will affect breastfeeding production in the mother, especially if there is no stimulation like the baby's sucking. (WHO, 2011)

Respondents understood that babies with less than normal birth weight need to get breastmilk which is proven by they all answered the question correctly. Respondents believed that babies with birth weights less than normal need to get breast milk. Breastmilk is the best food for all babies. Babies in any condition, breast milk is the best food. Breast milk is especially valuable for LBW or sick babies. LBW babies, both those born at term or premature, are at risk of infection and becoming sick (WHO, 2011). Almost respondents in this survey have understood that if the baby is sick, breastfeeding should not be stopped. Exclusive breastfeeding should be carried out for 6 months, and continued breastfeeding for up to 2 years. (Kemenkes RI, 2014)

When the negative question given which was All religions don't agree with mothers giving excess milk to other babies, most of the respondents in the pre-test answered incorrectly. Respondents thought that in sharing breastmilk, one baby get breast milk from more than one donor. Therefore, they also thought that the milk from some mothers will be mix together then given to the baby. Mini workshop provided information that one baby will get breastmilk from one mother. Furthermore, in the post-test the respondents were able to answer correctly. It is better if a baby gets breast milk from one breastmilk donor to make it clearer about the breastfeeding sibling (Fanani, 2012). Before the mini workshop, respondents partially answered that all religions did not allow mothers give excess breastmilk to other babies. However, during the post-test, the respondents were able to understand that all religions agreed that excessive breastmilk can be shared for other babies. Breast milk is the best food for babies, even breastfeeding is recommended by religions listed in the holy book. (Fanani, 2012)

Respondents agreed that expressed breast milk is good for babies. Expressed breast milk has the same content as breast milk directly on the breast, as long as it is stored and presented properly. Regarding the question that a good process of storing expressed breast milk will ensure the quality of breast milk is maintained, all respondents in the pre-test and post-test were able to answer correctly. Breast milk can be maintained its content by maintaining room temperature. When breast milk is in room air with a temperature of 25°C, it can last 6-8 hours. Breast milk in the refrigerator at 4°C can last up to 5 days. Breast milk is stored in the freezer at -18°C, can last 3-6 months. (IDAI, 2017)

Most of the respondents in the pre-test and post-test were able to understand that it is wrong to store breast milk from donors from various donors in one package. Donor breast milk is only stored in one package for one donor because it will be easier to identify the suitability of data on donors and donor recipients such as data on the sex of the baby, laboratory results and date of expressing breastmilk. (Lindemann, Foshausen, and Lindemann, 2004) In some countries such as philippine the breastmilk from many donor mothers was mixed before pasteurized process. Furthermore, it keep in the bottle or plastic pack of 200ml each for the breastmilk donor recipient.

Some of the respondents in the pre-test answered that Christianity, Buddhism and Hinduism had not favor the

sharing of breastmilk rather than support it. This is because the average respondent is Muslim so they do not know other religions views related to breastfeeding. All religions support breastfeeding but in Islam there are several conditions that must be understood in breastfeeding. (Fanani, 2012) For the question that in Islam, sharing breast milk is a good practice, all respondents give a correct answer. Because the respondents are mostly Muslim, they know the benefits of sharing breast milk. (Fanani, 2012) All respondents understood that Islam teaches not to throw away breast milk or sell breast milk. They followed the regulation that it is not allowed in selling and throwing breastmilk away, because breastmilk is highly recommended for babies. (Fanani, 2012)

Respondents did not know that the donor's breast milk had been processed so that it was free from pathogenic bacteria. Pathogenic bacteria can be present in breast milk due to the wrong storage process. Milk in breastmilk banks should be free from pathogenic bacteria According to (Kligman, 2013). Donors must test negative for cytomegalovirus (CMV), HIV, and hepatitis B and C, to prevent serious virus infections. All respondents in the pre-test and post-test are able to answer that breast milk donors do not need to have their health checked, which is a wrong thing. Breast milk donors need to be checked for health to find out and ensure that the content of breast milk is safe from viruses or bacteria that are transmitted from mothers who donated breast milk. (Lindemann, 2004)

Respondents in the pre-test and post-test answered correctly that the Breastmilk Depot is a place for storing donor milk and managing donor milk. Breastmilk Depot is a place to share breastmilk where the process of storing breast milk is safe and manages breast milk according to standards so that the breast milk content is not damaged and is safe for babies to consume. Furthermore, donor breast milk may not be traded because the purpose of sharing breast milk is actually not material but more of a human value (Fanani, 2012)

**Survey Intention toward Donate or Receive Breastmilk Donors**

The number of 15 question related with intention to be a breastmilk donor or breastmilk donor recipients were delivered to 140 respondent before and after they attended an online mini workshop sharing breastmilk in the perspective of religion, humanism and health.

**Table 3**  
**Intention Level Score**

Intention	Min	Max	Average±SD	p
Pretest	2	15	13.50±2.914	0,043
Posttest	3	15	14.37±1.999	
Δ score intention	1	0	0.868±3.685	

Table 3 revealed that the value of Sig.(2-tailed) is 0.043 <0.05, therefore it can be concluded that there is a difference in the average intention of respondents toward sharing breastmilk in the pretest and posttest, which means that there is an influence of the mini-workshop on breastfeeding sharing in increasing intention in the breastfeeding sharing program. Likewise with knowledge, the involvement of respondents with higher education and work supports a positive change in interest in receiving and giving donor breast (Katke, 2014)

In this survey, the average respondent in the pre-test answered that they lacked interest in donating their breast milk even though the milk production was excessive. However, in the post-test, the average respondent agreed to donate breast milk if it was more. This is because respondents do not understand the knowledge of sharing breast milk from a religious point of view. Families still think that breastfeeding is only for their children. After the mini-workshop, almost all respondents agreed to share breastmilk because all religions encourage babies to get the best food, namely breast milk. Respondents have an interest in sharing breast milk because in their religions, sharing breast milk is a positive action, even in Islam, sharing breast milk has certain conditions. Therefore, respondents agree that it needed breastmilk donors for babies who do not get breastmilk from their mothers. It is because getting breast milk is a baby's right that must be supported (Ardianti, 2015)

In the pre-test, respondents lacked the intention to leave their donor's breast milk in a breastmilk depot because of hygiene and safety reasons. After knowledge has given their interest to keep the breastmilk in the depot. Respondents did not understand the role of the Breastmilk depot which actually processes, keeps dan deliver the milk in a safe way. Other intention question in this survey was, how they interest in using breastmilk donor if their baby needed it. Before the knowledge delivered most respondents stated that they didn't want to use breastmilk donor for their babies. This is due to a lack of understanding about sharing breastmilk and it is still considered not good if receiving breast milk from others.

When the respondent understood that there is an identity in the breastmilk related with the gender of the babies, respondents interested in receiving donor breast milk. It is because of belief that in receiving breast milk, the gender of the baby and the identity of the family must be clear for religious reason. Therefore, the respondent also become agree to become a donor or donor receiver when their have enough identity of the parents and the gender of my baby receiving breast milk. At the time of the post-test answered interest.

Respondents also intended to be a breastmilk donor or donor recipients when the mother and the breastmilk were health through interview, medical checkup and laboratory examination. The quality of breast milk can also be influenced by the health of mothers who donate breast milk, so that laboratory tests are very helpful in assessing the safety of breast milk. Breast milk can be donated if the sex of the baby is the same and the breast milk is free from bacteria (Baumer, 2004)

Respondents in this study were mostly moslem women. Based on research in India, breastmilk donation does not depend on one's religion. Breastfeeding donors can be promoted by increasing the education of women. Women with extreme ages in the reproductive age group and women with higher parity need more motivation to donate breast milk. Uneducated women can be motivated to donate breast milk if the importance of breastfeeding is taught to women at a young age, and the practice of breastfeeding is embedded in the social culture of the place (Katke 2014). Another study explains that the collaboration of the Indian government with medical research centers and health authorities has shown a considerable increase in the public's view of Breastmilk Banks and created a positive climate for private sector provision. (Kappil, 2016).

Biological mothers that cannot provide exclusive breastfeeding for their babies, exclusive breastfeeding can be done by breastmilk donors. This is stated in the Government

Regulation of the Republic of Indonesia Number 33 of 2012, which contains exclusive breastfeeding by breastmilk donors with the following requirements: a. the request of the biological mother or the concerned baby's family; b. the identity, religion, and address of the breast milk donor are clearly known by the mother or the family of the infant receiving breast milk; c. the approval of the breast milk donor after knowing the identity of the breastfed baby; d. the breast milk donor is in good health condition and has no medical indication; e. Breast milk is not traded (Kementrian Kesehatan RI, 2012). Breastfeeding is carried out based on religious norms and takes into account socio-cultural aspects, quality, and safety of breast milk. (Kementrian Kesehatan RI, 2004).

The interest of breast milk donors has a direct effect on the decision variables of breast milk donors. In determining the interest of breastfeeding donors, there is knowledge and understanding of the mother about the importance of sharing breast milk. Based on the research, it is known that the source characteristics which consist of source credibility, source attractiveness, and source power have a significant influence on purchase intention. Breast milk donors who see the source in conveying information will know how the credibility of the source is. Breast milk donors who feel that the source of information has knowledge and expertise in conveying information, will reconsider breastfeeding donors. The decision-making process includes the AIDA model, namely: 1. Attention, the emergence of consumer attention to a marketing stimulus carried out by producers, in this case breast milk donors 2. Interest, the emergence of a sense of interest in the object offered by the producer or arouse interest 3. Desire, after a sense of interest, a desire or desire arises to have the object or visit 4. Action, consumer action purchases made by consumers after having a desire or desire to have an object (Lailiyah, 2018).

#### LIMITATION OF THE STUDY

This research is multi-year (3 years 2021 to 2023) and divided into 3 research stages. The first stage is a community intention survey, was conducted to find out the public's picture of the sharing breast milk concept of either as a donor or as a recipient of donor breast milk. After the community survey, the research will be continued by management studies at institutions that have successfully run the Breastmilk Bank. This study of management was conducted with an analytical descriptive design. The third stage of this research is the application of the program and analyzing the number of users, evaluating the strengths, weaknesses, opportunities, and threats. Positive results at this stage will be followed by expansion program. This study management which is the second stage of this research will be carried out in two countries, namely Indonesia and the Philippines. The survey and program application were carried out in Indonesia, while the system management study was carried out at Dr. Jose Fabella Memorial Hospital Philippines with facilitators from Arellano University, Philippines together with Lactashare foundation Malang, Indonesia.

#### CONCLUSIONS AND SUGGESTIONS

It can be concluded that Mini workshop of sharing breast milk increased the knowledge of respondents regarding

breastmilk, breastfeeding, breast milk donor and donor recipient. Therefore, this changes of knowledge increased the intention level of respondents in sharing breastmilk, both to be a breast milk donor and donor recipients. Respondents also agreed to establish a breastmilk bank in order to facilitate the low birth weight baby receive breastmilk and normal baby who did not has opportunity get breastmilk from the mothers. This is the basis for researchers to continue the second phase of research, namely management studies at institutions that have successfully run Breastmilk Banks. The study will be conducted on Breastmilk Bank Dr. Jose Fabella Memorial Hospital the Philippines and Lactashare Malang Indonesia, a non-profit foundation which have several activities related with sharing breastmilk.

#### Acknowledgment

The researchers would like to acknowledge and thank for dr. Estrella J. Olonan-Jusi, President Human Milk Bank Association of the Philippines (HMBAP) and dr. Meralda Nindyasti Eka Budiastutie, founder of lactashare Malang who already share knowledge and experience in sharing breastmilk movement. Acknowledgment also given to Dr. Maria Christina Ramaho, the head of Midwifery School Program, Arellano University Philippines for zoom facilitating. Special acknowledgment to the Director Poltekkes Kemenkes Semarang, Dr. Marsum, BE, SPd, MHP who gave an opportunity researchers in conducting this study.

#### Funding Statement.

This reseach was funded by DIPA Poltekkes Kemenkes Semarang

#### Conflict of Interest Statement

There is no conflict of interest between the this topic research with Poltekkes Kemenkes Semarang as a research sponsored.

#### REFERENCES

- Ardianti, S. *Konsep Raḍā'Ah Dalam Alquran* (Doctoral dissertation, Pascasarjana UIN-SU); 2015
- Asri, P., Rosyidah, B. M., Maharani, A., & Arfianto, A. Z. Manajemen ASI Perah Untuk Kesehatan Balita. *Jurnal Cakrawala Maritim*. 2019; 1(1), 29- 35
- Baumer, J Harry. Guidelines For The Establishment And Operation Of Human Milk Banks In The UK. *Arch Dis Child Educ Pract Ed* 2004;89:ep27–ep28. doi: 10.1136/adc.2004.053330
- Department of Health (2011) The Philippine Human Milk Banking (Manual of Operational <https://www.humanitarianresponse.info/sites/www>
- Coutsoudis, I., Adhikari, M., Nair, N., & Coutsoudis, A. (2011). Feasibility and safety of setting up a donor breastmilk bank in a neonatal prem unit in a resource limited setting: An observational, longitudinal cohort study. *BMC Public Health*, 11(1), 356.
- Du Plessis, L. M., & Mbhenyane, X. (2020). Breastfeeding support practices in designated workplaces in the Breede Valley sub-

- district, Western Cape, South Africa. *South African Journal of Child Health*, 14(2), 94-98.
- Fanani, A. Bank air susu ibu (ASI) dalam tinjauan hukum Islam; 2012
- FDA Working Group. "Backgrounder on Banked Human Milk." Dalam [www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/PediatricAdvisoryCommittee/UCM235642.pdf](http://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/PediatricAdvisoryCommittee/UCM235642.pdf) diunduh tanggal 25 (2012).
- Gabay, M. P. Galactogogues: medications that induce lactation. *J. Hum. Lact.* (2002);18(3):274-279.
- Geraghty, S. R., List, B. A., & Morrow, G. B. (2010). Guidelines for establishing a donor human milk depot. *Journal of Human Lactation*, 26(1), 49-52.
- Kappil, E., Sheppy, B., & McIntosh, B. Commentary: The Feasibility of a Human Milk Bank in Kerala State, India; 2016
- Katke, R. D., & Saraogi, M. R. Socio-economic factors influencing milk donation in milk banks in India: an institutional study. *Int J Reprod Contracept Obstet Gynecol*. 2014; 3(2), 389-393.
- Kemendes RI (2014), Situasi dan Analisis ASI Eksklusif. Infodatin Pusat Data dan Informasi, Kementerian Kesehatan RI
- Kemendagri Kesehatan RI (2004) Keputusan Menteri Kesehatan Republik Indonesia Nomor 450/Menkes/SK/VI/2004 tentang Pemberian Air Susu Ibu (ASI) secara eksklusif pada bayi di Indonesia
- Keputusan Menteri Kesehatan Republik Indonesia Nomor 450/Menkes/SK/VI/2004 tentang Pemberian Air Susu Ibu (ASI) secara eksklusif pada bayi di Indonesia
- Kligman RM. The relationship of neonatal feeding practices and the pathogenesis and prevention of necrotizing enterocolitis. *Pediatrics* 2003;111:671-2.
- Nirwana, A. B. ASI dan Susu Formula. Yogyakarta: Nuha Medika; 2014
- Nurhayati, F., & Nurlatifah, S. Hubungan Pengetahuan Ibu Menyusui Tentang Pemberian ASI Perah dengan Pendidikan di Wilayah Kerja Puskesmas Cimahi Tengah. *Jurnal Bidan*. 2018; 4(2), 267045.
- Lailiyah, K. *Pandangan Yusuf Qardhawi tentang Bank ASI* (Doctoral dissertation, UIN Sunan Ampel Surabaya); 2018
- Lindemann, P. C., Foshaugen, I., & Lindemann, R. Characteristics of breast milk and serology of women donating breast milk to a milk bank. *Archives of Disease in Childhood-Fetal and Neonatal Edition*. 2004; 89(5), F440- F441.
- Place, M. (2010). Donor breast milk banks: the operation of donor milk bank services. *Quigley, MA, Hockley, C., Carson, C., Kelly, Y., Renfrew, MJ, & Sacker, A.(2012). Breastfeeding is associated with improved child cognitive development: a population-based cohort study. The Journal of pediatrics*, 160(1), 25-32.
- Peraturan Pemerintah Republik Indonesia Nomor 33 Tahun 2012 Tentang Pemberian Air Susu Ibu Eksklusif
- Rahmadhani, E. P., Lubis, G., & Edison, E. Hubungan pemberian ASI eksklusif dengan angka kejadian diare akut pada bayi usia 0-1 tahun di Puskesmas Kuranji Kota Padang. *Jurnal Kesehatan Andalas*. 2013; 2(2), 62-66
- Ramli, N., & Ibrahim, N. R. (2010). Human milk banks-the benefits and issues in an Islamic setting. *Eastern Journal of Medicine*, 15(4), 163.
- Sari, P. N. Meningkatkan Kesuksesan Program Asi Eksklusif Pada Ibu Bekerja Sebagai Upaya Pencapaian Mdgs. *Jurnal Kesehatan Masyarakat Andalas*. 2017; 9(2), 93-97.
- Stoll BJ, Hansen N, Fanaroff AA, et al. Late-onset sepsis in very low birth weight neonates: the experience of the NICHD neonatal research network. *Pediatrics* 2002;110:285-91.
- The Philippine Human Milk Banking (Manual of Operational), Department of Health. (2011) [https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/FINAL%20RAFT\\_PNC\\_HMB%20GUIDELINES\\_June%202029%20Meeting%20Edited%20%20%281%29.pdf](https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/FINAL%20RAFT_PNC_HMB%20GUIDELINES_June%202029%20Meeting%20Edited%20%20%281%29.pdf)
- Undang-Undang Republik Indonesia Nomor 36 Tahun 2009 tentang Kesehatan
- WHO. Pelatihan Konseling Menyusui Modul 40 Jam WHO/UNICEF Revised; 2011
- Wijayanti, K., Subagio, H. W., & Nugraheni, S. A. (2019). Saponin Maintaining and Dose Determining in carica Papaya Leaf cookies as a Breast Milk Booster (galactogogue). *Indian Journal of Public Health Research & Development*, 10(9), 730-734.
- World Health Organization/Unicef. Pelatihan konseling menyusui modul 40 jam WHO/UNICEF. 2017. 25-37, 44-55, 101-108, 188-198, 233-240
- Yadav, S., & Rawal, G. (2015). Human breast milk bank. *Int J Health Sci Res [Internet]*, 592-7.

