



PROCEEDING BOOK OF ICLM

**"STEP UP FOR BREASTFEEDING : EDUCATE AND SUPPORT TO
PREVENT STUNTING IN THE FIRST 1000 DAYS OF LIFE"**

**NOVEMBER 2, 2022
SAMARINDA, INDONESIA**

organized by:

**CENTER OF EXCELLENT FOR SCIENCE & TECHNOLOGY OF BREAST MILK
HEALTH POLYTECHNIC MINISTRY OF HEALTH EAST KALIMANTAN**

PROCEEDING BOOK OF
INTERNATIONAL CONFERENCE ON LACTATION MANAGEMENT
"STEP UP FOR BREASTFEEDING : EDUCATE AND SUPPORT
TO PREVENT STUNTING IN THE FIRST 1000 DAYS OF LIFE “

Virtual Meeting Room, 2nd November 2022



PUBLISER:

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INTERNATIONAL CONFERENCE ON LACTATION MANAGEMENT

"STEP UP FOR BREASTFEEDING : EDUCATE AND SUPPORT TO PREVENT STUNTING IN THE FIRST 1000 DAYS OF LIFE “

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ISBN :

Published by:

Health Polytechnic Ministry of Health East Kalimantan
Jl. Kurnia Makmur No. 64 Rt.24 Samarinda,Indonesia
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PREFACE

Breast milk is beneficial for the health of mother and baby. According to Victora CG (2016), feeding breast milk can decrease the cases or severity of infectious diseases and child mortality. Breast milk contains various antimicrobial materials, anti-inflammation components, and factors which support the development of immune system and reduce the cases of respiratory tract infections. Almost one third of the cases of respiratory tract infections can be tackled by feeding of breast milk. The risk of baby mortality among non-breastfed baby is 14 times higher compared to exclusive breastfed baby.

Pandemic of *Corona Virus Disease 2019 (COVID-19)* established by WHO on March 11th 2020 has still been continuing, and until now more than 27 million cases has been spread all over the world. The infection of *Severe Acute Respiratory Syndrome-Coronavirus-2 (SARS-CoV-2)* infects all age groups, e.g pregnant women and neonatus. The information about the impact of COVID-19 infections on pregnant women and neonatus are still limited. Based on the case study, neonatus infected by SARS-CoV-2 showed mild clinical manifestations or asymptomatic; the total number of severe cases, complications and good prognosis were relatively rare to happen. The risks of neonatal infections through vertical transmission from mother-baby or breast milk cannot be concluded and need further research.

According to the purpose of this program is becoming a center of the research and development of technology in breast milk, therefore this international webinar with theme *The 2nd International Conference on Indonesia Lactation Management (ICLM) Step Up For Breastfeeding : Educate And Support To Prevent Stunting In The First 1000 Days Of Life.*

Editor in Chief

**REPORT OF THE CHAIRMAN OF THE INTERNATIONAL
CONFERENCE ON LACTATION MANAGEMENT "STEP UP FOR
BREASTFEEDING : EDUCATE AND SUPPORT TO PREVENT
STUNTING IN THE FIRST 1000 DAYS OF LIFE"**

Bissmilahirohmanirohim
Assalaamu'alaikum warahmatullahi wabarakaatuh,
Good morning and greetings to all of us.

Whom I respect Head of Development and Empowerment Human Resources Ministry of Health
Republic of Indonesia

All The speakers

1. Drg. Ariyanti Anaya, MKM
2. Shu-Fang Wang, PhD, RN, CNM, IBCLC
3. Assoc Prof Rokiah Don, FNSM
4. Eli Rahmawati, S.SiT, M.Kes
5. I Gede Andika Sukarya, S.ST., M.Imun

Whom I respect

Director of Politeknik Kesehatan Kementerian Kesehatan Kalimantan Timur , Dr. M. H Supriadi
S. Kp., M.Kep

Whom I respect

Deputy Director of Poltekkes Kemenkes Kaltim
Head of Center, Head of Unit, Head of Department, Head of Study Program, Lecturer and
Health Laboratory

Whom I respect

All the stakeholders, Head of health professional organizations, All participants of the webinar,
whether researchers, lactation experts, and students who are members of room zoom and
youtube.

First of all, let's express our gratitude to the presence of Allah SWT, for the abundance of grace
and gifts, so that this morning we can attend an international webinar with the theme "Lactation
management in Covid-19 era".

We as the committee, would like to extend our welcome, appreciation, and gratitude for the
presence of Mr. and Mrs. who have fulfilled our invitation to this international webinar. Your
presence at this time actually gives you a sense of pride, joy and we feel that we have received a
special appreciation for our efforts. Thanks to All the committee for their effort in preparing this
Webinar since some time ago.

Dear webinar participants, this webinar started from a thought of PUIPK or center of excellent
and Technology of Breastfeeding team to also contributed in dealing with the COVID-19
pandemic situation by presenting ideas and solutions, were the result of research, especially to
help the government achieve the goals of achieving the Breastfeeding program.

Therefore, this international webinar is organized with the aim of :

1. *Make all parties to convey ideas, experiences, expertise, and knowledge about global issues of lactation management*
2. *Open an international forum to develop insight and improve the competences of lecturers, health workers, lactation experts and students in the field of lactation management on an international scale*

Participants in this webinar was from various professions and institutions, including academics, researchers, lactation experts, practitioners, and non-governmental organizations.

Dear webinar participants,

This International Webinar is expected to become a meeting forum between scientists, researchers, policy makers, and users of research results, as well as encourage collaboration between various groups who are interested in the success of the breastfeeding program so that it can help the government in educating the nation's life in preparing the next generation of quality can be achieved immediately

In more detail, this webinar is divided into three themes as follows: The first, The Role of Midwives and Nurses in Protecting, Promoting, and Supporting Breastfeeding in Covid-19 Pandemic Era. The second, implementation Guidance on Counseling Women to Improve Breastfeeding Practices in Covid-19 Pandemic Era. The third, Building Healthcare Professional Skills to Support Breastfeeding in the Covid-19 pandemic Era

Dear webinar participants,

The material for this webinar consists of : 5 speakers, namely the main speaker and the supporting speaker. There are 5 main speakers. They are specially invited and experts in their fields. Supporting speakers are participants who have passed the selection. The papers to be presented have been selected and grouped by the team. The paper will be presented at the Group Session this afternoon.

Dear webinar participants,

To conclude of this report, I would like to thank the committee members who have worked hard to prepare this webinar as well as possible. However, I apologize if the implementation of this webinar are still have things that are not pleasing to you.

Finally, to the participants of the webinar, I wish you good luck in joining this webinar.

I hope this webinar is able to produce useful recommendations and there is real follow-up from all stakeholders.

That is all and thank you

Wabillahi taufik wal hidayah,

Wassalamu'alaikum warahmatullahi wabarakaatuh

Grace Carol Sipasulta, S.Kep., M.Kep., Sp.Kep.Mat

Chairman

OPENING REMARKS
DIRECTOR OF HEALTH POLYTECHNIC OF EAST KALIMANTAN

Assalamualaikum warrahmatullahi wabbarakatuh

Good Morning everyone

To the honored,

Deputy directors in Health polytechnic East Kalimantan

All the speaker :

1. Drg. Ariyanti Anaya, MKM
2. Shu-Fang Wang, PhD, RN, CNM, IBCLC
3. Assoc Prof Rokiah Don, FNSM
4. Eli Rahmawati, S.SiT, M.Kes
5. I Gede Andika Sukarya, S.ST., M.Imun

Head of Study Programs in Health Polytechnic East Kalimantan

Head of Center of Excellence

All staff in Health Polytechnic East Kalimantan

And All participants of International seminar in the zoom's room

Thank you and blessings

Welcome greeting to all the speakers and participants

1. Drg. Ariyanti Anaya, MKM (Keynote Speaker: Step up for Breastfeeding : Educate and Support To Prevent Stunting in The First 1000 Davs of Life)
2. Shu-Fang Wang, PhD, RN, CNM, IBCLC (The Role of Nurses in Step up for Breastfeeding : Educate and Support To Prevent Stunting in The First 1000 Davs of Life)
3. Assoc Prof Rokiah Don, FNSM (Optimizing Nutrition for Exclusively Human Milk Fed Infants To Prevent Stunting in The First 1000 Days of Life)
4. Eli Rahmawati, S.SiT, M.Kes (Improving Self-Efficacy of Mothers Through Breastfeeding Support Groups As An Effort To Expand Exclusive Breastfeeding Coverage)
5. I Gede Andika Sukarya, S.ST., M.Imun (IgG Antibodies Post infection SARS-CoV-2 in the Breast Milk and Sera of Breastfeeding Women)

Covid-19 is a disease caused by SARS-CoV-2. SARS-CoV-2 is the name of virus which has been identified for the first time since late 2019. This covid-19 pandemic has spread worries for most of lactating mothers. This worries is related to the anecdotal reports in some of local news, international and social media about breastfeeding is a transmission medium for Covid-19. We put more concern about the decrease of breastfeeding practices during this covid-19 pandemic because many mothers still lack information about breastfeeding during pandemic.

Breastmilk is the best nutrition for baby because it contains antibody to increase immune system on baby. WHO has recommended the exclusive breastfeeding for 6 months and continued to breastfeed the baby with suitable complementary feeding until 2 years old. However, some worries for breastfeeding among lactating mothers appear in this covid-19 pandemic. For example, physical contact between mother and baby will probably transmit the Covid-19 virus. This thing will cause some doubt to practice breastfeeding during pandemic among mothers.

Generation with good health, strong and smart is born from a strong mother too. A mother who is pregnant and delivers her baby always takes care her nutrition so that she can deliver a healthy baby. Nowadays, pregnant and lactating mothers during covid-19 Pandemic are expected to keep good body immune system. According to the Control and Prevention Center of Covid-19, this Covid-19 virus has not been detected yet in the breast milk. Moreover, it has not been known whether breastfeeding mothers can transmit new variant of Covid-19 to their babies or not, either during pregnant or breastfeeding. Therefore, good lactation management is necessary to prevent from Covid-19 virus. In this way, health promotion to improve the successful breastfeeding practices is also performed by educating the proper breastfeeding practices according to the health protocol for breastfeeding in covid-19 Pandemic.

During covid-19 Pandemic, Some innovations are necessary to support the target of exclusive breastfeeding practices for babies in the first 1000 days of life. Training or workshop is appropriate way for health workers to handle about infodemic in lactation, and regular training for lactation counselor is also necessary for helping pregnant and lactating mothers to understand the importance of exclusive breastfeeding during covid-19 pandemic.

This conference is the implementation of community dedication in Health Polytechnic East Kalimantan. This conference is also in line with one mission of Health Polytechnic East Kalimantan to implement community dedication based on Applied Research and Technology.

Purpose of this Program :

The purpose of this program is to obtain some information from speakers about how to increase the knowledge about lactation management during this covid-19 pandemic and able to give education and become facilitators of lactation management for mothers and community. Furthermore, this program is expected to participate actively to support the government's program, especially the exclusive breastfeeding program.

In brief, We would like to give appreciate to many participants who attend this conference. We also would like to say thank you especially to all speakers who has spare their times to share their knowledge to us, moreover I would like to say thank you to Deputy Directors, Head of Subdivisions, Head of Center, Head of Study Programs in Health Polytechnic of East Kalimantan and all committee of this conference. Besides that, I would like to say thank you to Professional Associations & Organizations such as : PPNI, IBI, PATELKI, PERSAGI and PPKMI which also support this conference.

I hope that this conference can contribute many benefits, especially the benefits related to update information about breastfeeding during this covid-19 Pandemic. Amin ya rabbal allamin.

I think that's all from me today and thank you

Wassalamualaikum Wr. Wb

Dr. H. Supriadi B, S.Kp, M.Kep
Director

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THE RELATIONSHIP OF FAMILY SUPPORT WITH QUALITY LIFE OF BREAST CANCER PATIENTS IN AW SJAHRANIE SAMARINDA Hospital

Candra Dewi ¹⁾, Nilam Noorma ²⁾, Ega Ersya Urnia ³⁾

¹⁾Student of Applied Midwifery Study Program, East Kalimantan Poltekkes

²⁾Lecturer in the Department of Nursing, Poltekkes Kaltim

³⁾Lecturer in the Department of Midwifery, Poltekkes Kaltim

Abstract

Introduction: Breast cancer is one of the most common non-communicable diseases affecting women, more than 400,000 women die from breast cancer. Breast cancer sufferers will feel ashamed because of the physical changes that occur to them, and will affect their quality of life. One of the factors that affect the quality of life is family support. The purpose of this study was to determine the relationship between family support and the quality of life of breast cancer patients at AW Sjahranie Hospital, Samarinda.

Method: this study used a cross sectional approach. The number of patients with breast cancer undergoing chemotherapy at the AW Sjahranie Hospital from July to December 2021 was 75 patients. The sampling technique in this study was purposive sampling with a total sample of 70 people.

Results: Chi-square test, it was found that there was a significant relationship between family support and the quality of life of breast cancer patients ($p = 0.002$).

Discussion :Family support is said to be good if the family has provided good instrumental, informational, esteem and emotional support. The patient's quality of life is good because of good family support

Conclusion:There is a relationship between family support and the quality of life of breast cancer patients at AW Sjahranie Hospital, Samarinda.

Keywords:Family Support, Breast Cancer, Quality of Life

INTRODUCTION

Data from the Global Cancer Observatory by the International Agency for Research on Cancer (IARC) for 2020 stated that as many as 65,858 people had cancer, of which 16.6% had breast cancer.(The Global Cancer Observatory, 2020). In Indonesia, breast cancer contributes 35% and is the most dominant type of cancer, beating cervical cancer which contributes 27%.(Ministry of Health, 2020).

The prevalence of breast cancer in the world is approximately 18% of all cases of cancer in women. The percentage of breast cancer patients in Indonesia who visit the doctor at the final stage reaches 70%. Based on the 2020 Indonesia Health Profile data,

the prevalence of cancer in Indonesia is 1.4 per 1000 population, or around 330,000 people. The highest cancer in Indonesia among women is breast cancer. Meanwhile, in East Kalimantan in 2020 there were 59 people (1.26%) who had breast cancer and 347 lumps in the breast.(Ministry of Health, 2020).

Breast cancer is one of the most common non-communicable diseases affecting women. Risk factors that cause breast cancer include first menstruation at the age of under 12 years, unmarried women, married women but do not have children, giving birth to their first child at the age of 30, not breastfeeding, using hormonal contraception or receiving hormonal therapy within a certain period of time. long term, menopause at the age of more than 55 years, had benign breast tumor surgery, history of cancer in the family, women who experience severe stress, excessive consumption of fat and alcohol, and active/passive smokers(P2PTM Ministry of Health, 2019).

Family support is a process of relationship between family and social environment. Based on research results(Perwitasari, 2019), said that the quality of life of cancer patients decreased after chemotherapy compared to before chemotherapy. This decrease in quality of life is more influenced by the patient's role domain, pain symptoms, decreased appetite and financial difficulties. The patient's quality of life should be an important concern for health professionals because it can be a reference for the success of an action/intervention or therapy.

The World Health Organization Quality of Life WHOQOL (1998) in Sari (2019), defines quality of life as an individual's perception of their life in the context of the culture and value system in which they live and its relationship to goals, expectations, standards, and also individual concerns. The WHOQOL-21 BREF domain of quality of life is physical health, psychology, social relationships and the environment.

Breast cancer sufferers have unstable physical and mental conditions, and many suffer from depression. Family support is no less important because no matter how big the treatment given, family support greatly affects the patient's quality of life. It is not uncommon for breast cancer patients to be shunned by their own family members because they are considered a burden to the family economy. Lack of family knowledge assumes that the disease that occurs will infect other family members(Nurul, 2020).

The discrepancy that has occurred so far based on the results of interviews at AWS Hospital, breast cancer patients undergoing chemotherapy experience a poor quality of life. The patient simply surrenders and feels that he does not want to live. Especially when the patient has to go to the hospital for therapy without being accompanied by his family. The patient is left alone to undergo therapy. This greatly affects the mental client. In addition, based on medical record data at the A. Wahab Sjahranie Hospital, a total of 289 breast cancer patients were hospitalized from January to December 2021.(RSUD. AWS, 2021). The results of a preliminary study conducted by researchers, according to AWS Hospital medical records, patients undergoing chemotherapy for breast cancer during 2021 were 150 patients with a percentage of 51.9%. Meanwhile, from June to December 2021, there were 75 patients.

This study aims to determine the relationship of family support to the quality of life of breast cancer patients at AW Sjahranie Hospital Samarinda.

METHOD

This type of research design is non-experimental using a correlation research design with the Cross Sectional approach method. The population used in this study was the entire number of breast cancer patients undergoing chemotherapy at AW Sjahranie Hospital for the period from June to December 2021 as many as 75 patients. Qa total sample of 70 people. The technique used to determine the sample in this study was purposive sampling. The independent variable in this study was family support. The dependent variable of this research is quality of life.

The instruments used included the family support questionnaire and the WHOQOL-BREF questionnaire. The statistical analysis used included univariate and bivariate tests using the Chi-Square Test.

RESULTS

Table 1. Frequency Distribution of Demographic Data in Breast Cancer Patients Undergoing Chemotherapy in the Chemotherapy Room of AW Sjahranie Hospital Samarinda in 2022

Category	Frequency (F)	Percentage (%)
Respondent Age		
26-41	13	18.6%
42-57	40	57.1%
58-75	17	24.3%
Gender		
Man	5	7.1%
Woman	65	92.9%
Religion		
Islam	43	61.4%
Christian	25	35.7%
Buddha	2	2.9%
Education		
SD	15	21.4%
JUNIOR HIGH SCHOOL	21	30%
SENIOR HIGH SCHOOL	27	38.6%
College	7	10%
Work		
Government employees	10	14.3%
Farm workers	8	11.4%
Self-employed	7	10%
Housewife	45	64.3%
Diagnosis		
Mamae	70	100%
Marital status		
Marry	56	80%
Widower widow	14	20%
Cancer stage		
III	53	75.7%
IV	17	24.3%
Live at home together		
Husband and wife	38	54.3%
Parent	3	4.3%
Son in law	29	41.4%
Amount	70	100%

Based on the results of the analysis of table 1 above, from 70 respondents, it was

found that the age of the majority of respondents was at the age of 42-57 years, as many as 40 people (57.1%), most of the respondents were female, 65 people (92.9%), Muslim, namely as many as 43 people (62%), the highest level of education is high school/equivalent, namely 27 people (38.6%), the respondent's occupation is a housewife as many as 45 people (64.3%), the marital status of respondents is 56 people (80%) , respondents who had mammary cancer were 70 people (100%), the stage of the cancer was 53 people (75.7%) stage III and respondents who still lived at home with their husband/wife were 38 people (54.3%).

Table 2. Frequency Distribution and Presentation of Family Support in Breast Cancer Patients Undergoing Chemotherapy at A. W. Hospital. Sjahranie Samarinda Year 2022

Family support	Frequency (F)	Percentage (%)
Good	37	52.9%
Enough	33	47.1%
Amount	70	100%

Based on table 2 it was found that most of the family support was in the good category as many as 37 people (52.9%) and adequate family support as many as 33 people (47.1%).

Table 3. Quality of Life in Breast Cancer Patients Undergoing Chemotherapy at AW Sjahranie Hospital Samarinda in 2022

No	quality of life	F	%
1	Good (107-130)	40	57,1
2	Enough (71-106)	30	42,9
Total		70	100.0

Source: Primary Data, 2022

Based on table 3 it is known that most of the quality of life is in the good category as many as 40 people (57.1%) and in the sufficient category as many as 30 people (42.9%).

Table 4. The Relationship between Family Support and Quality of Life in Breast Cancer Patients Undergoing Chemotherapy at AW Sjahranie Hospital Samarinda in 2022

Family support	Quality of Life				
	Good		Enough		Total
	F	%	F	%	
Good	27	20,6	10	16,4	37
Enough	12	18,4	21	14,6	33
Total	39		31		70

Pvalue

0.002

Based on table 4 of the relationship between family support and quality of life in breast cancer patients undergoing chemotherapy at AW Sjahranie Samarinda Hospital, out of a total of 37 respondents with family support in the good category, most of the quality of life was in the good category, 27 people (20.6%) and in the good category. enough 10 people (16.4%). A total of 33 respondents with adequate family support had a good quality of life, 12 people (18.4%), and 21 people (14.6%) who were in the sufficient category. Based on the results of tests conducted using the chi-square test, significant results were obtained $p = 0.002$, because $P\text{-value} \leq \alpha 0.05$, it was concluded that there was a relationship between family support and quality of life in breast cancer patients undergoing chemotherapy at AW Sjahranie Hospital Samarinda.

DISCUSSION

1. Family Support for Breast Cancer Patients Undergoing Chemotherapy at AW Sjahranie Hospital Samarinda in 2022

Based on the research data in table 5, it was found that the percentages of informational support, appreciation support, instrumental support, and emotional support varied. Many factors influence this.

Assessment support :This support can occur when there is an expression of a positive assessment of the individual. Individuals have someone to talk to about their problems, occurs through the expression of positive individual expectations to other individuals, encouragement, approval of one's ideas or feelings and positive comparisons of someone with other people, for example people who are less able. Family support can help improve individual coping strategies with alternative strategies based on experiences that focus on positive aspects. This is confirmed by research (Nurhidayati & Rahayu, 2017) which mentions the behavior of reward support, namely giving praise, motivation and encouragement to partners, in this case, namely the treatment process.

Instrumental support :This support includes the provision of physical support such as services, financial and material assistance in the form of real assistance (Instrumental support material support), a condition where objects or

services will help solve practical problems, including direct assistance, such as when someone gives or lends money, helps with work everyday life, delivering messages, providing transportation, looking after and caring for when sick or depressed that can help solve problems. This is corroborated by research results (Nurhidayati & Rahayu, 2017) instrumental support obtained, namely financial support, helping to get food and drinks, delivering chemotherapy, providing entertainment facilities in the form of music and chatting, and reminding chemotherapy schedules.

Informational support :This type of support includes communication networks and shared responsibilities, including providing solutions to problems, giving advice, directions, suggestions or feedback about what someone is doing. Families can provide information by suggesting about doctors, good therapy for themselves and specific actions for individuals to fight stressors. This is corroborated by the results of research (Nurhidayati & Rahayu, 2017) namely individuals who experience depression can get out of their problems and solve their problems with support from the family by providing feedback. In this information support, the family acts as a collector of information and provides information.

Emotional support:During depression, individuals often suffer emotionally, sad, anxious and lose self-esteem. If depression diminishes one's sense of belonging and being loved. Emotional support gives individuals a feeling of comfort, feeling loved, empathy, trust, attention so that individuals who receive it feel valuable. This is corroborated by research results (Nurhidayati & Rahayu, 2017), namely the family provides a place to rest and provide encouragement. Based on the results of this study, the support that has been found to need attention is informational support. Couples are expected to be able to provide informational support by actively asking doctors or nurses during chemotherapy. This is in accordance with the results of research conducted by Kamariah (2020), which said that family support affects the recovery of mothers who have breast cancer. So for breast cancer patients who are undergoing chemotherapy by getting support from their families they are more eager to undergo chemotherapy, and this can help speed up the healing process.

According to the researcher's assumption that having family support is a way to improve the quality of life of patients as seen from information support, appreciation support, instrumental support, emotional support and respondents rated the family support provided as good.

2. Quality of life in breast cancer patients undergoing chemotherapy at AWSjahranie Hospital Samarinda in 2022.

Based on the results of the study, it was shown that out of 70 respondents, 40 people (57.1%) had a good quality of life, 30 respondents (42.9%) had an adequate quality of life.

Based on Ayuni's research (2020), breast cancer patients can have a good quality of life if they take treatment regularly, so that by taking treatment regularly the chances of recovery are very large, thus breast cancer patients can recover and can carry out activities to meet their needs without dependence on other people. So that the patient can be independent emotionally, socially, physically, and will easily achieve a good quality of life.

This is in accordance with the results of research conducted by Ayuni (2020), which states that there are several factors contributing to the quality of life of breast cancer patients such as patient age, age of marriage and results of anatomical pathology (cancer stage). Independent factors include age, education, occupation, marital status, income, chemotherapy, duration since treatment, recurrence status, primary hospital accreditation level and location all appear to correlate with quality of life. This research requires a more in-depth study of the quality of life of breast cancer patients and intervention efforts to improve the quality of life of breast cancer patients.

According to the assumptions of quality of life researchers in breast cancer patients undergoing chemotherapy, from a physical perspective, most breast cancer patients undergoing chemotherapy at AW Sjahranie Hospital Samarinda experience health problems, namely having a disease that makes breast cancer patients undergoing chemotherapy dissatisfied with their abilities. carry out activities every day, from a psychological point of view many breast cancer patients undergoing chemotherapy from the results of the data obtained are saying enough, with economic problems and not having time for recreation.

3. The Relationship between Family Support and the Quality of Life of Breast Cancer Patients Undergoing Chemotherapy at AW Sjahranie Hospital Samarinda in 2022.

Based on the results of the study from a total of 37 respondents with family support who were in the good category, it was found that most of the quality of life was in the good category, 27 people (20.6%) and in the sufficient category, 10 people (16.4%). A total of 33 respondents with adequate family support had a good quality of life, 12 people (18.4%), and 21 people (14.6%) who were in the sufficient category. This study used the chi-square test and found that $p = 0.002 < 0.05$, which means that there is a relationship between family support and quality of life for breast cancer patients undergoing chemotherapy. The results showed that there was good family support and quality of life for patients, and there was also adequate family support and quality of life for patients.

This is in line with the research of Irawan and Purwaningsih (2017), which is in accordance with Marilyn's theory which states that there is a strong relationship between the family and the health status of its members where the role and support of the family is very important for every aspect of family member health care, starting from strategies to the chemotherapy phase. Based on the results of the correlation data analysis with the chi-square test, it is known that the significance level is $0.014 < 0.05$ where there is a significant relationship between family support and the quality of life of breast cancer patients undergoing chemotherapy.

According to the results of Ayuni's research (2020) it shows that there is a relationship between family support and the quality of life of breast cancer sufferers. The better the family support, the better the quality of life for breast cancer sufferers. A study in Germany found that cancer patients wanted and did receive social support from their doctors and family/friends, while other professionals (psychologists, social workers, clergy) were less involved (Finck, 2018).

Quality of life is an individual's ability to enjoy satisfaction throughout his life and must be able to function physically, spiritually, psychologically

and socially in order to achieve an adequate quality of life. To improve the quality of life of breast cancer patients undergoing chemotherapy, they must feel safe in their living environment by means of a family that alienates them and does not reject their existence, providing family support to breast cancer patients undergoing chemotherapy in the form of providing information and behavior or materials so that breast cancer patients Those undergoing chemotherapy feel cared for, valued and loved (Dewi, 2017).

According to the assumptions of researchers Family support provides great motivation and enthusiasm for breast cancer patients to recover and be strong in life. The feelings of comfort, love and security that patients get ultimately provide well-being that determines their quality of life. Good social relations and good support that patients receive from the closest people, co-workers, neighbors, from nurses and doctors who are responsible for the patient will have a very positive impact on breast cancer sufferers. The positive attitude and outlook of cancer sufferers will eliminate the resulting negative responses. Fulfillment of all aspects of family and social support will ultimately provide a good quality of life for breast cancer patients.

CONCLUSION

1. Family support for breast cancer patients undergoing chemotherapy at RSUD AW. Sjahranie Samarinda is good as much as 37 (52.9%).
2. Quality of life in breast cancer patients undergoing chemotherapy at AW Sjahranie Hospital Samarinda was good 40 people (57.1%).
3. There is a relationship between family support and quality of life with P-Value = 0.002 ($p < 0.05$)

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THE RELATIONSHIP LEVEL OF KNOWLEDGE OF COUPLE OF REPRODUCTIVE AGE WITH THE SELECTION OF INTRACEPTIVE DEVICES IN THE MBCU ROOM OF BONTANG ISLAMIC HOSPITAL IN 2022

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Abstract

Introduction:Based on the 2021 World Population Data Sheet released by PRB, the world population reaches 7.8 billion people with a TFR of 2.3. From the same data, it was found that in mid-2021, Indonesia is home to 275.1 million people (Kaneda et al., 2021). From the results of the 2019 SKAP, Indonesia's TFR was 2.45, while East Kalimantan was 2.47 (BKKBN, 2020). The government, through the BKKBN, is targeting to reduce the TFR rate to 2.26 children per woman in 2020. The TFR target in several regions of Indonesia has not been achieved, so it is necessary to optimize family planning advocacy efforts (Anggraini et al., 2021).

Method:This research is a quantitative descriptive study with a cross-sectional design. The sample is 30 PUS respondents who control at MBCU RSIB. Data were analyzed using the chi-square test to determine whether there was a relationship between the level of knowledge of CFA and IUD selection.

Results:The results of this study indicate that there is a relationship between the level of AFA knowledge and IUD selection. This is evidenced by the results of the chi-square test having p-value = 0.003 (p-value <0.05).

Discussion:According to Green's theory (1974, in Hayden, 2021)Health behavior, in this case the choice of IUD method as the contraceptive method of choice, is influenced by education and knowledge factors. Health knowledge includes detailed information related to health services and patient rights, giving patients more opportunities and abilities to determine the best health services for themselves.

Conclusion:There is a relationship between the level of knowledge of PUS and IUD selection. Couples with less knowledge tend not to choose the IUD as their preferred method of family planning.

Keywords:Knowledge Level, IUD, EFA

INTRODUCTION

Based on the 2021 World Population Data Sheet released by the Population Reference Bureau (PRB), the world population reaches 7.8 billion people with a TFR of 2.3. Indonesia is the 4th most populous country in the world. From the same data, it was found that in mid-2021, Indonesia is home to 275.1 million people (Kaneda et al., 2021).

In the last 10 years (2010-2020), Indonesia's population has increased by 1.25% per year (BPS, 2021). This figure is still above the population growth rate target set for 2010, which was 1.1% per year.

From the results of the 2019 Program Performance and Accountability Survey (SKAP), Indonesia's Total Fertility Rate (TFR) was 2.45, while East Kalimantan was 2.47 (BKKBN, 2020). The government, through the BKKBN, is targeting to reduce the TFR rate to 2.26 children per woman in 2020. The TFR target in several regions of Indonesia has not been achieved, so it is necessary to optimize family planning advocacy efforts (Anggraini et al., 2021).

To achieve the TFR target, it is necessary to run a family planning program. The use of contraception is one part of the family planning program. Contraception consists of hormonal contraception and non-hormonal contraception. Non-hormonal consists of the Lactation Amenorrhea Method (LAM), condoms, Intrauterine Contraception Devices (IUD) and stable contraception (tubectomy and vasectomy). Meanwhile, hormonal contraception consists of hormones containing progestins in the form of pills, injections and implants as well as combination hormones in the form of pills and injections (Anggraini et al., 2021).

Apart from the use of contraception, one of the scopes of family planning is Communication, Information and Education (IEC). According to BKKBN (2011, in Anggraini et al., 2021), KIE is an activity of conveying information to increase the knowledge, attitudes and behavior of individuals, families and communities in population and family planning programs.

Education, as a component of IEC, plays an important role in increasing knowledge. In accordance with Green's theory (1974, in Hayden, 2021), one of which is health behavior is influenced by education and knowledge factors. This is included in the level of knowledge in determining contraception.

The pattern of choosing the type of contraception in 2020 shows that the majority chose to use the injection method (72.9%), followed by the pill method (19.4%), and the IUD method (8.5%)(RI Ministry of Health, 2021). According to Bansode, Sarao and Cooper (2021), the most effective contraceptives are etonogestrel implants, levonorgestrel IUDs, and Copper IUDs. However, considering the ease of control and installation, duration of contraception, side effects, and the desire to get pregnant again from the mother, the IUD is the best contraceptive option.

However, based on data from PUS and Active Family Planning Participants in Bontang City in 2021, out of 25,641 PUS in Bontang City, only 18,427 couples are active family planning participants or 28.13% of couples are not. Among couples using birth control, 1,575 used condoms, 1,206 used implants, 6,659 used injections, 3,542 used pills, 1,223 used MOW, 134 used MOP, and 4,088 used IUDs or only 15.9% of PUS used IUDs.

Based on research conducted by Borges et al. (2020), the level of knowledge about the IUD associated with interest in using the contraceptive method. In addition, based on research Amelia, Maryati and Hardjanti (2021), after conducting educational interventions with video media regarding IUDs, there was an increase in knowledge and attitudes about IUD contraception.

This study aims to determine is there a relationship between the level of knowledge of couples of childbearing age towards the choice of intrauterine contraceptives in the MBCU Room of Bontang Islamic Hospital in 2022

METHOD

Type of research designed is a quantitative descriptive study with a cross-sectional research design. The population used in the research is couples of childbearing age who control at MBCU Bontang Islamic Hospital. The number of PUS who control family planning registration at MBCU Bontang Islamic Hospital during 2021 is 345 couples. From these figures, the average is taken so that the number of visits per month is 29 people. A total sample of 30 people. The technique used to determine the sample in this study was purposive sampling. The independent variable in this study was knowledge level of couples of childbearing age. The dependent variable of this research is selection of intrauterine contraception.

instruments used in this study was a questionnaire prepared by researchers to measure the level of knowledge of PUS about the IUD. The statistical analysis used included univariate and bivariate tests using the Chi-Square Test.

RESULTS

Table 1. Characteristics of Wives Based on Education Level

Education	Frequency	Percentage (%)
Middle education	19	63.3%
higher education	11	36.7%
Amount	30	100%

Source: Primary Data, 2022; Law Number 20 of 2003

Based on table 1 which shows the characteristics of wives based on their level of education, the highest level of education was 19 respondents (63.3%) who received education up to secondary level.

Table 2. Characteristics of Husbands Based on Education Level

Education	Frequency	Percentage (%)
Middle education	19	63.3%
higher education	11	36.7%
Amount	30	100%

Source: Primary Data, 2022; Law Number 20 of 2003

Based on table 2 which shows the characteristics of husbands based on their level of education, the highest level of education was 16 respondents (53.3%) who received education up to secondary level.

Table 3. The value of AFA's knowledge of the IUD

Variable	N	Min	Max	Means	SD
EFA Knowledge Value	30	17.39	95.65	61.44	18.82

Source: Primary Data, 2022

Table 3 shows the value of the level of knowledge of PUS towards IUD family planning methods. From the knowledge level value data of 30 respondents, the average value is 61.44, and the standard deviation is 18.82.

Table 4. Level of Knowledge of PUS on the IUD

Knowledge level	Frequency	Percentage (%)
Not enough	15	50%

Enough	9	30%
Good	6	20%
Amount	30	100%

Source: Primary Data, 2022

Table 4 shows the level of knowledge of PUS towards IUD family planning methods. From the data on the level of knowledge of 30 respondents, most of them had less knowledge, namely 15 respondents (50%).

Table 5. Selection of the IUD as the preferred method of birth control

IUD selection	Frequency	Percentage (%)
Yes	7	23.3%
No	23	76.7%
Amount	30	100%

Source: Primary Data, 2022

Table 5 shows the distribution of respondents who are willing to use the IUD and those who are not. Of the 30 respondents, the majority of 23 respondents (76.7%) were not willing to use the IUD as their preferred method of family planning.

Table 6. Statistical Analysis Results *Chi-Square Knowledge Level of AFA with IUD Selection*

		IUD selection				p-value
		Yes		No		
		n	%	n	%	
Knowledge level	Not enough	0	0%	15	100%	0.003
	Enough	3	33.3%	6	66.6%	
	Good	4	66.6%	2	33.3%	
Total		7	23.3%	23	76.6%	

Source: Primary Data, 2022

Table 6 shows the statistical results of the chi-square analysis of the level of knowledge of ACC by selecting an IUD. For the low level of knowledge, all 15 respondents (100%) did not choose the IUD. For the sufficient level of knowledge, the majority of 6 respondents (66.6%) did not choose the IUD. For a good level of knowledge, the majority, namely 4 respondents (66.6%), chose the IUD. Based on the results of chi-square analysis using SPSS 19 software at an error level of 5%, the p-value was 0.003 (p-value <0.005). From these results, it can be said that H0 is rejected and Ha is accepted, which means that there is a relationship between the level of knowledge of PUS and the choice of intrauterine contraceptives.

DISCUSSION

1. Level of education

Based on research data in tables 1 and 2, found similar research, namely the results of research conducted by Zia (2019), which stated that the majority (44.1%) of married women received education up to the secondary level. In research Rosida (2020), it was also explained that respondents with a secondary education level used more long-term contraception (IUDs) than respondents with a lower education level.

Education can influence behavior and lifestyle. Generally, the higher the education, the easier it is to be exposed to information, increase knowledge, and the more motivated the individual is to play a role in development (Zia, 2019). Education not only influences the respondent's decision in choosing contraception, but also in evaluating the contraceptive used (Rosida, 2020).

Based on the results of this study, the higher the level of education, the more likely it is to choose long-term contraception (IUD). So it is hoped that there will be efforts from the government to set compulsory education standards up to the senior high school level. In addition, there needs to be a joint effort with the Puskesmas regarding MKJP education, to raise awareness of PUS regarding MKJP.

2. EFA Knowledge Value and EFA Knowledge Level

Based on the research results in table 3, similar results were found to the research conducted by Amelia et al. (2021), where the level of knowledge of PUS related to the IUD prior to the intervention was in the sufficient category. This is an initial illustration from the results of the study that the level of knowledge of PUS related to the IUD method is in the sufficient category.

This study is similar to the results of the study Fitriani (2019), which stated that most of the PUS mothers (69.8%) had less knowledge about IUD contraception. Furthermore, a similar study was also conducted by Suwanti (2019), who said that the majority (50%) of PUS women had a low level of knowledge regarding the IUD prior to being given health education. This is an initial description of the results of the study in which the majority of PUS mothers

have a low level of knowledge related to the IUD method.

3. Correlation between Knowledge Level of Couples of Reproductive Age and Selection of Intrauterine Contraceptives

Based on the results of the chi-square statistical test, for respondents with less knowledge, 15 respondents (100%) did not choose the IUD. For respondents with sufficient level of knowledge, 6 respondents (66.6%) did not choose the IUD and 3 respondents (33.3%) chose the IUD. And for respondents with a good level of knowledge, 4 respondents (66.6%) chose the IUD and 2 respondents (33.3%) did not choose the IUD.

For the results of chi-square analysis using SPSS 19 software at an error level of 5%, the results obtained were a p-value of 0.003 (p-value <0.005). From these results, it can be said that H₀ is rejected and H_a is accepted, which means that there is a relationship between the level of knowledge of PUS and the choice of intrauterine contraceptives.

This analysis is in accordance with the results of research conducted by Hatijar and Saleh (2020). Hatijar and Saleh stated that there was a relationship between knowledge level and IUD selection (p-value = 0.000 <0.05). Another research conducted by Mardia (2019), which states that there is a relationship between knowledge and the choice of contraceptives.

Based on the results of research data analysis accompanied by supporting theory, it can be concluded that H₀ failed to be rejected or there is a significant relationship between the level of knowledge of PUS and the choice of IUD method. Thus, to increase the use of the IUD method, it is also necessary to increase health education for PUS regarding the IUD method.

Researchers assume that there is a relationship between the level of knowledge of couples of childbearing age and the choice of IUD as a contraceptive method. There are still very few couples of childbearing age who choose the IUD as a method of contraception, so it is necessary for health workers to provide counseling with the right method of family planning to couples of childbearing age, so that the couple can decide on the right method for selecting
contraception.

CONCLUSION

1. The characteristics of PUS respondents who were in control in the MBCU Room of Bontang Islamic Hospital were that the majority (43.3%) were in the early adult age group (26-35 years), all (100%) were married, the majority (63.3%) received education up to secondary level, the majority (86.7%) are Muslim, and the majority (76.7%) work as housewives.
2. The knowledge value of PUS who controls in the MBCU Room of Bontang Islamic Hospital about IUDs has a minimum value of 17.39, a maximum value of 96.65, an average of 61.44, and a standard deviation of 18.82. from the data above, it is known that the average respondent's knowledge is in the sufficient category.
3. The level of knowledge of PUS who controls in the MBCU Room of Bontang Islamic Hospital about IUDs, the majority (50%) of respondents have less knowledge.
4. Selection of the IUD by the PUS who controlled it in the MBCU Room of the Bontang Islamic Hospital as a contraceptive, the majority (76.7%) did not choose the IUD as the preferred method of family planning.
5. PUS with less knowledge, all (n = 15) did not choose the IUD as the preferred method of family planning. In PUS with sufficient level of knowledge, 6 respondents (66.6%) did not choose the IUD and 3 respondents (33.3%) chose the IUD. And for respondents with a good level of knowledge, 4 respondents (66.6%) chose the IUD and 2 respondents (33.3%) did not choose the IUD. This is an early indication that there is a relationship between the level of knowledge and IUD selection.

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RELATIONSHIP OF MOTHER'S OCCUPATIONAL STATUS AND PATTERN OF BREAST MILK WITH GROWTH OF BABY WEIGHT AGED 0-6 MONTHS IN THE WORK AREA OF WONOREJO CITY PUSKESMAS SAMARINDA 2022

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Abstract

Growth in children is from the time in the fetus until the age of 24 months or what is often called the *golden period* . To achieve maturity at optimal growth and development is largely determined by nutritional intake at that age. This study aims to determine the relationship between maternal employment status and breastfeeding patterns with weight growth of infants aged 0-6 months in the working area of the Wonorejo Health Center, Samarinda City. with The type of research used is Analytical *Observational* research with a *cross sectional approach* . The number of samples is 34 respondents. Maternal employment status and breastfeeding patterns were obtained using a questionnaire. The growth of the baby's weight is obtained by weighing the weight and looking at the Card Towards Health (KMS) . Based on the results obtained that most of the mothers who do not work 23 people (67.6%). There were 19 mothers who gave breast milk (52.9%). And most of the normal weight growth as many as 20 people (58.8%). The results showed that there was no significant relationship between maternal employment status and breastfeeding pattern with p value ($P > 0.005$), and there was a significant relationship between breastfeeding pattern and infant weight growth ($P < 0.005$) . There is no relationship between the mother's employment status and the pattern of breastfeeding and there is a significant relationship between the pattern of breastfeeding and the growth of the baby's weight.

Keywords: *Mother's occupation; Breastfeeding Pattern; Baby Weight Growth*

INTRODUCTION

According to *World Health Organization* (2014) Exclusive breastfeeding is giving only breast milk without giving other food or drinks to babies from birth to 6 months of age, except for drugs and vitamins. However, this does not mean that

when exclusive breastfeeding is completed, breastfeeding is stopped, but it is continued to be given to babies until they are 2 years old.

The practice of breastfeeding in the community is certainly different, in the village mothers breastfeed their babies almost without rules and also every cry is always interpreted as a baby in a hungry state so that the mother always gives breast milk (Mother's Milk), even though the baby Crying isn't necessarily because you're hungry. Some mothers feel that their babies are not getting enough breast milk, when in fact there is no problem at all with breast milk, or they are not used to the normal variations found in breastfed babies (Irianti, 2018) .

Most women work to earn a living outside the home and also often leave their families for a few hours each day thereby interfering with breastfeeding for those who have just given birth. In accordance with the demands of living in a big city, where there is a tendency to increase the number of wives who are actively working outside the home for help enhancement income family . Labor _ rising girl _ Becomes one _ constraint in the success of the Exclusive Breastfeeding program , this is also because paid leave give birth to only 12 weeks , of which 4 weeks among them taken before delivery. Working mothers can only accompany their babies intensively for 2 months, including breastfeeding their babies. After that, they have to go back to work and often mothers are forced to breastfeed their children (Nugroho, 2011) .

According to Soetjiningsih (2012) growth is related to changes in size, number, size or dimensions at the cellular level which can be measured by weight, length, bone age and metabolic balance.

According to Al Rahmad (2016), growth in children is from the time in the fetus until the age of 24 months or what is often referred to as the *golden period*. To achieve maturity at optimal growth and development is determined by nutritional intake at that age.

To achieve optimal growth and development, WHO/UNICEF recommends four important things that must be done, namely by giving only breast milk from birth to

6 months of age and providing complementary foods (MP ASI) from 6 months to 24 months of age. The period of rapid growth and development is at the age of 0-24 months, so it is often termed the golden period as well as the critical period. Before giving birth. Working mothers can only accompany their babies intensively for 2 months, including breastfeeding their babies. After that, they have to go back to work and often mothers are forced to breastfeed their children (Nugroho, 2011) .

According to Soetjiningsih (2012) growth is related to changes in size, number, size or dimensions at the cellular level which can be measured by weight, length, bone age and metabolic balance.

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To achieve optimal growth and development, WHO/UNICEF recommends four important things that must be done, namely by giving only breast milk from birth to 6 months of age and providing complementary foods (MP ASI) from 6 months to 24 months of age. The period of rapid growth and development is at the age of 0-24 months, so it is often termed the golden period as well as the critical period.

The good impact of exclusive breastfeeding to infants is as a single food to meet all their needs, increasing the baby's immune system, anti-allergy and increasing intelligence and increasing affection (Atiqa, 2016) . According to Fitri (2014) it was found that exclusive breastfeeding is a factor that greatly influences growth and development, where infants who are exclusively breastfed have the opportunity to experience normal growth which is 1.62 times greater than infants who are not given exclusive breastfeeding. In terms of development, babies who are exclusively breastfed have a 5.474 times greater chance of developing according to age than babies who are not exclusively breastfed.

Based on data from the *United Nations International Children's Emergency Fund* (UNICEF), the success of exclusive breastfeeding worldwide

in 2018 was only 41%, which had not yet reached the target as set, which was 70%. The nutritional status problems in the world include the prevalence of *wasting* as much as 8%, *overweight* 6%, and *stunting* 23%. In Indonesia, the results of Riskesdas (2018) state that the proportion of breastfeeding patterns for infants aged 0-5 months for exclusive breastfeeding is 37.3%, partial breastfeeding is 9.3% and predominant breastfeeding is 3.3%. In the proportion of poor nutritional status and under-nutrition under five, as many as 17.7%

Meanwhile, based on Data and Information on the Indonesian Health Profile (2019), the coverage of infants receiving exclusive breastfeeding in East Kalimantan Province was 78.53% and the percentage of children aged 0-23 months according to nutritional status with an index of BW/U for undernourished status of 11.50% and on poor nutrition by 3.20%. This is an indicator that there is still a lack of monitoring of exclusive breastfeeding patterns that affect the nutritional status of toddlers.

Based on a preliminary study, data obtained from the Samarinda City Health Office in 2020 for the work area of the Wonorejo Health Center, Samarinda City regarding the percentage of infants who received exclusive breastfeeding, which was 47.8% and there were 17.8% undernourished children under five.

Based on the above background, the researcher is interested in conducting a research entitled "The Relationship between Employment Status and Exclusive Breastfeeding with Weight Growth in Infants aged 0-6 Months in the Wonorejo Health Center Work Area, Samarinda City". This is necessary in order to determine the relationship between exclusive breastfeeding and infant weight in the Wonorejo Community Health Center working area.

METHOD

The type of research used is *Analytical Observational research* with a *cross sectional approach*. Study this conducted April -May in the work area Public health center Wonorejo Samarinda City 2022. The number of samples is

34 respondents. retrieval technique sample Mother 's employment status and breastfeeding pattern were obtained by using a questionnaire. For the growth of the baby's weight, it is obtained by weighing the weight and looking at the Card Towards Healthy (KMS).

RESULTS AND DISCUSSION

Table 4. 1. Distribution Characteristics Respondent Based on Mother's Age and Education

Mother Characteristics	Amount	
	n(34)	%
a) Mother's Age		
16-18	1	3.0
19-29	29	85.0
30-49	4	12.0
b) Mother's Education		
SD	6	17.6
JUNIOR HIGH SCHOOL	6	17.6
SENIOR HIGH SCHOOL	18	52.9
College	4	11.8

Source: Primary Data, 2022

Based on table 4.1, it is known that almost all of the respondents aged 19-29 years were 29 people (85.0%) and most of the respondents who had the latest high school education were 18 people (52.9%).

Table 4. 2. Distribution Characteristics Respondent Based on Type Gender and Age Baby

Baby Characteristics	Amount	
	n(34)	%
a) Baby's Gender		
Man	19	55.9
Woman	15	44.1
b) Baby's Age		
1 month	12	35.3
2 months	3	8.8
3 months	8	23.5
4 months	8	23.5
6 months	3	8.8

Source: Primary Data, 2022

Based on table 4.2, it is known that most of the respondents have a male gender as many as 19 people (55.9%) and almost half of the respondents who have 1 month of age are 12 people (35.3%).

b. Mother's Employment Status

Table 4. 3. Work Status Distribution Mother

Mother's Employment Status	Amount	
	N	%
Working	11	32.4
Not working	23	67.6
Total	34	100

Source: Primary Data, 2022

Based on table 4.3, it is known that most of the respondents who do not work in the Wonorejo Health Center work area are 23 people (67.6%).

c. Breastfeeding Pattern

Table 4. 4 .Distribution of Breastfeeding Patterns

Breastfeeding Pattern	Amount	
	n	%
Breastfeeding	19	55.9
Not breastfed	15	44.1
Total	34	100

Source: Primary Data, 2022

Based on table 4.4, it is known that the majority of respondents in the Wonorejo Health Center working area were breastfed, namely 19 people with a percentage (55.9%).

d. Baby Weight Growth

Table 4. 5. Distribution Growth Baby Weight

Baby Weight Growth	Amount	
	N	%
Normal	20	58.8
Abnormal	14	41.2
Total	34	100

Source: Primary Data, 2022

Based on table 4.5 it is known that most of the respondents in the working area of the Wonorejo Health Center in the category of normal weight growth are 20 people (58.8%)

3. Bivariate

a. Relationship between Mother's Occupational Status and Baby's Weight Growth

Table 4. 6. Job Status Relationship Mother with Growth Baby Weight

Job status	Baby Weight Growth						P value
	Normal		Abnormal		Total		
	n	%	N	%	n	%	
Working	7	63.6%	4	36.4%	11	100%	1.00
Doesn't work	13	56.5%	10	43.5%	23	100%	
Total	20	58.8%	14	41.2%	34	100%	

Source: Primary Data, 2022

Based on table 4.6, it is known that the results of the analysis using *Fisher's exact test* obtained $p\text{ value} = 1.00 > 0.05$ which means H_a is rejected and H_0 is accepted which means there is no significant relationship between Mother's Occupational Status and Infant Weight Growth in respondents at the Wonorejo City Health Center. Samarinda.

b. The Relationship of Breastfeeding Patterns with Baby Weight Growth

Table 4. 7. Relationship between breastfeeding patterns and Growth Baby Weight

Giving Pattern breast milk	Baby Weight Growth						P value
	Normal		Abnormal		Total		
	n	%	n	%	N	%	
Breastfeeding	7	36.8%	12	63.2%	19	100%	0.005
Not Breastfeeding	13	86.7%	2	13.3%	15	100%	
Total	20	58.8%	14	41.2%	34	100%	

Source: Primary Data, 2022

Based on table 4.7, it is known that the results of the analysis using *Fisher's exact test* obtained $p\text{ value} = 0.005 < 0.05$, which means that there is a significant relationship between the pattern of breastfeeding and the growth of baby weight in the respondents of the Wonorejo Health Center, Samarinda City.

CONCLUSION

On research this almost whole respondent 19-29 years old as many as 29 people (85.0%), some big respondents who have education last high school that is as many as 18 people (52.9%). Respondent manifold sex man as many as 19 people

(55.9%) and almost half respondents who have 1 month old as many as 12 people (35.3%). Employment Status mother at work Public health center wonorejo that part big that doesn't work namely 23 people (67.6%) and those who work totaled 11 people (32.4%). Pattern of breastfeeding in the work area Public health center wonorejo that mothers who give breast milk to the baby that is as many as 19 people (52.9%) and mothers who did not giving breast milk is as many as 15 people (44.1%). Growth baby 's weight in the work area Public health center wonorejo that part big growth normal body weight as many as 20 people (58.8%) and growth abnormal weight as many as 14 people (41.2%). Based on the analysis of the results of statistical tests using *Fisher 's test* , there is no relationship between the mother's employment status and the baby's weight growth with a p value of 1.00 (> 0.05) . Based on the analysis of the results of statistical tests using the Fisher test, *there is* a significant relationship between breastfeeding patterns and infant weight growth with p value = 0.005 (< 0.005).

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THE CORRELATION OF EXCLUSIVE BREASTFEEDING ON BODY LENGTH AND WEIGHT OF INFANTS AGED 7-12 MONTHS AT PMB NURHAIDAH

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Abstract

backgrounds:Breast milk (ASI) is the right food to be given to newborns because all the nutrients contained in breast milk are needed for the growth of infants aged 0-6 months. The results of the Nutrition Status Monitoring (PSG) held by the Ministry of Health of the Republic of Indonesia in 2016 illustrates the percentage of stunting/shortness in Indonesia in the toddler group which is 29.0% higher than the under-five group of 21.7% . According to WHO, the prevalence of stunting under five becomes a public health problem if the prevalence is 20% or more. The purpose of this study was to determine the relationship between exclusive breastfeeding and body length and weight of infants aged 7-12 months

Methods:This study used an analytical research design with a cross-sectional approach. The population in this study were postpartum mothers who routinely checked their babies at PMB Nurhaidah and a sample of 30 people. The sample was selected by consecutive sampling method. This research was conducted at PMB Nurhaidah Samarinda in June 2022. The analytical test used was the Chi-Square test.

Results:A total of 20 infants who were exclusively breastfed had weight within the normal range, while 1 infant (10%) who did not receive exclusive breastfeeding had body weight within the normal range, as many as 7 infants (23.3%) were in the underweight range. (Underweight) and 2 infants (20%) in the range of severely underweight (severely underweight). The results of statistical tests with the Chi-Square test obtained a p-value of $0.000 < 0.05$. Problems with growth disorders in early childhood can occur due to lack of nutrition, or improper consumption of nutrition, one of which is the provision of early complementary feeding without prior consultation with doctors and nutritionists.

Conclusion:There is a relationship between exclusive breastfeeding and weight growth of infants aged 7-12 months at PMB Nurhaidah.

Suggestions: Exclusive breastfeeding for infants aged 1-6 months is highly recommended because breast milk is proven to be sufficient to meet the needs of infants aged 1-6 months.

Keywords:Exclusive Breastfeeding, Body Length, Body Weight

INTRODUCTION

Community nutrition is one of the focuses of health development in the 2016-2030 Sustainable Development Goals (SDG's). Nutrition is a key factor in the success of improving the health status of the people of Indonesia and the world because good nutrition improves public health standards. SDG's success indicators are translated into six points, namely exclusive breastfeeding, food for pregnant women and children, reducing the number of short toddlers, pregnant women with anemia, lack of energy, and underweight toddlers. Improvement in nutritional status begins with intake in the first 1,000 days of birth. For this reason, baby nutrition in the womb and breastfeeding after birth are important elements in preparing children's health(Khoiriyah, 2020).

The baby is the first phase of an individual's life after birth from the mother's womb. The condition of babies who are very susceptible to various diseases makes mothers have to always maintain cleanliness and provide adequate nutritional intake. The best nutritional intake for babies is by breastfeeding. According to Irianto in Lubis (2018) Mother's milk (ASI) is the right food to be given to newborns because all the nutrients contained in breast milk are needed for the growth of babies aged 0-6 months.(Lubis, 2018).

The stipulation of exclusive breastfeeding for 6 months has certainly gone through various tests and studies so that the result is that exclusive breastfeeding for 6 months is sufficient to meet the nutritional needs of the baby, prevent and fight germs, and prepare the baby's digestive tract to receive solids. Apart from containing food substances, breast milk also contains absorbent substances in the form of separate enzymes which will not interfere with the enzymes in the intestine. Formula milk does not contain enzymes so the absorption of food depends on the enzymes in the baby's intestines(Sembiring, 2018).

According to the Global Nutrition Report in 2014, Indonesia was included in the top 17 of 117 countries with three nutritional problems, namely stunting, wasting and overweight in toddlers. As many as 56% of stunted children live in Asia and 36% in Africa. The prevalence of stunting under five in Indonesia is also

the highest compared to Myanmar (35%), Vietnam (23%), Malaysia (17%), Thailand (16%) and Singapore (4%)(Prakasita, 2018).

The results of the Monitoring of Nutritional Status (PSG) held by the Ministry of Health of the Republic of Indonesia in 2016 illustrated that the percentage of stunting/shortness in Indonesia in the toddler group was 29.0% higher than the under-five group of 21.7%. According to WHO, the prevalence of stunting under five becomes a public health problem if the prevalence is 20% or more(RI Ministry of Health, 2020).

stuntis is a condition of impaired growth in children, namely the child's height is lower or shorter (dwarf) than the standard age. The prevalence of stunting in Indonesia is in the high category because based on data from Riskesdas in 2018, nationally the prevalence of stunting is 30.8%. The prevalence of stunting has decreased from 37.2% in 2013 to 30.8%. The prevalence of stunting in East Kalimantan is based on data from Riskesdas in 2018, namely 30% with a stunting prevalence of 18% and very stunted 12% (Riskesdas, 2018). Data from the East Kalimantan Health Service in 2017 stated that the number of children under five years of age who were stunted was relatively high, namely 30.6% of the total toddlers. Meanwhile, in Samarinda City, 28.8% of children under the age of five were stunted(Ministry of Health, 2018).

According to research from Septikasari (2018), the results showed that out of 122 babies who were exclusively breastfed, most (95.10%) had normal weight and a small number experienced excess weight growth (2.45%) and underweight growth, namely by 2.45 percent. And most of those who did not get exclusive breastfeeding (68.57%) were underweight and a small proportion (5.71%) experienced normal weight growth, while those who were underweight were as many as 28.12 percent.(Septikasari, 2018).

The situation that is happening a lot nowadays related to exclusive breastfeeding for newborns is that there are still many postpartum mothers who do not give breast milk to their babies, so this can also be a trigger for stunting. For various reasons from mothers who do not breastfeed or for medical reasons(Julu et al., 2019). Problems from the mother that arise during breastfeeding can start

before delivery (antenatal period), during the early postpartum period, and after the late postpartum period. Breastfeeding problems can also result from special circumstances. In addition, mothers often complain that their babies often cry, or "refuse" to breastfeed, and so on, which often means that the milk is not enough, or the milk is not tasty, not good, or whatever their opinion is, which often causes the decision to stop breastfeeding. Problems in babies are generally related to lactation management, so babies often become "confused nipples" or often cry, which is often interpreted by mothers and families that breast milk is not right for their babies(Elis et al., 2021).

The bivariate results show that there is the relationship between exclusive breastfeeding and the incidence of stunting with $p\text{-value} < 0.05$. This shows that there is a relationship between exclusive breastfeeding and the incidence of stunting in infants and toddlers, which means that babies who are not exclusively breastfed have a greater chance of experiencing stunting compared to babies and toddlers who are exclusively breastfed.(Mahendra, 2021).

In the last 3 months, there were 30 postpartum mothers who exclusively breastfed their babies and checked the health of their babies aged 7-12 months at the Mandiri Midwife Nurhaidah Practice. Due to the high stunting rate in East Kalimantan, especially in Samarinda, and the large number of mothers who have not exclusively breastfed their babies, the researchers were interested in researching "the relationship between exclusive breastfeeding on body length and weight of infants aged 7-12 months at PMB NURHAIDAH".

RESEARCH METHODS

Location and Time of Research

This research was conducted in June 2022 at PMB Nurhaidah.

Research design

The type of research used in this research is to use analytic research with a cross-sectional approach.

Population and Sample

The population in this study were 30 postpartum mothers who had their babies aged between 7-12 months checked at the Mandiri Midwife Nurhaidah Practice..

Method of collecting data

The data collection method was carried out by observing the respondents who had been determined by the researcher according to the inclusion criteria. Next, the baby's weight and length were measured.

Data analysis

The collected data were analyzed univariately and bivariately using the chi-square test.

RESEARCH RESULT

Univariate analysis

a. Characteristics of Respondents

Table 1. Distribution of Respondent Characteristics Based on Mother's Age, Mother's Occupation, Mother's Education, Baby's Age, and Baby's Gender

Distribution of Respondent Character	Frequency (n=30)	Percentage (%)
Age (Years)		
17-25	21	70
26- 35	5	16,7
36-45	4	13.3
Total	30	100
Mother's job		
Housewife	24	80
Private sector employee	6	20
Total	30	100
Mother's Education		
SENIOR HIGH SCHOOL	25	83.3
College	5	16,7
Total	30	100
Baby Age		
7-9 Months	16	53,3
10-12 Months	14	46,7
Total	30	100
Gender of Baby		
Man	16	53,3
Woman	14	46,7
Total	30	100

Source: Primary Data, 2022

Based on table 1 above, it is known that the distribution of the characteristics of the 30 respondents based on the age of the mother, namely, the majority were 17-25 years old as many as 21 people (70%) and a small proportion aged 36-45 years were as many as 4 people (13.3). Based on the mother's occupation, the majority of respondents were housewives, 24 people (80%), and a small proportion worked as private employees, 6 people (20%). Based on mother's education, that is, the majority of mothers studied up to Senior High School, namely 25 people (83.3%), and a small proportion took education up to Higher Education as many as 5 people (16.7%). Based on the age of the baby, that is, most of the babies aged 7-9 months were 16 babies (53.3%), and a small number of babies aged 10-12 months were 14 babies (46.7%). Based on the sex of the baby, namely,

b. Frequency Distribution of Independent Variable: Breastfeeding at PMB Nurhaidah

Table 2. Frequency Distribution based on Breastfeeding

Frequency Distribution	Frequency (n=30)	Percentage (%)
Breastfeeding		
Exclusive Breastfeeding	20	66,7
Not Exclusive Breastfeeding	10	33,3
Total	30	100

Source: Primary Data, 2022

Table 2 showed that of the 30 research respondents, most babies received exclusive breastfeeding for 6 months from birth, many 20 babies (66.7%), and a small number did not get exclusive breastfeeding for 6 months as many as 10 babies (33.3%).

c. Dependent Variable Frequency Distribution: Baby's Body Length

Table 3. Frequency Distribution based on Baby's Body Length

Frequency Distribution	Frequency (n=30)	Percentage (%)
Baby's length		
Short	9	30
Normal	21	70
Total	30	100

Source: Primary Data, 2022

Table 3 shows that of the 30 research respondents, most of the babies had normal body length according to their age of 21 babies (70%), and a small number of babies had bodies that were classified as short (stunted) of 9 babies (30%).

d. Frequency Distribution of the Dependent Variable: Infant's Weight

Table 4. Frequency Distribution based on Baby's Weight

Frequency Distribution	Frequency (n=30)	Percentage (%)
Baby's length		
Very less weight (severely underweight)	2	6,7
Underweight	7	23,3
Normal	21	70
Total	30	100

Source: Primary Data, 2022

Table 4 shows that of the 30 research respondents, most of the babies had normal weight according to their age, 21 babies (70%), a small number of babies who were classified as underweight, 7 babies (23.2%) , and a small proportion had a weight that was classified as very underweight (2 babies (6.7%)).

Bivariate Analysis

a. Analysis of the Relationship between Exclusive Breastfeeding and Baby's Body Length

Table 5. Analysis of the relationship between exclusive breastfeeding and body length for babies aged 7-12 months

No	Pemberian ASI Eksklusif	Panjang Badan				Total		P-Value
		Pendek (Stunted)		Normal		F	%	
		F	%	F	%			
1	ASI Eksklusif	0	0	20	100	8	100	0,000
2	Tidak ASI Eksklusif	9	90	1	10	10	100	
	Total	9	30	21	70	30	100	

Table 5 shows that as many as 20 babies (100%) who received exclusive breastfeeding for 6 months had body lengths within the normal range and as many as 1 baby (10%) who received exclusive breastfeeding had normal body lengths according to the PB/U Z Score table, whereas in infants who were not exclusively breastfed, it was found that 9 infants (90%) had relatively short body length (stunted). The results of the statistical test with the Chi-Square test obtained a p-value of $0.000 < 0.05$, then H_1 was accepted and H_0 was rejected, so it can be concluded that there is a relationship between exclusive breastfeeding on the growth of body length in infants aged 7-12 months at PMB Nurhaidah.

b. Analysis of the Relationship between Exclusive Breastfeeding and Baby's Weight

Table 6. Analysis of the relationship between exclusive breastfeeding on the weight of babies aged 7-12 months

No	Pemberian ASI Eksklusif	Berat Badan						Total		P-Value
		Berat badan sangat kurang (severely underweight)		Berat Badan Kurang (Underweight)		Normal		F	%	
		F	%	F	%	F	%			
1	ASI Eksklusif	0	0	0	0	20	100	20	100	0,000
2	Tidak ASI Eksklusif	2	20	7	70	1	10	10	100	
	Total	2	6,7	7	23,3	21	70	30	100	

Table 6 shows that as many as 20 babies who received exclusive breastfeeding had a weight in the normal range, while 1 baby (10%) who did not get exclusive breastfeeding had a weight in the normal range, 7 babies (23.3%) were in range of underweight (underweight) and 2 babies (20%) in the range of very underweight (severely underweight). Statistical test results with the Chi-Square test obtained a p-value of $0.000 < 0.05$, then H1 was accepted and H0 was rejected, so it can be concluded that there is a relationship between exclusive breastfeeding and weight growth for babies aged 7-12 months at PMB Nurhaidah.

DISCUSSION

Univariate analysis

a. Overview of Exclusive Breastfeeding

According to Brown in Giri(Giri, 2013)Breast milk is a food that is hygienic, cheap, easy to give, and is readily available for babies. Breast milk is the only food a baby needs during the first 6 months of life to become a healthy baby. Its dynamic composition and according to the baby's needs make breast milk the optimal nutritional intake for babies. Breast milk and plasma have the same ion concentration, so the baby does not need additional fluids or food. Exclusive breastfeeding for 6 months is considered sufficient to meet the needs of infants, so early complementary feeding is expected to be avoided(Giri, 2013).

The results of the research conducted at PMB Nurhaidah showed that of the 30 research respondents, most babies received exclusive breastfeeding for 6 months from birth, many 20 babies (66.7%), and a small number did not get exclusive breastfeeding for 6 months as many as 10 babies (33.3%), where some chose to give early MP-ASI to their babies who had not yet reached the age of 6 months.

The results of this study are in line with research conducted by Giri (2013), which showed that after conducting research in Kampung Kajanan Village, the results obtained were 19 respondents (24.4%) who did not provide exclusive

breastfeeding and 59 respondents who gave exclusive breastfeeding. respondents (75.6%)(Giri, 2013).

According to the researcher's assumptions, the willingness and ability of a mother to provide exclusive breastfeeding for 6 months is determined by various factors, which can be internal factors from the mother in the form of a lack of knowledge of the mother regarding the importance of breastfeeding for the baby's health and also the content in breast milk so that she chooses to give MP. -Early breastfeeding, can be in the form of a psychological condition of the mother who experiences postpartum blues so that she feels pressured to breastfeed her baby, the mother suffers from an illness, the mother's health condition is not good after giving birth through the Caesarean section process. In addition, there are several external factors that influence exclusive breastfeeding for infants, namely the lack of family support, influenced by customs and also influenced by the role of health workers through health promotion activities carried out by health workers to the community through posyandu activities and health promotion activities in various health facilities. A mother is believed to be able to provide exclusive breastfeeding to her baby for 6 months, if the mother has a good health condition both physically and psychologically, receives support from the family, and fulfills a balanced nutritional intake during pregnancy and breastfeeding.

b. Relationship of Exclusive Breastfeeding to Baby's Body Length

Based on the results of the bivariate test, it was found that 20 babies (100%) who received exclusive breastfeeding for 6 months had body length within the normal range and as many as 1 baby (10%) who received exclusive breastfeeding had normal body length according to the Z Score PB table /U, whereas in infants who were not exclusively breastfed, it was found that 9 infants (90%) had relatively short body length (stunted). The results of the statistical test with the Chi-Square test obtained a p-value of $0.000 < 0.05$, then H1 was accepted and H0 was rejected, so it can be concluded that there is a relationship between exclusive breastfeeding on the growth of body length in infants aged 7-12 months at PMB Nurhaidah.

The results of this study are in line with research conducted by Devriany (2018) which showed that the group of neonates who were given exclusive breastfeeding and non-exclusive breastfeeding achieved the same average body length in the fourth week of 3 cm. However, it appears that changes in body length increased faster in the group of neonates who were given exclusive breastfeeding, namely on day 14 (3.00 cm), while changes in body length in neonates who were given non-exclusive breastfeeding were slower, namely on day 28 (3.00 cm)(Devriany et al., 2018).

The results of this study are not in line with the results of research conducted by Zaenab (2016), which stated that based on the results of an independent T test showed that exclusive breastfeeding had an effect on growth in infants who were exclusively breastfed and non-exclusively breastfed but not significant with a P value > 0.05 . This is understandable because exclusive breastfeeding is not the only factor that influences the growth of the baby, but there are other factors that play a role in the growth and development of the baby, such as genetic factors and the biophysic-psycho-social environment.(Zaenab et al., 2016).

In line with the theory put forward by Abdullah in Zaenab (2016), the growth between weight and height has a linear relationship if the child's growth is normal. Breastfeeding alone can also affect the increase in body weight and height so that growth is balanced. Children who are exclusively breastfed grow better than children who are not exclusively breastfed. Child growth is related to nutritional needs, if the nutrients needed in the growth process are not balanced, then children will experience malnutrition or bad during the toddler growth period(Zaenab et al., 2016).

According to the assumption of the researchers, ASI plays an important role in the growth of the length of the baby's body, optimal breastfeeding in the first 1000 days of life will determine how the baby grows until adulthood. The problem of growth disturbance in early childhood can occur due to malnutrition, or improper nutrition consumed, one of which is by giving early MP-ASI without prior consultation with a doctor or nutritionist. Babies who are classified as

stunted and severely stunted can potentially experience stunting in the future if not treated immediately.

c. Relationship of Exclusive Breastfeeding to Baby's Weight

The results showed that 20 babies who received exclusive breastfeeding had a weight within the normal range, while 1 baby (10%) who did not get exclusive breastfeeding had a weight in the normal range, 7 babies (23.3%) were in range of underweight (underweight) and 2 babies (20%) in the range of very underweight (severely underweight). The results of statistical tests with the Chi-Square test obtained a p-value of $0.000 < 0.05$, then H1 was accepted and H0 was rejected, so it can be concluded that there is a relationship between exclusive breastfeeding and weight growth for infants aged 7-12 months at PMB Nurhaidah.

This is in line with research conducted by Lubis (2018) showing that the nutritional status of infants based on the weight-for-age index is generally in the good nutrition category, but there are 3 infants with undernourished status and 1 infant with severe nutritional status. In infants who experience malnutrition, it turns out that the baby is born with low birth weight (LBW) with sufficient gestational age, the breastfeeding is not smooth because one of the factors is the mother is thin and at the age of 5 months the baby has been given porridge because the baby is not want to give formula milk.

This research is also in line with research conducted by Laliasa (2017) which said that there were 37 respondents who received exclusive breastfeeding consisting of 30 babies (44.8%) whose weight increased and 7 babies (10.4%) who experienced weight gain. did not increase, while there were 30 respondents who did not get exclusive breastfeeding consisting of 12 babies (17.9%) whose weight increased and 18 babies (26.9%) who did not gain weight. In data analysis with the Chi-square test (Continuity Correction) obtained a p value (Asymp. Sign 2-sided) 0.001 less than the value $\alpha = 0.05$, meaning that H0 is rejected or there is a relationship between exclusive breastfeeding and weight gain in babies aged 3-6 months in the working area Lambuya Health Center in 2017.

This is in line with the theory put forward by Munir in Sandewi (2018) which states that exclusive breast milk fat is easily digested and absorbed by infants because exclusive breast milk contains the enzyme lipase which digests fat triglycerides into diglycerides, so that very little fat is not absorbed by the baby's digestive system. , while non-exclusive breast milk (formula milk) does not contain enzymes because enzymes will be damaged when heated. That is why it is difficult for the baby to absorb the fat from formula milk and cause the baby to have diarrhea and cause fat accumulation which will eventually result in obesity (obesity) in the baby. In addition, babies who receive other foods, such as mashed rice or bananas, will only get a lot of carbohydrates so that the nutrients they enter are not balanced.(Sandewi, 2018).

According to the assumptions of researchers, babies who get exclusive breastfeeding for 6 months have the potential to grow healthier with weight / age according to the Z-score table and have immunity to various diseases, and will be more comfortable emotionally because of their closeness to their mother. Positive benefits are also obtained by mothers who give exclusive breastfeeding. A number of studies have shown that giving formula and cow's milk can cause allergies in infants, so it is more recommended to give exclusive breastfeeding during the first 6 months of birth.

CONCLUSIONS AND RECOMMENDATIONS

The conclusion from this study is that there is a relationship between exclusive breastfeeding and the baby's growth in length and baby's weight. Mothers with babies aged 0-6 months are advised to give exclusive breastfeeding without being given complementary foods early, because ASI has been proven to be able to meet the nutritional needs of babies aged 0-6 months.

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RELATIONSHIP PATTERNS OF BREAST MILK BREAST MILK SURVIVAL OF COVID 19 WITH GROWTH AND BABY DEVELOPMENT IN THE REGION SAMARINDA CITY HEALTH DEPARTMENT

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Abstract

Introduction : The best nutrition for babies in the first 6 months of life is breast milk. Transmission of Covid 19 through breastfeeding. there is still not enough evidence, the problem is that mothers who survive Covid 19 after giving birth will affect the pattern of breastfeeding where mothers cannot exclusively breastfeed because the mother is sick with exposure to Covid 19 which can have an impact on the growth and development of the baby.

Objective : To determine the relationship between the pattern of breastfeeding mothers who survived Covid 19 and the growth and development of babies in the Samarinda City Health Service Area.

Methods : This study uses a Cross Sectional approach. The number of maternity mothers who have been positively infected with Covid 19 in Samarinda is 33 in 2021. The total sample is 25 people.

Results : Of the 25 respondents, respondents who gave exclusive breastfeeding were 28% and not exclusive breastfeeding was 72%. The growth based on the Chi Square test results shows the probability value (p value) = 0.170 > 0.05, while the development based on the Chi Square test results shows the probability value (p value) = 0.524 > 0.05.

Conclusion : The pattern of breastfeeding for COVID-19 survivors is not related to the growth and development of babies in the Samarinda City Health Service Area.

Suggestion : It is hoped that there will be no separation between maternity mothers who are Covid 19 survivors and their babies, but with due observance of the Covid 19 protocol, so that their babies can continue to receive exclusive breastfeeding.

Keywords : Breastfeeding, Growth, Development, Covid 19

INTRODUCTION

Monitoring infant growth and development since the beginning of life is the most important thing, because growth and development behavior is very closely related to children's current and future health . To enable health professionals to adequately assess the growth of infants who are exclusively breastfed. The definition of exclusive breastfeeding used here is WHO, i.e. a child is considered exclusively breastfed when receiving only breast milk, without other types of food, including water. Exclusive breastfeeding is recommended for 6 months and the focus is on growth in the first six months of life (Giugliani, 2019)

Infants are children aged 0 to 12 months. Every baby goes through a stage of growth and development in his lifetime. Growth and development is a continuous process, is continuous and growth is part of the development process. Growth that includes changes in height, weight, teeth, bone structure, and sexual characteristics. This growth is quantitative. While developments such as motor, sensory, cognitive and psychosocial development are qualitative (Merita, 2019)

Growth and development is influenced by various conditions from within the child itself and the conditions of the surrounding environment. For growth and development, a baby needs adequate nutrition, so that it can ensure optimal growth and development. The best nutrition for babies in the first 6 months of life is breast milk. WHO and UNICEF recommend exclusive breastfeeding from birth to 6 months of age and infants should be breastfed frequently without time limit. Normal growth of a baby until the age of 6 months can be achieved only by breastfeeding alone (Roesli, 2017)

About the transmission of COVID-19 through breastfeeding. still insufficient evidence, Corona virus disease-2019 (COVID-19), declared a pandemic on March 11, 2020, by the World Health Organization (WHO), began as a pneumonia outbreak in Wuhan, China, in December 2019. Later, it was discovered that the disease It is caused by a single-stranded RNA virus, which is named SARS-CoV-2 (severe acute respiratory

syndrome coronavirus-2). This virus is known to be transmitted through droplets from infected individuals and causes respiratory symptoms (Bhatt, 2021).

A preliminary study that the researchers conducted at the A. Wahab Sjahranie Hospital, Samarinda, in January-September 2021, there were 33 mothers who gave birth with positive cases of covid 19 and this caused the mothers to not be admitted to the hospital for breastfeeding. Babies who are born without being fully breastfed will affect the growth and development of the next baby. Researchers also conducted interviews from 10 mothers who gave birth in Abdul Wahab Syahranie who had been exposed to covid 19, there were 8 mothers who breastfed predominantly and 2 mothers who breastfed partially.

Based on the above background, the researchers are interested in conducting research on the relationship between the pattern of breastfeeding mothers in childbirth for COVID-19 survivors and the growth and development of infants in Samarinda. In this study, researchers will conduct home visits to determine the pattern of breastfeeding as well as the growth and development of the baby responders of COVID-19 survivors in the area of the Samarinda City Health Office.

METHODS

This research method uses descriptive analytical research method, which is a research method carried out with the main aim of making a description or description of a situation objectively and then analyzed to find the relationship between two variables. This method is used to solve or answer the problems that are being faced in the current situation. This research was carried out with a cross sectional research design, namely a study in which the variables including risk factors and variables including effect factors were observed or observations of independent and dependent variables were carried out at the same time (Notoatmodjo, 2012)

The population in this study were all babies born to maternity mothers who survived COVID-19 in the period February-March 2022 who gave birth at hospitals in Samarinda with a total of 33 respondents. Sampling used the *Total Sampling* technique, namely, the

technique of determining the sample when all members of the population were used as samples (Sugiyono, 2017) so that the number of samples in this study was 33 infants. This research will be conducted in March- July 2022 . Researchers will make visits to the addresses of maternity mothers who have survived Covid 19 in the Samarinda City Health Service Area. The independent variable in this study was the pattern of breastfeeding for mothers who survived COVID-19 and the dependent variable was the growth and development of the baby. This study uses primary data, namely a questionnaire for breastfeeding patterns, while to measure growth and development using observation sheets, KPSP, KIA books, scales and microtoise. The secondary data in this study is data on the number of maternity mothers who survived Covid 19 in 2022. The data collected in the study were analyzed analytically using a computer software program and manual calculations using the Chi Square formula (χ^2).

RESULTS AND DISCUSSION

Table 1. Frequency Distribution Characteristics of Mothers Maternity C ovid - 19 Survivors in the Region Samarinda City Health Office

No.	Characteristics	(n)	(%)
1	Age		
	< 20 years	0	0
	20-35 years old	18	72.0
	> 35 years old	7	28.0
2.	Education		
	SD	7	28.0
	JUNIOR HIGH SCHOOL	3	12.0
	SENIOR HIGH SCHOOL	7	28.0
	PT	8	32.0
3.	Work		
	IRT	20	80.0
	civil servant	1	4.0
	Private	2	8.0
	Self-employed	2	8.0
4.	parity		
	Primipartism	8	32.0
	Multiparity	14	56.0
	Grandemulti	3	12.0
5.	Income		84.0
	Able (\geq Rp. 2,000,000)	21	
	Unable ($<$ Rp. 2,000,000)	4	16.0

6.	Gestational Age		
	28-31 weeks	2	8.0
	32-35 weeks	2	8.0
	36-39 weeks	15	60.0
7.	40-42 weeks	6	24.0
	Type of Delivery		36.0
	Spontaneous	9	64.0
	SC	16	
	Amount	25	100

Source: Primary Data , 2022

Based on table 1, it can be seen that of the 25 respondents, most of the respondents aged between 20-35 years were 18 people (72%), higher education education was 8 respondents (32%), the most occupations were IRT as many as 20 respondents (80%), parity, mostly multiparity as many as 14 respondents (56%), income including the category of capable as many as 21 respondents (84%), gestational age at delivery mostly 36-39 weeks as many as 15 respondents (60%), and the type of delivery mostly SC deliveries as many as 16 respondents (64%).

Table 2. Frequency Distribution based on Baby Characteristics

No.	Characteristics	(n)	(%)
1.	Baby Age		
	1.0-3.0 months	10	40.0
	3.1-6, 1 month	15	60.0
2.	Baby Gender		
	Man	13	52.0
	Woman	12	48.0
3.	Birth Weight		
	1500-2500 gr	6	24.0
	2500-4000 gr	19	76.0
4.	Weight Now		
	3000-4000 gr	2	8.0
	4100-5000 gr	6	24.0
	5100-6000 gr	9	36.0
	6100-7000 gr	7	28.0
	7000-8000 gr	1	4.0
5.	Birth Body Length		
	40-45 cm	2	8.0
	46-50cm	20	80.0
	51-55cm	3	12.0
6.	Body Length Now		
	50-55cm	4	16.0
	56-60cm	14	14.0
	61-65 cm	6	6.0
	66-70 cm	1	4.0

Amount	25	100
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Source: Primary Data, 2022

Based on table 2, most of the babies aged 3-6 months 15 babies (60%), it was seen that the sex of the babies were mostly male, namely 13 babies (52%), the most weight at birth was between 2500-4000 grams, namely as many as 19 babies (76%), the current weight at most weighs between 5100-6000 grams as many as 9 babies (36%), most of the birth length is 46-50 cm as many as 20 babies (80%), current body length is mostly between 56-60 cm that is as many as 14 babies (56%).

Table 3. Distribution of the Frequency of Breastfeeding Patterns to Mothers of C ovid -19 Survivors in the Health Office of Samarinda City

No.	Breastfeeding Pattern	(n)	(%)
1.	Exclusive breastfeeding	7	28.0
2.	No Exclusive Breastfeeding	18	72.0
Amount		25	100

Source: Primary Data , 2022

Based on table 3, it can be seen that from 25 respondents, respondents who have exclusive breastfeeding patterns are 7 respondents (28%) and most of the respondents do not give exclusive breastfeeding as many as 18 respondents (72%).

Table 4. Distribution of the Frequency of Infant Growth in Mothers of C ovid -19 Survivors in the Region of the Health Office of Samarinda City

No	Baby Growth	(n)	(%)
1.	Normal Nutrition	9	36.0
2.	Malnutrition	16	64.0
Amount		25	100

Source: Primary Data , 2022

Based on table 4, it can be seen that of the 25 respondents, most of the infants experienced growth of infants with less nutrition as many as 16 infants (64%) and the remaining 9 infants (36%) with normal nutritional growth.

Table 5. Distribution of the Frequency of Infant Development in Mothers of C ovid -19 Survivors in the Region of the Health Office of Samarinda City

No.	Baby Development	(n)	(%)
1.	In accordance	24	96.0
2.	Doubtful	1	4.0
	Amount	25	100

Source : Primary Data ,2022

Based on table 5, it can be seen that of the 25 respondents, most of the babies experienced appropriate infant development as many as 24 babies (96%) and the remaining 1 baby (4%) with dubious development.

Table 6. Cross Table (Crosstab) Relationship between Breastfeeding Patterns and Baby Growth in Covid - 19 Survivors Mothers in the Health Office of Samarinda City

Breastfeeding Pattern	Growth				Total	χ ² Value
	Normal Nutrition		Malnutrition			
	n	%	n	%	N	%
Exclusive breastfeeding	4	57.1	3	42.9	7	100
No Exclusive Breastfeeding	5	27.8	13	72.2	18	100
Amount	9	36.0	16	64.0	25	100

Source: Primary Data, 2022, Chi Square . Test

Table 6 above explains that of the 7 babies who were given exclusive breastfeeding, 4 (57.1%) had normal nutritional growth and the remaining 3 (42.9%) had stunted growth. And of the 18 babies who were not given exclusive breastfeeding, there were 5 babies (27.8%) whose nutritional growth was normal and the remaining 13 babies (72.2%) with poor nutritional growth.

Analysis of the relationship between breastfeeding patterns and infant growth was carried out using the *Chi Square* formula with a significant level of *alpha* 5% and $df = (2 - 1) (2 - 1) = 1$, when viewed in χ^2_{table} the number was 0.827, while the value of $\chi^2_{was\ calculated} = 0.827 < \chi^2_{table} = 3,841$. The result of the *probability value* (*p value*) = 0.170 > 0.05 automatically H_0 is accepted, which means that there is no significant (meaningful) relationship between breastfeeding patterns and infant growth in mothers who have survived Covid 19 in the Health Office of Samarinda City.

Table 7. Cross Table (*Crosstab*) Relationship between Breastfeeding Patterns and Infant Development in Mothers Surviving Covid 19 in the Health Office of Samarinda City

Breastfeeding Pattern	Growth				Total		Value
	In accordance		Doubtful		N	%	
	n	%	n	%			
Exclusive breastfeeding	7	100	0	0	7	100	0.524
No Exclusive Breastfeeding	17	94.4	1	5.6	18	100	
Amount	24	96.0	1	4.0	25	100	

Source: Primary Data 2022, *Chi Square . test*

The table above explains that of the 7 babies who were exclusively breastfed, 7 babies (100%) developed appropriate and there was no doubt, of the 18 babies who were not exclusively breastfed, 17 babies (94.4%) experienced appropriate development and the rest 1 infant (5.6%) had questionable development.

Analysis of the relationship between breastfeeding patterns and infant development was carried out using the *Chi Square* formula with a significant level of *alpha* 5% and $df =$

$(1 - 1) (1 - 1) = 1$, when viewed in χ^2_{table} the number was 0.000 , while the value $\chi^2_{count} = 0.000 < \chi^2_{table} = 3,841$. The result of the *probability value (p value)* = 0.524 > 0.05, H_0 is automatically accepted , which means that there is no significant (meaningful) relationship between breastfeeding patterns and infant development in mothers who have survived Covid 19 in the Samarinda City Health Service Area .

Discussion

1. Characteristics of Respondents

Based on the data in table 1, it is known that most of the maternity mothers who survived Covid-19 aged 20-35 years were 18 people (72%), almost half had a history of college education as many as 8 people (32%), almost all of them were IRT as many as 20 people. (80%), most of them are multiparas as many as 14 people (56%), almost all of them have a monthly income of > Rp. 1.000.000-, up to Rp. 2,000,000-, as many as 21 people (84%).

Syukur 's research (2020) states that age <16 years or >35 years will make pregnant women vulnerable to a number of complications. Age is one of the factors that affect the production of breast milk in mothers. Mothers who are less than 35 years old produce more milk than mothers who are older. However, mothers who are very young (less than 20 years old) produce less breast milk because of the level of maturity. The respondent's age range of 20-35 years is the ideal age to go through pregnancy, childbirth and breastfeeding so that they can optimally care for their babies. At this age, the mother is biologically mature.

Mothers who do not work have more time with their children so they have a greater opportunity to pay attention to their children's needs compared to working mothers (Siregar and Ritonga, 2020) .

According to Wahyutri (2017) knowledge is a supporting framework for successful breastfeeding, education about breastfeeding is given to pregnant women and their families in order to gain knowledge, skills and positive attitudes towards breastfeeding.

Mothers who have higher education are able to receive information about exclusive breastfeeding well and have broader knowledge about exclusive breastfeeding compared to respondents with low education (Afriyani, 2018)

Based on the mother's occupation, it was found that 20 respondents worked as IRT (housewives), mothers who did not work had more time with their children so they had a greater opportunity to pay attention to the needs of their children compared to working mothers (Siregar and Ritonga, 2020)

Gobel (2012) explained that multiparous or grande multiparous mothers have the opportunity to provide exclusive breastfeeding by 4.60 times compared to primiparous mothers.

Based on table 2, most of the babies aged 3-6 months were 15 babies (60%), from gender, it was found that most of the babies were boys, namely 13 babies (52%), the most weight at birth was between 2500-4000 grams, namely as many as 19 babies (76%), the current weight at most weighs between 5100-6000 grams as many as 9 babies (36%), birth length is mostly 46-50 cm as many as 20 babies (80%), babies with current body length mostly between 56-60 cm that is as many as 14 babies (56%).

2. Breastfeeding Patterns (Exclusive Breastfeeding, Predominant Breastfeeding, Partial Breastfeeding) for Covid-19 Survivors

Based on table 3, it can be seen that from 25 respondents, respondents who have exclusive breastfeeding patterns are 7 respondents (28%) and most of the respondents do not give exclusive breastfeeding as many as 18 respondents (72%) .

Exclusive breastfeeding affects the baby's health quality. The fewer the number of infants who are exclusively breastfed, the worse the health quality of infants and toddlers will be . That's because the provision of complementary foods that are not correct can cause digestive disorders that result in growth disorders and increase the Infant Mortality Rate (IMR). This can lead to a situation that is quite serious in terms of infant nutrition (Depkes RI, 2013) .

A global pandemic or epidemic indicates a very fast Covid 19 infection that almost no country or region in the world is spared from the corona virus. One of the sectors affected is family resilience. One of the ways to maintain family resilience is by

continuing to breastfeed during a pandemic. (Widaryanti, 2021) . Currently the government has taken various measures to stop the spread of the corona virus. One of the efforts to prevent the spread of COVID-19 is by urging the public to maintain a physical distance of at least one meter from other people. However, this actually makes breastfeeding mothers afraid to breastfeed their babies. The current pandemic situation is certainly a challenge for breastfeeding mothers. Until now, the existence of the Covid 19 virus in breast milk has not been scientifically proven. WHO (World Health Organization) still recommends breastfeeding because the benefits of breastfeeding substantially exceed the potential risk of transmitting Covid 19 (WHO, 2021)

3. Growth of Babies Born to Mothers Surviving Covid 19

Based on table 4, it is known that with a total sample of 25 babies, the results showed that most of the babies experienced poor growth, namely 16 babies (64%) and the rest experienced normal growth, namely 9 babies (36%).

Good toddler growth can be said if a toddler gets older , his weight and height will also increase within normal limits according to his age. This is supported by the theory by Rohan and Siyoto which states that growth is a dynamic and continuous process and increases the size of cells in all parts of the body (Octasila, 2019).

4. Development of Babies Born to Mothers Surviving Covid 19

Based on table 5, the results of the analysis with a total sample of 25 babies showed that there were 24 babies (96%) experiencing appropriate development and the remaining 1 baby (4%) experiencing dubious development.

Development is the increase in the ability and function of the body from the simple to the more complex in a regular and predictable pattern, as a result of the maturation process. In development there is a process of maturation of body cells, body tissues, organs, and organ systems that develop so that each can perform its function. Development is related to the maturation of organ/individual functions, such as emotional, intellectual development, fine motor skills, gross motor skills, language, and personal social as a result of interaction with the environment (Rusdiyanto, 2020) About 5-10% of the child population has developmental disorders, but early detection and diagnosis are often delayed. In Indonesia, the number of children under five is 10%

of the total population, where the prevalence (average) of developmental disorders varies from 12.8% to 16% (Marliany, 2020)

5. The Relationship of Breastfeeding Patterns for Mothers of Covid-19 Survivors with Baby Growth and Development

Based on table 6, the results obtained with a total sample of 25 babies, it was found that 7 babies received exclusive breastfeeding, 4 babies (57.1%) with normal nutrition and the remaining 3 babies (42.9%) with less nutrition. And of the 18 babies who were not given exclusive breastfeeding, there were 5 babies (27.8%) whose nutritional growth was normal and the remaining 13 babies (72.2%) with poor nutritional growth. This study shows that there is no relationship between the pattern of breastfeeding and infant growth with a p value of 0.170 where this is indicated by the results of mothers who give exclusive breastfeeding and do not give exclusive breastfeeding from 25 respondents almost entirely have children with less growth so this shows that babies who are exclusively breastfed and babies who are not exclusively breastfed all have babies with the same growth using the measurement of weight/PB.

The results of this study support the research conducted by Utami (2020) which in the study showed that from the group of children with exclusive breastfeeding (case) the number of children who experienced normal growth was 13 children (86.7%) and 2 who experienced abnormal growth. children (13,3%). While the group of children who were not given breast milk (control) who experienced normal growth were 7 children (46.7 %) and those who experienced abnormal growth were 8 children (53.3%). The results of the Chi square test obtained the value of sig X "count ($p = 0.053 > (\alpha = 0.05)$), then H_0 is accepted, which means that there is no relationship between exclusive breastfeeding and child growth. However, there is a tendency for abnormal growth from non-breastfed children.

This is supported by research conducted by Dewi (2018) on the Differences in Weight Gain of 6 Months Old Babies Between Infants Who Received Exclusive Breastfeeding and Formula Milk in the Kartasura City Health Service Area which stated that the weight gain of infants who were exclusively breastfed was lower than

that of infants. who received formula milk. The average weight gain of infants with exclusive breastfeeding per month was 633 grams, lower than those fed formula milk , which was 775 grams.

One of the factors that affects exclusive breastfeeding is the mother who is sick, in this case the case for mothers who have survived Covid 19. Although the evidence on the risk of vertical transmission, through the respiratory tract or through breast milk itself, is limited, breastfeeding is generally accepted as the nutrition of choice for infants. from infected mothers. In breast milk of infected mothers, IgA antibodies against SARS-CoV-2 have been detected, which may explain the reduced clinical impact of the disease in breastfed infants on future virus exposure (Konstantinou, 2021)

The results showed that there were 4 babies who were exclusively breastfed with more nutrition, this indicates that exclusive breastfeeding can increase body weight. Exclusive breastfeeding cannot prevent the risk of obesity. As Huus (2008) research entitled Exclusive breastfeeding of Swedish children and its possible influence on the development of obesity: a prospective cohort study, where in his research that although there is still a possibility that breastfeeding affects weight development, exclusive breastfeeding does not seem to protect against obesity. , at least not in early childhood. Breastfeeding should be encouraged for several different reasons, but for the prevention of obesity in Swedish children, other measures may be more important.

According to researchers, exclusive breastfeeding should still be given to babies after the mother gives birth because there is no evidence that breast milk can affect the quality of breast milk.

Based on table 7, the results of the study were obtained with a total sample of 25 babies, from 7 babies who were exclusively breastfed, 7 babies (100%) developed accordingly and there was no doubt, while from 18 babies who were not given exclusive breastfeeding, 17 babies (94.4%) were found.) development was appropriate and 1 infant (5.6%) had doubtful development. The results of this study indicate that there is no relationship between breastfeeding patterns and infant development with a p value of 0.542 where this is indicated by the results of mothers who gave exclusive

breastfeeding and mothers who did not give exclusive breastfeeding . This shows that infants who are exclusively breastfed, predominantly breastfed and partially breastfed all have babies with appropriate infant development using the KPSP measuring instrument.

The results of this study support the research conducted by Utami (2020) where the results of the research are that children with exclusive breastfeeding (cases) have the number of children with normal development, namely 13 children (86.7%) and children with abnormal development, namely 2 children (13.3). %. Meanwhile, children with non-breastfeeding (control) who have normal development are 9 children (60%) and children who have abnormal development are 6 children (40%). Fisher test results obtained fisher exact's test value, namely ($p = 0.25$) $>$ ($\alpha = 0.05$), then H_0 is accepted so that there is no relationship between exclusive breastfeeding and child development. However, from the cross table, it appears that the tendency to have abnormal development, the majority comes from the non-breastfeeding group.

The low coverage of exclusive breastfeeding can interfere with the growth and development of babies. Exclusive is an obligation that must be done. Exclusive breastfeeding is the best food for babies, breast milk contains nutrients in the right amount and composition and is very much needed in the growth and development of babies. Physiologically babies aged 0-6 months are a high risk group for growth disorders, mothers who do not give their babies Exclusive breastfeeding can result in less than optimal growth and development (Widodo, 2011)

This study does not support the research conducted by Choi (2018) where the results of the study when compared with infants who did not breastfeed at all, infants who were exclusively breastfed until the age of 4 months followed by mixed breastfeeding had better communication and social interaction at the age of 6 months. , and better cognition, communication, and social interaction at 12 months of age. Exclusive breastfeeding until 6 months of age had no significant impact on outcomes at 6 and 12 months of age.

According to the researcher, there is no relationship between exclusive breastfeeding and infant development in mothers who have survived Covid 19 because

the assessment of infant development at the age of infants < 3 months is still difficult to detect.

RESEARCH LIMITATIONS

This study has several limitations and constraints because this research was conducted while the Covid 19 pandemic was still ongoing which caused it to take time to convince respondents to be willing to make a home visit, so the researcher could not meet the supposed sample of 33 respondents, in this study the researcher only got a sample of 25 respondents. . In addition, the research location is not only carried out in the District Health Office of the City of Samarinda. Researchers also took research respondents from Kutai Kartanegara Regency.

CONCLUSION

Based on the results of research and discussion that have been described previously, it can be concluded as follows:

1. The characteristics of maternity mothers who survived Covid 19 showed that most of the respondents aged 20-35 years were 18 mothers (72%), almost all of the respondents were Muslim, namely 24 mothers (96%), most of the respondents were respondents who had a history of higher education as much as 8 mothers (32%), almost all of the respondents worked as IRT as many as 20 mothers (80%), most of the respondents were multiparas, namely 14 mothers (56%), almost all respondents had a monthly family income of > Rp. 1.000.000-, up to Rp. 2,000,000-, as many as 21 mothers (84%).

The characteristics of the babies showed that all babies aged < 6 months were 25 babies (100%), most of the babies were male, as many as 16 babies (64%), babies born weighing 2500 grams-4000 grams were 19 babies. (76%) and almost all of them had a birth length of 46-50 cm as many as 20 babies (80%).

2. Infants born to mothers who were confirmed to have Covid 19 in the Samarinda City Health Service Area were 7 respondents (28%) receiving exclusive breastfeeding, 7

respondents (28%) receiving predominant breast milk and the remaining 11 respondents (44%) receiving partial breastfeeding.

3. In babies born to mothers who were confirmed to have Covid 19 in the Samarinda City Health Service Area, the growth of babies with more nutrition was 1 baby (4%), in good nutrition 20 babies were found (80%) and the rest were undernourished in 4 babies (16%). The growth of infants with malnutrition is found in mothers with predominant and partial breastfeeding patterns.
4. For babies born to mothers who were confirmed to have Covid 19 in the Samarinda City Health Service Area, 96% of appropriate baby development and 4% doubtful ones. Doubtful baby development is found in mothers with partial breastfeeding patterns.
5. There is no significant relationship between the pattern of breastfeeding for maternity mothers confirmed by Covid 19 and the growth and development of the baby.

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**THE RELATIONSHIP BETWEEN ANXIETY AND
BREASTFEEDING PATTERN
IN MATERNAL MOTHER SURVIVAL OF COVID-19
IN THE WORK AREA OF THE HEALTH DEPARTMENT
SAMARINDA CITY**

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ABSTRACT

Introduction:The Global Breastfeeding Scorecard report evaluates breastfeeding data from 194 countries, the percentage of infants ≤ 6 months who are exclusively breastfed is only 9.79% (9 countries). Meanwhile, in Indonesia exclusive breastfeeding 0-6 months is only 50.67%.

Research purposeshere's to knowingThe relationship between anxiety and the pattern of breastfeeding for mothers who are survivors of Covid-19 in the Work Area of the Samarinda City Health Service.

Method:This study uses a cross sectional approach.The number of mothers giving birth and breastfeeding who have been positively infected with Covid-19 in the Work AreaCity Health OfficeSamarinda with a total of 33 in 2021.The total sample is 25 people.

Results:Somer's D test obtained a value of r (correlation coefficient) of 0.005 meaning that it has a very weak or less significant relationship. Meanwhile, the significance value of ρ is $0.971 > 0.05$ or $\rho > \alpha$.

Discussion:The pattern of breastfeeding is not influenced by the level of anxiety felt by the respondent. The pattern of breastfeeding can be influenced by many factors, namely knowledge, breastfeeding problems, and so on.

Conclusion:There isn't anyThe relationship between anxiety and the pattern of breastfeeding for mothers who are survivors of Covid-19 in the Work Area of the Samarinda City Health Service.

Suggestion: It is hoped that health workers will increase caring and always motivate patients to increase the coverage of exclusive breastfeeding.

Keywords: Covid-19, Anxiety, Patterns of Breastfeeding

INTRODUCTION

Breast milk is the main food for babies aged 0-6 months and lasts until the child is 2 years old. The advantages of breastfeeding as a fulfillment of nutrition, immunology, and psychology (Arianti, 2020). Exclusive breastfeeding can prevent the death of 823,000 children under five per year in developing countries, reduce the risk of infectious diseases in infants (diarrhea and respiratory infections), protect against chronic diseases as adults, and increase intelligence scores. The Global Breastfeeding Scorecard report evaluates breastfeeding data from 194 countries, the percentage of infants ≤ 6 months who are exclusively breastfed is only 9.79% (9 countries). Meanwhile, in Indonesia only 50.67% give exclusive breastfeeding 0-6 months (Unicef, 2021).

National Basic Health Research Data for 2018 exclusive breastfeeding in infants aged less than 6 months was 37.3% (Ministry of Health, 2018). Whereas in East Kalimantan in 2020 exclusive breastfeeding for babies less than 6 months was 38.2% and in Samarinda City there were 8,862 people aged 0-12 months. The prevalence of babies who are given exclusive breastfeeding is only 48.1% and the rest are not given exclusive breastfeeding (Ministry of Health, 2020a).

Basic Health Research Data (Riskesda) for 2018 in Ministry of Health (2018) stated that the pattern of breastfeeding in infants aged 0 months was 37.3% exclusive breastfeeding, 3.3% predominantly breastfeeding, and 9.3% partial breastfeeding. The percentage of exclusive breastfeeding was higher for male babies, namely 38.7%, while for female babies, it was 35.9%.

Researchers conducted a preliminary study at the A. Wahab Sjahranie Hospital, data on 33 breastfeeding mothers who were infected with Covid-19 in 2021. The researchers also conducted interviews with 10 positive breastfeeding mothers for Covid-19, there were 8 mothers who exclusively breastfed, and 2 mothers who partially breastfed. Meanwhile, out of 10 mothers infected with Covid-19, 1 person experienced anxiety levels in the panic category, 6 people with severe and 3 people moderate (AWS Hospital, 2021).

The COVID-19 pandemic makes mothers who are about to post partum experience anxiety from mild to moderate, such as fear of crowds and confining themselves at home (Tambaru et al., 2020). Based on research results Tambaru et al., (2020) Most of them were worried about Covid-19 totaling 22 people (59.5%) and not worried about Covid-

19 totaling 15 people (40.5%). Expenditure of breast milk in post partum mothers until the second day, most of them had not come out, amounting to 24 people (64.9%), while it had come out to 13 people (35.1%). There is an effect of Covid-19 pandemic anxiety on post partum mothers' milk output (p value : $0.000 < \alpha : 0.05$).

Breastfeeding mothers who are confirmed positive for COVID-19 can still provide exclusive breastfeeding for their children. Precisely based on research results, breast milk in positive COVID-19 mothers has a high antibody content. There are Immunoglobulin A and G antibodies, actalbumin, Lactoferrin which are specifically a stronghold of resistance against SARS-CoV-2. SARS-CoV-2 specific sIgA antibodies and specific IgG antibodies in the milk of COVID-19 survivors can last 7-10 months after infection (Ministry of Health, 2021).

According to Asmariyah (2021), the emergence of the corona virus (Covid-19) has caused the psychological condition of breastfeeding mothers to be unstable. When a mother is diagnosed positively infected with Covid-19, the mother will feel anxious or worried about breastfeeding her baby. The mother feels that while breastfeeding, she will pass this virus on to her baby. Thus, mothers and families decide to give formula milk, tea, porridge, food or other drinks as a substitute for breast milk (ASI).

World Health Organization (WHO) classifies breastfeeding patterns into three categories, namely exclusive breastfeeding, predominant breastfeeding, and partial breastfeeding. Exclusive breastfeeding is not giving other foods or drinks, including water, apart from breastfeeding (except medicines and vitamin or mineral drops. In this case, expressed breast milk is also allowed). (Ministry of Health, 2014).

Breastfeeding is predominantly breastfeeding the baby but never giving a little water or water-based drinks, such as tea, as a prelacteal food/drink before the milk comes out. Meanwhile, partial breastfeeding is breastfeeding the baby and being given artificial food other than breast milk, either formula milk, porridge or other food before the baby is 6 (six) months old, either given continuously or given as prelacteal food (Ministry of Health, 2014).

Based on the above, researchers are interested in conducting research with the title "The Relationship between Anxiety and the Pattern of Breastfeeding in Maternity Survivors of Covid-19 in the Work Area of the Samarinda City Health Office. This study aims to determine The relationship between anxiety and the pattern of breastfeeding for

mothers who are survivors of Covid-19 in the Work Area of the Samarinda City Health Service.

Research methods

This type of research design is non-experimental. Correlation research design with cross sectional approach method. The population in this study were all mothers giving birth and breastfeeding who had been positively infected with Covid-19 in the Work Area of the Samarinda City Health Service with a total of 25 people in 2021. The technique used to determine the sample in this study was total sampling with purposive sampling where the research sample was adjusted according to the inclusion and exclusion criteria. The sample that the researcher took was 25 respondents.

The research was carried out from March to July 2022. Researchers visited the home addresses of Covid-19 survivors in the Samarinda City Health Service Work Area. In this study the independent variable is anxiety and the dependent variable is the pattern of breastfeeding. Researchers use HARS questionnaire and breastfeeding pattern questionnaire. Data analysis using SPSS software. The test used is Somer's D test

RESULTS

Table 1. Frequency Distribution based on the Characteristics of Surviving Maternity Mothers Covid-19

No	Characteristics	n	%
1	Age		
	20-35 Years	18	72
	> 35 Years	7	28
	Total	25	100
2	Religion		
	Islam	24	96
	Catholic	1	4
	Total	25	100
3	Education		
	SD	7	28
	JUNIOR HIGH SCHOOL	3	12
	SENIOR HIGH SCHOOL	7	28
	College	8	32
	Total	25	100
4	Work		
	civil servant	1	4
	Self-employed	2	8
	Private	2	8
	IRT	20	80
	Total	25	100
5	Marital status		
	Marry	25	100
	Total	25	100

6	Parity		
	Primipara	8	32
	Multipara	14	56
	Grande Multipara	3	12
	Total	25	100
7	Income per Month		
	Rp. 500,000-, up to Rp. 1,000,000-,	4	16
	> Rp. 1,000,000-, up to Rp. 2,000,000-,	21	84
	Total	25	100

Primary data source 2022

Based on the data in table 1, it is known that most of the survivors of Covid-19 are aged 20-35 years as many as 18 people (72%), almost all of them are Muslim as many as 24 people (96%), almost half have a history of tertiary education as many as 8 people (32%), almost all of them as housewives as many as 20 people (80%), all of whom are married as many as 25 people (100%), most of them are multipara as many as 14 people (56%), and almost all have a monthly income of > Rp. 1,000,000-, up to Rp. 2,000,000, as many as 21 people (84%).

Table 2. Frequency Distribution based on Infant Characteristics (Age, Gender, Birth Weight, Birth Length)

No	Characteristics	n	%
1	Baby Age		
	< 6 months	25	100
	≥ 6 months	0	0
	Total	25	100
2	Gender of Baby		
	Man	16	64
	Woman	9	36
	Total	25	100
3	Birth Weight		
	< 2500 grams	6	24
	2500-4000 grams	19	76
	Total	25	100
4	Birth Length		
	< 46 cm	2	8
	46-55 cm	23	92
	Total	25	100

Primary data source 2022

Based on the data in table 2, it is known that all infants aged < 6 months were 25 people (100%), the majority were male, 16 people (64%), almost all of them had a birth weight of 2500-4000 grams, 19 people (76%), and almost all of them had a birth length of 46-55 cm as many as 23 people (92%).

Table 3. Breastfeeding Problems in Maternity Survivors of Covid-19

No	Breastfeeding Problems	n	%
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1	There isn't any	8	32
2	Little/No milk	4	16
3	Separate Care	12	48
4	Chafed Nipples	1	4
Total		25	100

Primary data source 2022

Based on the data in table 3, it is known that almost half of the mothers who gave birth to survivors of Covid-19 experienced breastfeeding problems in the form of separate care from their babies during isolation, as many as 12 people (48%).

Table 4. Levels of Anxiety in Maternity Survivors of Covid-19

No	Worry	n	%
1	No worries	20	80
2	Mild Anxiety	3	12
3	Moderate Anxiety	2	8
Total		25	100

Primary data source 2022

Based on the data in table 4, it is known that almost all of the survivors of Covid-19 did not experience anxiety as many as 20 people (80%).

Table 5. The Pattern of Breastfeeding to Mothers who Give Birth Survivors of Covid-19

No	Pattern of Breastfeeding	n	%
1	Exclusive breastfeeding	7	28
2	Predominant ASI	7	28
3	Partial ASI	11	44
Total		25	100

Primary data source 2022

Based on the data in table 5, it is known that almost half of the mothers who gave birth to survivors of Covid-19 carried out a pattern of partial breastfeeding to their babies, as many as 11 people (44%).

Table 6. The Relationship between Anxiety and Breastfeeding Patterns for Maternity Survivors of Covid-19 in the Work Area of the Samarinda City Health Office

		Quality of Life			Total	r	ρ
		Exclusive	Predominant	Partial			
Anxiety Level	There isn't any	6	5	9	20	0.005	0.971
	Light	0	2	1	3		
	Currently	1	0	1	2		
Total		7	7	11	25		

Primary data source 2022

Based on data in cross table 6, it is known that out of 20 mothers who gave birth to survivors of Covid-19, 6 people did not experience anxiety giving exclusive

breastfeeding, 5 people were mostly breastfeeding, and 9 people were partial breastfeeding.

Meanwhile, of the 3 mothers who gave birth to survivors of Covid-19 who experienced mild anxiety, as many as 2 people gave predominantly breast milk and 1 person gave partial milk. In addition, of the 2 mothers who were survivors of Covid-19 who experienced moderate anxiety, as many as 1 person gave exclusive breastfeeding and 1 person gave partial milk.

The results of statistical analysis using the Somer's D test obtained a value of r (correlation coefficient) of 0.005, meaning that it has a very weak or less significant relationship. Meanwhile, the significance value of p is $0.971 > 0.05$ or $p > \alpha$. So, it can be concluded that there is no relationship between anxiety and the pattern of breastfeeding for mothers who are survivors of Covid-19 in the Work Area of the Samarinda City Health Service.

DISCUSSION

1. Characteristics of Maternity Survivors of Covid-19, Characteristics of Babies, and Breastfeeding Problems

Based on the data in table 1, it is known that most of the survivors of Covid-19 are aged 20-35 years as many as 18 people (72%), almost half have a history of tertiary education as many as 8 people (32%), almost all as housewives as many as 20 people (80%), most of whom were multiparas, 14 people (56%), almost all of whom had a monthly income of $> \text{Rp. } 1,000,000-$, up to $\text{Rp. } 2,000,000$, as many as 21 people (84%).

Presearch(Gratitude and Purwanti, 2020)States thatAge < 16 years or > 35 years will make pregnant women susceptible to a number of complications. Age is one of the factors that affect the production of breast milk in mothers. Mothers who are less than 35 years of age produce more breast milk than mothers who are older. However, mothers who are very young (less than 20 years old) produce less milk because of their level of maturity. The age range of respondents 20-35 years is the ideal age to go through pregnancy, childbirth and breastfeeding so that they can optimally care for their babies. At this age, the mother is biologically mature.

Parity is a woman who has given birth before. Parity is divided into several terms, namely primipara, which is a woman who has given birth to a fetus for the first time, multipara, which is a woman who has given birth to a fetus more than once, and grande multipara, which is a woman who has given birth to fetuses more than five times.(Manuaba, 2013). Previous research explained that multiparous or grande multiparous mothers have a 4.60 times chance of exclusive breastfeeding compared to primiparous mothers.(Gobel and Arsin, 2012)

PWidstrom research (2018) in(Gratitude and Purwanti, 2020)stated that by doing IMD with the right and correct technique, namely going through the 9 instinctive stages that start in the first hour of a baby's birth without delay, it can help speed up milk production. The first hour after the baby is born is a golden opportunity that will determine the success of the mother in optimally breastfeeding her baby because the baby has been trained to instinctively find her mother's nipples for herself. Newborns are four times more likely to maintain their structuring rhythm after IMD where the baby's chin makes proper contact with the mother's breast. If the baby can suckle within 20-30 minutes it will help increase uterine contractions, reduce the incidence of uterine atony, because the skin contact between the mother and the baby and the baby's suction can stimulate the production of oxytocin and prolactin, so that the baby gets his first milk.

Mothers who have higher education are able to receive information about exclusive breastfeeding well and have broader knowledge about exclusive breastfeeding compared to respondents with low education.(Afriyani et al., 2018).

There are demands and opportunities to work to help the family economy, some mothers choose to work outside the home. Therefore, by working mothers cannot have full contact with their babies, as a result mothers are more likely to give formula milk which causes the frequency of breastfeeding to decrease and milk productivity to decrease. This situation causes mothers to stop giving breast milk, while mothers who don't work have free time and can make direct contact with the baby while breastfeeding, so that the productivity of breast milk increases.(Widdefrita and Mohanis, 2013). Other research also explains the possibility that working mothers are relatively burdened with office and home activities so that mothers do not have enough time to have direct contact with their babies.(Asemahagn, 2016).

Based on the data in table 2, it is known that all infants aged < 6 months were 25 people (100%), the majority were male, 16 people (64%), almost all of them had a birth weight of 2500-4000 grams, 19 people (76%), and almost all of them had a birth length of 46-55 cm as many as 23 people (92%). Study Priscilla and Ramun (2015) shows that there is no relationship between the independent variables and the dependent variable with their respective p values, namely the age of the baby and the pattern of breastfeeding with a p value = 0.120.

Based on the data in table 3, it is known that almost half of the mothers who gave birth to survivors of Covid-19 experienced breastfeeding problems in the form of separate care from their babies during isolation, as many as 12 people (48%). According to the Ministry of Health (2020), breastfeeding mothers who are exposed to the Covid-19 virus must carry out isolation both independently and in isolation at the hospital. The World Health Organization (WHO) also provides recommendations for mothers affected by acute respiratory infections (ARI) and Covid-19 to continue breastfeeding. Therefore, mothers who are confirmed positive for Covid-19 or who are suspected of being infected with Covid-19 and are currently in independent isolation, even though they can still provide breast milk to their babies, of course by implementing hand washing, wearing a mask while breastfeeding, cleaning the breast area or body surface, or do milking (Ministry of Health, 2020).

Researchers argue that many respondents were treated separately from their babies when they were infected with the Covid-19 virus. This causes mothers not to give exclusive breastfeeding to babies and add additional food/drinks to their babies.

2. Level Anxiety for Maternity Survivors of Covid-19

Based on the data in table 3, it is known that out of 25 people, 20 people (80%) did not experience anxiety, 3 people experienced mild anxiety (12%), and 2 people experienced moderate anxiety (8%).

Anxiety that often arises in postpartum mothers when faced with unpleasant situations. Just as during the Covid-19 pandemic, mothers felt anxious, worried, and afraid, which disrupted the mother's psychology, which had an adverse effect on the health of both mother and baby. In the case when the mother's heart is comfortable, calm and happy it will facilitate milk production and vice versa if the mother is not

calm, uncomfortable and even worried it will hinder the smooth release of breast milk. Ministry of Health (2021) stated that the situation in Indonesia in March 2021 had a total of 1,495,002 confirmed cases of Covid-19 and 40,364 deaths. Of the many confirmed cases of Covid-19, this has caused postpartum mothers to experience mild and moderate anxiety. Fadli (2020) said that it was very easy for the majority of respondents to experience anxiety in preventing and controlling the Covid-19 outbreak. Buana (2020) said that most respondents were anxious, worried and afraid in the face of the Covid-19 pandemic. Maternity survivors of Covid-19 have limitations in interacting with their surroundings, making it very difficult to access information about the Covid-19 pandemic, while information about Covid-19 is very important for the prevention and control of COVID-19.

Zainiyah and Susanti (2020) explained that if a housewife tends to stay at home, interactions outside the home or its surroundings are very difficult and she does not receive information about Covid-19. If housewives don't receive information about the Covid-19 pandemic, they will worry. The anxiety you feel may be mild, moderate, or severe. Anyone who is not aware of the existence of Covid-19 will easily be agitated, restless or overly sensitive to himself. This is what makes the level of anxiety severe or moderate. This is due to the lack of associations, media, public environment, and others. Anxiety is a feeling of fear that something will happen, is triggered by the expectation of danger, and is a signal that helps people prepare to deal with threats. The impact of demands and competition on life can affect physical and mental health. (Sutejo, 2018). Covid-19 is a new disease that has a negative impact felt throughout the world, can cause confusion, anxiety and fear in society. In this case it can be said that the Covid-19 pandemic is the main stressor in this case, anxiety is common because worry is a common state of fear or feeling uncomfortable (Bandi et al., 2020).

Researchers assume that the emergence of the level of anxiety felt by giving birth mothers because they are infected with Covid-19. So, he is afraid to infect the baby and his family. Covid-19 is considered a deadly virus, so there is anxiety for mothers who give birth to survivors of Covid-19.

3. Patterns of Breastfeeding for Covid-19 Survivors: Exclusive, Predominant, and Partial

Based on the data in table 5, it is known that out of 25 mothers who were survivors of Covid-19, 11 people (44%) gave partial breastfeeding, 7 people (28%) gave predominant breastfeeding and 7 people (28%) gave Exclusive breastfeeding.

Breast milk has many advantages over formula milk. The superiority of ASI can be seen from several aspects, such as nutritional, immunological, psychological, intelligence, neurological, and economic aspects(Iskandar and Maulidar, 2016)

Mothers who breastfeed need to understand how to breastfeed properly during the COVID-19 pandemic while protecting their babies from potential COVID-19 attacks, one of which is by washing their hands with soap or hand sanitizer before breastfeeding and using a mask. The pattern of breastfeeding determines the nutritional status and adequacy of the baby. Pandemic conditions make mothers feel worried if breastfeeding risks transmitting the virus to their babies. WHO (World Health Organization) recommends that postpartum mothers breastfeed because the benefits of breastfeeding outweigh the potential risk of transmission of COVID-19(WHO, 2020). As a result of the covid pandemic, access to services such as breastfeeding counseling has been disrupted.

At a relatively young age, mothers have insufficient experience about good and correct breastfeeding patterns during the Covid-19 pandemic. One way that can be done before breastfeeding is to comply with health protocols, namely washing your hands or using a hand sanitizer before breastfeeding your baby. Manuaba deep Amalia (2021)if a young age is at high risk of anxiety due to mental immaturity and lack of experience. So that most of the post-partum breastfeeding mothers are classified as very young so they experience anxiety, worry and fear during the Covid-19 pandemic and therefore will have an impact on the smooth production of breast milk.

Haryono inside Amalia (2021)failure in breastfeeding is influenced by factors of not breastfeeding the baby due to not producing breast milk, psychological, physical, socio-cultural, husband's support and support from health workers. It is hoped that the Covid-19 pandemic in Indonesia will not make mothers afraid or stop breastfeeding. The government has made various efforts to suppress the spread of the virus. One of the efforts to prevent the transmission of Covid-19 is by advising the public to maintain a physical distance of at least one meter from other people.

Researchers assume that the many patterns of partial breastfeeding are caused by a lack of information and knowledge that mothers have about breastfeeding when infected with the Covid-19 virus. This causes anxiety in the mother. Mothers and families are afraid that breastfeeding will transmit the Covid-19 virus to their babies. So, prefer to give drinks or food other than breast milk.

4. Relationship between Anxiety and Patterns of Breastfeeding in Maternity Survivors of Covid-19

The data in table 6 obtained the results of statistical analysis using the Somer's D test obtained a value of r (correlation coefficient) of 0.005, meaning that it has a very weak or less significant relationship. Meanwhile, the significance value of p is $0.971 > 0.05$ or $p > \alpha$. So, it can be concluded that there is no relationship between anxiety and the pattern of breastfeeding for mothers who are survivors of Covid-19 in the Work Area of the Samarinda City Health Service.

The research that the researchers conducted found that there was no relationship between anxiety and the pattern of breastfeeding for mothers who survived Covid-19 in the Work Area of the Samarinda City Health Service. The results of this study are in line with research Kusumaningrum and Sari (2021) with the title Factors that influence breastfeeding patterns during the Covid-19 pandemic. There are factors that have a significant relationship with breastfeeding patterns of breastfeeding mothers during the Covid-19 pandemic, knowledge ($p = 0.001$) and attitudes ($p = 0.005$). Meanwhile, anxiety did not have a significant relationship with the mother's breastfeeding pattern ($p = 0.162$). Midwives in collaboration with health cadres are expected to increase educational efforts regarding breastfeeding information during the Covid-19 pandemic so that they can increase knowledge and change attitudes and behavior.

Anxiety in this study has no relationship to the pattern of breastfeeding. The pattern of breastfeeding in this study could be influenced by, among others, age, education, parity, income, co-patient services for mothers, and problems with babies such as Low Birth Weight Babies (LBW).

Age < 16 years or > 35 years will make pregnant women vulnerable to a number of complications. Age is one of the factors that affect the production of breast milk in mothers. Mothers who are less than 35 years of age produce more breast milk

than mothers who are older. However, mothers who are very young (less than 20 years old) produce less breast milk because of their level of maturity.(Gratitude and Purwanti, 2020). In this study, 5 mothers aged >35 years gave Partial Breastfeeding and 1 person gave Predominant Breastfeeding.

Mother's education can affect the pattern of breastfeeding. the higher a person's education, the easier it will be to receive and develop the knowledge he has acquired, so that the higher the productivity produced in order to improve the welfare of the family and babies. mother's education level affects the mother's acceptance of the information she gets, especially breastfeeding and breastfeeding(Sari, 2019). Researchers obtained data that out of 7 mothers who had a history of elementary school education, 4 of them gave predominant breastfeeding and 1 gave partial breastfeeding.

Income is one that can indirectly affect the pattern of breastfeeding. This is because the high or low of a person's income will usually determine what the baby will be given later (breast milk or other milk). As it is known that someone who has a high level of income is more likely to use formula milk than to breastfeed their baby properly and correctly, even though that person already knows the benefits of breastfeeding and its advantages.(Sari, 2019). In this study, the results were obtained from 21 people who had income > Rp. 1,000,000 -, as many as 5 people gave predominantly ASI and 10 people gave Partial ASI. This result is greater than the respondents who have income <Rp. 1,000,000-,

The implementation of room-in-patient services has an effect on the mother's breastfeeding pattern because from the start the mother has been put together with the baby and the mother is left to care for the baby alone. However, in mothers who are infected with Covid-19, the baby is not united with the mother. This is what causes mothers not to give exclusive breastfeeding(Sari, 2019). Though, a suggestionMinistry of Health (2020)for mothers who are infected with Covid-19 can still give their milk while maintaining cleanliness and aseptic measures. Breastfeeding problems such as chafed nipples and little or less milk can also affect breastfeeding patterns. Nipple blisters on the mother give a painful sensation, so the mother is reluctant to give her breast milk. Mothers prefer to give formula milk. Meanwhile, breastfeeding is a little / less cause for concern for mothers and families. The

assumption that babies are crying because they are hungry because breast milk doesn't come out is the reason why babies are given formula milk (Kusumaningrum and Sari, 2021).

Breastfeeding mothers who are survivors of Covid-19 can continue to exclusively breastfeed according to regulations issued by WHO and the Ministry of Health in "Guidelines for Antenatal, Childbirth, Postpartum and Newborn Services in the Era of Adapting to New Habits". But in reality, not all health agencies implement this policy. Breastfeeding mothers who are Covid-19 survivors are treated separately from their babies. In the end, the mother does not give her baby breast milk. In fact, babies are given formula milk and other complementary foods even though the baby is < 6 months old. This is what causes the low coverage of exclusive breastfeeding in the research that the researchers conducted.

Low Birth Weight Babies (LBW) are babies weighing <2500 grams. Babies with certain conditions, such as LBW, need to get additional nutrition from formula milk according to the advice of a pediatrician. The purpose of giving formula milk is to increase the baby's weight. Formula milk contains high sucrose which aims to prevent hypoglycemia in babies with low birth weight (Damaris, 2019). In this study, the results obtained from 6 babies with LBW as many as 3 babies got predominantly breast milk and 2 babies got partial milk.

This study has no significant relationship. Researchers assume, the pattern of partial and predominant breastfeeding is due to breastfeeding problems in mothers. Maternity survivors of Covid-19 are isolated (treat separately from babies). In addition, there are babies born with LBW. The LBW baby is given formula milk by the family and the mother. Another thing that can affect the pattern of breastfeeding according to researchers is the mother's education level. Mothers who have a history of basic education mostly give ASI predominantly.

In addition, the respondents experienced mild anxiety because the respondent who was infected with Covid-19 did not have any signs of symptoms, the mother was examined for antigen swabs when she was about to give birth. Then, a positive result was obtained for Covid-19. After the baby is born, mother and baby are cared for separately. Babies who are treated separately are not given breast milk, but formula milk and other complementary foods.

CONCLUSION

1. Characteristics of research respondents:
 - a. The results showed that the characteristics of mothers who gave birth to survivors of Covid-19 most of the respondents aged 20-35 years were 18 people (72%), almost all of whom were Muslim as many as 24 people (96%), almost half of the respondents had a history of tertiary education as many as 8 people (32%), almost all as housewives as many as 20 people (80%), all of whom were married as many as 25 people (100%), the majority were multipara as many as 14 people (56%), almost all of them had a monthly income of > Rp. 1,000,000-, up to Rp. 2,000,000, as many as 21 people (84%).
 - b. The results showed that the characteristics of the baby all infants aged <6 months were 25 people (100%), the majority were male as many as 16 people (64%), almost all had a birth weight of 2500-4000 grams as many as 19 people (76%), and almost all 23 people (92%) had a birth length of 46-55 cm.
 - c. Breastfeeding problems in the Samarinda City Health Service Work Area the results showed that almost half of the respondents experienced breastfeeding problems in the form of separate care from babies during isolation as many as 12 people (48%).
2. Level anxiety in pregnant women survivors of Covid-19 in the Work Area of the Samarinda City Health Service, the results show that almost all respondents did not experience anxiety as many as 20 people (80%).
3. The pattern of breastfeeding for mothers who are survivors of Covid-19 in the Work Area of the Samarinda City Health Office shows that almost half of the respondents did a pattern of partial breastfeeding to their babies as many as 11 people (44%).
4. No There is The relationship between anxiety and the pattern of breastfeeding for mothers who are survivors of Covid-19 in the Work Area of the Samarinda City Health Service, the value of r (correlation coefficient) is 0.005, meaning that it has a very weak or less significant relationship and a p value of $0.971 > 0.05$ or $\rho > \alpha$.

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THE INFLUENCE OF YOGA ON MOTHER'S STRESS LEVELS BREASTFEEDING AT PMB SUSIYATI, S.Tr.Keb

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Abstract

BackgroundThe postpartum period is a transitional period for mothers who are at greater risk of experiencing stress. For mothers who cannot adapt to the changes that occur, they can cause psychological disorders, both mild, moderate and severe psychological disorders. Stress can be overcome with yoga because has the benefit of being able to minimize body mind and mental tension and make the body stronger when dealing with stress and anxiety, increase self-confidence, always think positively and can increase endorphins

Research purposesKnowing the effect of yoga on stress levels in breastfeeding mothers at PMB Susiyati, S.Tr.Keb

Research methodsThis type of research is an experiment with a pre-experimental research design, the variables in this study are yoga exercises and stress levels in breastfeeding mothers. The sample and location of this research were 15 postpartum mothers, taken by purposive sampling. This research was conducted from May to July 2022 at PMB Susiyati, S.Tr.Keb. Yoga is done 2 times a week for 2 weeks with a duration of 50 minutes each meeting. Parameters for measuring stress levels use the PSS (Perceived Stress Scale). Data were analyzed by univariate analysis and bivariate analysis using the Wilcoxon signed rank test with the result that if the P-value <0.05 then Ha is accepted.

Research resultThe characteristics of the majority of respondents aged 20-35 years amounted to 13 people (86.7%), 9 people graduated from Vocational School (60.0%) and worked as IRT as many as 7 people (46.7%). The stress level of breastfeeding mothers before doing yoga with a light stress level was 5 people (33.3%), moderate stress was 10 people (66.7%) while the stress level of breastfeeding mothers after doing yoga with light stress was 12 people (80%), moderate stress 3 people (20%). There is an effect of yoga on stress levels in breastfeeding mothers at PMB Susiyati, S.Tr.Keb with a P-value <0.05 so that Ho is rejected and Ha is accepted.

ConclusionThere is an effect of yoga exercise on stress levels in nursing mothers.

Keywords :Stress, yoga, breastfeeding mothers

INTRODUCTION

The stress level of breastfeeding mothers in the first month who experienced stress was 42.5%; consists of light stress 25%; moderate stress 15%; and severe stress 2.5%.

Breastfeeding in the first month was 57.5%, carried out by mothers who did not experience stress and mothers who experienced mild and moderate stress (Zuly & Yuli, 2018). Adaptations are made by the mother both physically and psychologically. The puerperium is a transitional period for mothers who are at greater risk of experiencing stress than during pregnancy.

Dramatic shifts in the role and responsibilities of the mother as well as the attention and encouragement of other family members are positive supports for the mother. This can be a source of stress for mothers who often experience difficulties at the beginning of breastfeeding such as fatigue, insufficient milk, sore nipples, sleep disturbances at night, and stress related to a new role.

One of the efforts to deal with stress in breastfeeding mothers is by giving non-pharmacological therapy to breastfeeding mothers by doing yoga exercises which can provide a feeling of relaxation for nursing mothers.

Some of the benefits of yoga can reduce catecholamines, which are hormones produced by the adrenal glands in response to stress, lower levels of neurotransmitter hormones, dopamine, norepinephrine, epinephrine and create a sense of calm.

This study aims to determine the effect of yoga on stress levels in breastfeeding mothers at PMB Susiyati, S.Tr.Keb

METHOD

This type of research is experimental research with a pre-experimental research design with a one group pretest-posttest design.

The population in this study were all postpartum mothers at PMB Susiyati, S.Tr.Keb and it was held from May to July 2022. The sample in this study was based on Roscoe's opinion 10 to 20, so the researchers took a sample of 15 people who were taken by purposive sampling . The independent variable is yoga exercise and the dependent variable is stress on breastfeeding mothers.

The stress level measurement scale in this study was the PSS (Perceived Stress Scale), which contained 10 questions regarding the mother's condition in the last 1 month. All assessments are accumulated, then adjusted according to stress levels 0-13 low stress, 14-26 moderate stress, 27-40 severe stress(Purnami & Sawitri, 2019).

Data were analyzed univariately to explain or describe the characteristics of each

research variable. And the data were analyzed in a bivariate manner to determine the effect of the two variables. Univariate data analysis in this study used frequency and percentage. The results of the normality test in this study were that the data were not normally distributed, so the Wilcoxon signed rank test was used.

RESEARCH RESULT

Table 1. Frequency distribution of the characteristics of the respondents

Characteristics Respondents	Frequency (n)	Percentage (n)
Age		
>20year	2	13,3
20-35 years	13	86,7
Total	15	100
Education		
JUNIOR	1	6,7
HIGH SCHOOL	9	60,0
SMK	5	33,3
S1	15	100
Total		
Work		
IRT	7	46,7
Employee	4	26,7
Honorary	3	20,0
Teacher	1	6,7
Total	15	100

Data Source : Primary Data, 2022

Based on table 1 above, it shows that the distribution of respondents was mostly 20-35 years old, totaling 13 people (86.7%), the education of most of them was Vocational High School, there were 9 people (60.0%) and the jobs of most of the IRT were 7 people (46.7). %)

A. Univariate analysis

Table 2. Frequency distribution of stress levels of breastfeeding mothers before and after being given yoga exercises at PMB Susiyati, S.Tr Keb

Criteria	Frequency (n)	Percentage (%)
Before		
Light	5	33,3
Currently	10	66,7
Total	15	100

After		
Light	12	80
Currently	3	20
Total	15	100

Data Source : Primary Data, 2022

Based on table 2 above, it shows that the stress level in breastfeeding mothers before doing yoga exercises with mild criteria is 5 people (33.3%), moderate is 10 (66.7%) and the stress level in breastfeeding mothers after doing yoga exercises with moderate criteria is 12 people (80%) and mild as many as 3 people (3%).

B. Bivariate Analysis

Table 3. The effect of yoga exercise on the stress level of breastfeeding mothers at PMB Susiyati, S.Tr.Keb

yoga	<i>Stress Level</i>					Z	P value	
	Light		Currently		Total			
	Σ	%	Σ	%	Σ			
Before	5	33,3	10	66,7	15	100	-2.646b	0.008
After	12	80,0	3	20,0	15	100		

SPSS Wilcoxon sign rank test, 2022

The difference in the stress levels of breastfeeding mothers before and after being given yoga exercises using the SPSS (Statistical Product and Service Solutions) computerized system based on the database obtained a Z value of -2,646 and Asymp sig (2 tailed) .008, which means less than 0.05. So from this study it can be concluded that H_0 is accepted there is an effect of giving yoga exercises on stress levels in nursing mothers.

DISCUSSION

Postpartum is a very worrying time for a woman who is becoming a mother for the first time because she is required to be able to adjust to her new role. Some adjustments are needed by the mother to carry out her new activities and roles

the first weeks or months after giving birth, both physically and mentally. There are those who can adjust well by being calm and able to carry out their roles well. But there are some who do not manage to adapt and even experience psychological disturbances (Rohmana et al., 2020)

Stress has the potential to have a negative impact if the number of sources of stress is large, but the capabilities are few. Conversely, if the source of stress is in sufficient capacity and in proportion to ability then stress can have a positive impact. Stress on individuals is based on the fundamental theory of stress stimulus, response and transactional models (Lumban Gaol, 2016)

The benefits of yoga which can minimize body, mind and mental tension and make the body stronger when dealing with stress and anxiety, increase self-confidence, always think positively and increase endorphins are expected to make mothers who do yoga become calmer and relax in your puerperium.

In this study, researchers analyzed the causes of stress levels for breastfeeding mothers such as lack of sleep, fussy babies, insufficient breast milk, swollen breasts. One way of handling that can be done is by giving yoga exercises for postpartum mothers for more than 14 days, which are carried out 2 times a week for 2 weeks.

Based on the frequency distribution of education levels, it is known that mothers with 1 junior high school education, 9 vocational high school students and 5 bachelor's degrees. The level of education is a social aspect that generally influences the level of family income as an economic factor. Education can also influence human attitudes and behavior. The high education of a person will create an attitude that will give birth to behavior, including breastfeeding. The higher the education level of the mother, the higher the number of mothers giving breast milk to their babies (Ansori, 2015). Someone who has higher education or at least upper secondary will easily receive information about the benefits of breastfeeding. According to public factors, the lack of information about the importance of exclusive breastfeeding is caused by several factors, including: mothers' lack of knowledge about exclusive breastfeeding, and the circulation of unfavorable myths about breastfeeding.

This problem can be overcome if breastfeeding mothers have higher education because education will give birth to good knowledge. People who have higher

education will respond rationally to the information that comes and will think about the extent of the benefits they will get. This is in accordance with research(Daima Ulfa et al., 2020)which shows most levels of education are junior high school by 48% experiencing more stress than high school education by 45%

Based on the distribution of work frequency, it is known that there are 7 IRT (housewives) (46.7%), 4 employees (26.7%), 3 honorary people (20.0%), and 1 teacher (6.7%). Characteristics of work that is difficult, and requires special skills and expertise that are difficult for the individual concerned, will be pressure that leads to job stress. Characteristics of work include skills and expertise, the importance of work for society, authority in work, and the role of leadership(Sulaimiyah et al., 2018).

In this study, certain types of work did not affect the level of stress in nursing mothers, as evidenced by the results of the study which showed that all respondents experienced moderate to mild pain that was not related to the respondent's employment status.

Stress levels in nursing mothers

Based on the results of bivariate analysis using the Wilcoxon test, it is known that of the 15 breastfeeding mothers before being given yoga exercises, 5 people had stress levels with mild stress criteria and 10 breastfeeding mothers with moderate stress criteria. Meanwhile, after being given yoga exercises, 12 people had stress levels with mild stress criteria and 3 people who were breastfeeding mothers with moderate stress levels. There is a decrease in stress levels in nursing mothers after being given yoga 2x a week for 2 weeks. (p value = 0.008)

The results of this study are in accordance with(Jatnika et al., 2016)which showed that the average stress level of third trimester primigravida mothers before prenatal yoga was 22.47 (SD = 6.44) and the average stress level of third trimester primigravida mothers after prenatal yoga was 12.18 (SD = 5.02) and it can be concluded that there is a significant difference between the stress level before and after the prenatal yoga intervention (p value = 0.0001 < α = 0.05).

The effect of yoga on reducing stress levels in nursing mothers

Based on the analysis using the SPSS (Statistical Product and Service Solutions)

computerized system based on the data base using the Wilcoxon test, the p value is .002, which means it is smaller than α 0.05. So from this study it can be concluded that H_a is accepted there is an effect of yoga exercise on stress levels in breastfeeding mothers in the work area of PMB Susiyati, S.Tr.Keb in 2022.

The results of this study are in accordance with the statement (Buttner et al., 2015) said that giving yoga exercise results in the yoga group experiencing a significantly greater reduction in depression, anxiety, and an increase in HRQOL, compared to the control group with moderate to large effects.

Empirical evidence for CAM therapy is growing, with several studies demonstrating the efficacy of yoga for depression and anxiety in the general population and prenatal yoga for depression and anxiety in pregnant women in particular. yoga also outperformed the control condition in reducing depression and anxiety and had the beneficial effect of increasing HRQOL (Buttner et al., 2015)

Other yoga-related mechanisms include regulation of decreased hypothalamic, pituitary, adrenal, pituitary, adrenal (HPA) function resulting in stress reduction, regulation of neurotransmitter systems, optimizing sleep benefits, and enhancing adaptive thinking and behavior. (Wijaya et al., 2022)

The results of research conducted by Galih Jatnika et al in 2016 in the journal Effects of Prenatal Yoga on Stress Levels in Primigravida Mothers Trimester III prenatal yoga which is done 2 times a week for 2 weeks with a duration of 2 hours each meeting found that the stress level before prenatal yoga is 22.47 (SD = 6.44) and the average stress level of third trimester primigravida mothers after prenatal yoga was 12.18 (SD = 5.02). It was concluded that giving yoga can reduce stress levels in third trimester primigravida mothers.

Based on the findings by researchers, the things that cause interventions to be less effective are the lack of family or husband support, such as not having a substitute when the mother is resting. Based on these findings, it is hoped that the husband and family can replace the mother when she is resting, such as taking care of the baby, temporarily replacing housework.

From the results of the research conducted, it was found that out of 15 breastfeeding mothers who were given yoga interventions before being given the yoga intervention in the medium stress category, 10 people (66.7%) and after being given

yoga intervention in the moderate stress category, 3 people (20%) experienced a decrease in stress levels by 7 people.

CONCLUSION

From the results of the study it was found that there was an effect of yoga on reducing stress levels before being given yoga exercises in the work area of PMB (Independent Midwife Practice) Susiyati, S.Tr.Keb of 15 breastfeeding mothers who had stress levels with mild criteria as many as 5 people (33.3%). The stress level of breastfeeding mothers after being given yoga exercises in the work area of PMB (Independent Midwife Practice) Susiyati, S.Tr.Keb of 15 breastfeeding mothers had a mild stress level of 12 people (80%).

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THE EFFECTIVENESS OF GIVING TEMULAWAK EXTRACT AND MARMET TECHNIQUES AGAINST INCREASED BREAST MILK PRODUCTION IN SAMARINDA

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Abstract

Introduction: Exclusive breastfeeding coverage for East Kalimantan Province with a percentage of 76.1%. Factors that can affect the production of breast milk is the food factor consumed by the mother. Temulawak is that contains lactogogum compounds. The marmet technique is a manual technique of expressing breast milk using the hands and helps the milk ejection reflex. The purpose of this study was to determine the effectiveness of giving temulawak extract and marmet technique to increase breast milk production in Samarinda.

Methods : The research method is a quasi-experimental method, the population is the first day postpartum mothers at the Kartika Jaya and Kusuma Clinics. The sampling technique using accidental sampling was 36 people.

Results : The results of this study showed that there was an effectiveness of giving temulawak extract to increase breast milk production (p -value = 0.000) and there was an effectiveness of giving marmet technique to increase breast milk production (p -value = 0.000) with a value of = 0.05

Conclusion: Giving temulawak extract and marmet technique is effective to increase breast milk production, but there was no significant difference in effectiveness.

Suggestions: hoping further research can make processed ginger extracts too.

Key words : Temulawak extract, marmet technique, breast milk production

INTRODUCTION

Breast milk is the main food for infants, especially for infants aged 0-6 months. Based on the statement of the World Health Organization (WHO) and the United Nations Emergency Children's Fund (UNICEF), infants must be given breast milk in the first hour after birth and continued until the age of 6 months without being given complementary foods or drinks. In

2020 WHO presented data on the number of exclusive breastfeeding globally, although there has been an increase, the increase is not yet significant, which is around 44%.(WHO, 2020).

Based on data from the Ministry of Health of the Republic of Indonesia, nationally the coverage of infants receiving exclusive breastfeeding in 2020 is 66.06%.(Ministry of Health, 2021).

Breast milk production can occur due to stimulation of the hormone oxytocin. When a baby starts sucking breast milk, there are two reflexes that will stimulate milk production. Factors that can affect breast milk production are the food factors consumed by the mother(Mariati et al., 2018). One way to facilitate breastfeeding is to eat foods that can stimulate the hormone prolactin and contain lactogogum compounds. One of the natural ingredients that can increase breast milk production is temulawak extract. Temulawak is a plant that is efficacious for increasing breast milk production because it contains active ingredients such as Prolactin Releasing Hormone (PRH), contains steroid compounds, and contains active ingredients such as oxytocin.(Muhammad et al., 2018).

Consuming ginger extract can facilitate the production of breast milk. Apart from food, massage techniques can also help to stimulate milk production. One of them is the marmet technique. The marmet technique is a manual technique of expressing breast milk using a hands and helps the milk ejection reflex. The marmet technique develops massage and stimulation methods to help lock the milk-ejection reflex. This method has been done by many experienced breastfeeding mothers and those who have never breastfed. Mothers who have previously been able to express milk or who have not, get very good results after doing this technique. The marmet technique is also a safe way to stimulate milk production(Ningrum et al., 2017).

The main factor that affects the production of breast milk is the fulfillment of nutritional and hormonal needs(Bzikowska et al., 2018). If the nutritional needs of the mother are not met, then the milk production will be disrupted so that the process of exclusive breastfeeding for the baby also decreases.

Based on the above background, the writer wanted to know the effect of giving

temulawak extract and marmet technique to increase breast milk production in Samarinda.

METHOD

This research is a quantitative research with a quasi-experimental research design with a non-equevalent pre-post test design and group comparison.

This research was conducted at the Kartika Jaya Clinic and the Kusuma Clinic, Samarinda. Sampling was carried out from May to July 2022.

The population in this study were primiparous postpartum mothers at the Kusuma Clinic and Kartika Jaya Clinic with 36 vaginal deliveries. The sampling method used accidental sampling where the researcher took anyone he met as long as it complied with the desired requirements. This study was conducted to determine the effectiveness of giving temulawak extract and marmet technique to increase breast milk production in Samarinda.

This study used the temulawak extract group, namely the group given the temulawak extract and the marmet technique group, the group given the marmet technique. Measurements in this study were carried out twice, namely before the intervention (*pre test*) and after the intervention (*post test*) with which the results will be compared.

The research instruments used were observation sheets, temulawak extract and tools for the marmet technique in the form of baby oil and cloth or towels. Univariate data analysis technique using frequency distribution and bivariate analysis using test *Paired t* Test and *Independent t* Test.

RESULT AND DISCUSSION

Table 4.1. Frequency Distribution of Respondents Characteristics to Post Partum Mothers Given Temulawak Extract in Samarinda

Characteristics	F	%
Age		
<20 years	2	11.1
20-35 years old	16	88.9
Total	18	100
Education		
College	5	27.8
SENIOR HIGH SCHOOL	7	38.9
JUNIOR HIGH SCHOOL	4	22.2
SD	2	11.1
Total	18	100
Work		
IRT	14	77.8
civil servant	1	5.6
Private	3	16.7
Total	18	100

Source: Primary Data 2022

Table 4.1 can be seen that almost all of the respondents were aged 20-35 years with a total of 16 respondents (88.9%). Almost half of the respondents' education was high school graduates with a total of 7 respondents (38.9%). Almost all of the respondents' occupations are housewives with a total of 14 respondents (77.8%).

Table 4.2 Frequency Distribution of Respondents' Characteristics in Post Partum Mothers Given the Marmet Technique in Samarinda

Characteristics	F	%
Age		
20-35 years old	18	100
Total	18	100
Education		
College	3	16.7
SENIOR HIGH SCHOOL	13	72.2
JUNIOR HIGH SCHOOL	2	11.1
Total	18	100
Work		
IRT	15	83.3
Private	2	11.1
Self-employed	1	5.6

Total	18	100
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Data Source: Primary Data 2022

Table 4.2 can be seen that all respondents aged 20-35 years with a total of 18 respondents (100%). Education of respondents most of the respondents are high school graduates with a total of 13 respondents (72.2%). Almost all of the respondents' occupations are housewives with a total of 15 respondents (83.3%).

Table 4. 3. Results of Normality Test for Breast Milk Production in Primipara Post Partum Mothers in Samarinda in 2022

Intervention	Shapiro-Wilk		
	Statistics	df	Sig.
Temulawak extract pretest	0.939	18	0.275
Temulawak extract posttest	0.922	18	0.140
Marmet technique pretest	0.906	18	0.074
Marmet technique pretest	0.953	18	0.477

Source: Primary Data 2022

Based on table 4.3, the results of the normality test using Shapiro-Wilk obtained a significant value of breast milk production in the temulawak extract group pre-test of 0.275 and post-test of 0.140. The pre-test marmet technique group was 0.074 and the post-test was 0.477. The results of the data indicate that the significance value is greater than 0.05 which means the data is normally distributed, so the test used is the Paired t-Test.

Table 4. 4. The results of the statistical test of breast milk production for post partum primipara mothers in Samarinda in 2022

Group	Variable	Criteria	mean	p-value
Temulawak Extract	Breast milk production	Pretest	6.06	0.000
		Posttest	71.94	
Marmet Engineering	Breast milk production	Pretest	5.39	0.000
		Posttest	81.94	

Source: Primary Data 2022, Paired t Test

Based on table 4.4, it shows that the Paired t-Test test for breast milk production in the group given the ginger extract and marmet technique resulted in a significant p-value of 0.000 (<0.05). Therefore, it can be concluded that there is an effectiveness in increasing breast milk before and after administration of temulawak extract and marmet technique to postpartum mothers in Samarinda.

Table 4. 5. Differences in the Effectiveness of Giving Temulawak Extract and Marmet Technique to Post Partum Mothers in Samarinda in 2022

	Sig.	t	df	Sig. (2-tailed)
Equal variance assumed	0.308	-1.584	34	0.122

Source: Primary Data 2022, Independent t Test

Based on table 4.5, it shows a significant value, namely p-value = 0.122, which means that there is no significant difference between the administration of temulawak extract and the marmet technique.

Description of Respondents Characteristics

a) Age

Based on the results of statistical tests, it is known that in the administration of temulawak extract, almost all respondents aged 20-35 years with a total of 16 respondents (88.9%) and in the provision of marmet techniques all respondents aged 20-35 years with a total of 18 respondents (100%).

The age of 20-35 years is a healthy reproductive time where this age is a safe age for pregnancy, childbirth and breastfeeding. Therefore, the reproductive age is very good for the process of forming and producing breast milk. Meanwhile, those aged <20 years are considered to be physically, mentally and psychologically not ready to face pregnancy, childbirth or breastfeeding (Wulandari, et al, 2018).

Age is one of the factors that affect milk production. Mothers under 35 years of age will produce more breast milk, but very young mothers who are less than 20 years of age also produce less breast milk due to their level of maturity. Mothers aged 20-35 years are a mature age to experience pregnancy, childbirth and breastfeeding so that they can optimally care for their babies(Gratitude & Purwanti, 2020).

Researchers assume that in this study maternal age affects breast milk production, where age 20-35 years is a healthy reproductive age so that the oxytocin and prolactin hormones can work well. At that age also affects the level of maturity of the mother in making decisions and the readiness of the mother both physically and psychologically in the breastfeeding process so that it affects milk production.

b) Education

Based on the results of statistical tests, it is known that the mother's last education level on giving temulawak extract almost half of the respondents were high school graduates with a total of 7 respondents (38.9%) and in the provision of marmet techniques most of the respondents were high school graduates with a total of 13 respondents (72.2%).

The level of education is the stage of education that is determined based on the level of development of students. Education makes a person curious about information. Higher education makes a person more receptive to the information obtained. The mother's education level affects the mother's attitude in breastfeeding, the higher the mother's education, the better the mother's knowledge about exclusive breastfeeding. Meanwhile, low maternal education allows mothers to be slower in receiving new information and knowledge(Fatimah, 2017).

This is in line with the research of Syukur, et al(2020), out of 30 respondents, 14 respondents (46.6%) were high school graduates who explained that education is needed so that a person gets information that supports health in order to improve the quality of life. The lower the education level, the lower one's ability to think will also be.

Based on the assumption of the researcher, education will affect a person's insight and way of thinking. Mothers with higher levels of education tend to be more willing to accept the information provided. This is evidenced by mothers with higher education experience an average increase in the amount of breast milk more than mothers with low education.

c) Work

Based on the results of statistical tests, it was found that in the administration of temulawak extract almost all of the respondents were housewives with a total of 14 respondents (77.8%) and in the provision of marmet techniques almost all of the respondents were housewives with a total of 15 respondents (83.3 %).

Mothers who work spend more time at work and may not or rarely give exclusive breastfeeding because they have a shorter time to care for their babies, while mothers who do not work are likely to give exclusive breastfeeding because they have more time to care for their babies. A working mother tends to be busy with her work so that she has little time to breastfeed which causes the mother to stop breastfeeding her baby(Fatimah, 2017).

Based on the research of Syukur, et al(2020), there are 30 respondents as many as 19 respondents (63.3%) are housewives. Mother's work is an important factor in breastfeeding where mothers who do not work have more time to breastfeed their children than mothers who work.

Researchers assume that working mothers tend to interact less with their babies in contrast to mothers who do not work. Mothers who do not work have more time to be able to directly breastfeed their babies.

Differences in Breast Milk Production Before and After Treatment

a) Differences in Breast Milk Production of Post Partum Mothers Before and After Giving Temulawak Extract

Based on the results of research on breast milk production before being given temulawak extract, the average value (mean) was 6.06 ml and after being given temulawak extract, the average result (mean) was 71.94 ml with p value = 0.000 <0.05 which means showed a significant difference in breast milk production before and after administration of temulawak extract.

According to Sari (2003) in Ayu (2021), temulawak contains elements of lipids and hormonal structures in which these active compounds play an active role in the milk production process because they have a lactogogum effect. In addition, temulawak rhizomes contain polyphenols which also play a role in increasing prolactin levels.

This is in line with Ayu (2021) research on the effect of giving ginger rhizome extract to post partum mothers on increasing the weight of babies born with stones and Astutik, et al.(2018)on the effectiveness of giving temulawak on milk production in breastfeeding mothers. This study found the effect of temulawak rhizome extract on increasing breast milk production with a p value of 0.000.

A similar study was also conducted by Widhiastusti, et al.(2018)entitled Effect of Temulawak (*Curcuma xanthorrhiza* or Javanese Ginger) on the breast milk production of post partum mother at ningsih independent midwifery Tawamangu. In this study, the results showed that there was a significant effect of the use of temulawak on the production of postpartum mother's milk with p value = 0.000.

So that researchers assume in general the effort to give temulawak extract can increase breast milk production, therefore H_0 is rejected which means that there is an effectiveness of giving temulawak extract to increase breast milk production.

b) Differences in Postpartum Mother's Milk Production Before and After Marmet Technique Massage

Based on the results of the research on breast milk production before the marmet technique massage showed the average value (mean) was 5.39 ml and after the marmet technique was given the average result (mean) was 81.94 ml with p value = 0.000 <0.05 which showed a significant difference in breast milk production before and after

administration of temulawak extract.

The marmet technique is a combination technique between massaging the breast and expressing breast milk. The marmet technique aims to empty the lactiferous sinuses which are under the areola so that it is hoped that by emptying the breast milk, it can stimulate the prolactin hormone. The next release of the hormone prolactin will stimulate the mammary alveoli to produce breast milk (Dahlan, 2017). The marmet technique is a method of massaging and stimulating so that breast milk can come out optimally. If done effectively and appropriately, there will be no problems in milk production (Pangestu et al., 2017).

Based on research conducted by Wahyuni & Purnami (2020) After giving a combination of massage nape and marmet technique after giving birth, there was a difference in the results of milk expulsion in the intervention group and the control group with p value = 0.002.

A similar study was also conducted by Darmasari, et al. (2019) entitled Effectiveness of the combination of marmet technique and oxytocin massage against the breast milk production of mother postpartum. In this study, it was found that there was a significant effect between postpartum mother's milk production in the intervention group and postpartum mother's milk production in the control group with p value = 0.007.

The researcher assumes that in general, giving marmet technique massage can increase milk production. Therefore, H_0 is rejected, which means that there is an effectiveness of giving marmet technique to increase breast milk production.

The Effectiveness of Giving Temulawak Extract and Marmet Technique to Increase Breast Milk Production

Based on the research results of breast milk production before being given temulawak extract, the average value was 6.06 ml and after being given temulawak extract, the average value was 71.94 ml with an increase in milk production of 65.88 ml and p value = $0.000 < 0.05$. The milk production before being given the marmet

technique showed an average value of 5.39 ml and after the marmet technique was given the average value was 81.94 ml with an increase in breast milk production of 76.55 ml and the p value = 0.000 < 0.05. After continuing to use the independent t test, the p-value = 0.122 was obtained.

Referring to the journal Desbiyani, et al.(2017)entitled Effect of consuming temulawak extract on breast milk production in postpartum mothers. In this study, there is an effectiveness in increasing breast milk production in post partum mothers with a p value = 0.001.

This is inversely proportional to the research of Ardela, et al.(2021)entitled The effectiveness of consumption between temulawak extract and katuk leaves toward breast milk launch in post partum. In this study, there was no difference in the effectiveness of consuming temulawak extract and katuk leaves on breast milk production in post partum mothers.

In a study conducted by Darmasari, et al.(2019)entitled Effectiveness of the combination of marmet technique and oxytocin massage against the breast milk production of mother postpartum. In this study, it was found that there was a significant effect between postpartum mother's milk production in the intervention group and postpartum mother's milk production in the control group with p value = 0.007.

This is in line with the research of Dariani & Khadijah(2021)entitled the difference in the effectiveness of breast care and marmet techniques on the smooth flow of breast milk in post partum mothers. The results showed that the marmet technique was more effective than breast care in increasing milk production.

The researcher assumed that there was no significant difference in effectiveness between the administration of temulawak extract and the marmet technique on increasing breast milk production.

CONCLUSION

Based on the results of the above study entitled The Effectiveness of Giving

Temulawak Extract and Marmet Techniques on Increasing Breast Milk Production in Samarinda, it can be concluded as follows:

1. The characteristics of the respondents who were given temulawak extract were mostly aged 20-35 years as many as 16 respondents (88.9%), most of them had high school education as many as 7 respondents (38.9%) and most of the mothers worked as housewives as many as 14 respondents (77.8%). In giving the marmet technique, all respondents aged 20-35 years were 18 respondents (100%), most of the respondents were high school graduates as many as 13 respondents (72.2%), and almost all respondents were housewives as many as 15 respondents (83, 3%).
2. Differences in milk production before and after treatment, namely:
 - a. The average milk production in postpartum mothers before being given temulawak extract with a mean pretest value of 6.06 ml and posttest 71.94 ml with an increase of 65.88 ml.
 - b. The average milk production in postpartum mothers with a value before being given the marmet technique with a mean pretest value of 5.39 ml and posttest 81.49 ml with an increase of 76.55 ml.
3. There is an effectiveness of giving temulawak extract to increase milk production before and after being given treatment and there is an effectiveness of giving marmet technique to increasing breast milk production before and after being given treatment with p value = $0.000 < 0.05$. There was no significant difference in effectiveness between the administration of temulawak extract and the marmet technique on increasing breast milk production.

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