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The Effectiveness of Almond Juice on Breast Milk Volume at Clinic B Bekasi

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Abstract

Background: Breast milk is the ideal food for newborns because of its unique nutritional properties. Therefore, it is appropriate for every baby to get exclusive breastfeeding until the age of 6 months. To make this happen, the baby's mother must try to increase the volume and quality of her breast milk. These efforts must be supported by providing appropriate nutritional intake for breastfeeding mothers.

Purpose: To determine the effectiveness of almond juice on breast milk volume.

Methods: Quasi-experiment with pre and post treatment. The sample in this study was 30 people consisting of 15 experimental groups and 15 control groups. The sampling technique used was purposive sampling. The research instrument used direct observation and breast pump. Data were analyzed using descriptive statistics and inferential statistics, namely paired t-tests.

Result: The results showed that there was a significant difference in the volume of breast milk before and after the intervention was given.

Conclusion: giving almond juice regularly taken 2 times a day for 10 days is effective in increasing the volume of breast milk. Midwives are expected to be even better at providing counseling regarding the fulfillment of balanced nutrition by adding almond juice in increasing the volume of breast milk.

Keywords: Almond Juice, Breast Milk Volume

Introduction

The neonatal period, also called a newborn period, is the most critical period of a child survival. Implementation of early initiation of breastfeeding and exclusive breastfeeding increases the newborn body's immune system against infection. The low coverage of exclusive breastfeeding can have an impact on the quality of life of the nation's next generation and also on the national economy.[4]

Globally, the cause of high infant mortality is caused by problems that can actually be controlled. Control can be done by giving Exclusive breastfeeding. As stated by the United Nations Children Fund (UNICEF), optimal breastfeeding has the potential to prevent 1.4 million deaths of

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children under one year of age each year. The failure of mothers to provide exclusive breastfeeding can occur due to the influence of several factors, including low support in the form of breast milk quality nutrition. Mothers who are given support in breastfeeding are proven to be 2.5 times more successful and enthusiastic in giving breast milk. This has a positive psychological impact on milk production. Milk production is one of the general factors that also determine the success of breastfeeding.[2]

Breastfeeding in infants is closely related to under nutrition and over nutrition (fat) condition. Breastfeeding can reduce the risk of acute infectious diseases such as diarrhea, pneumonia, ear infections, haemophilus influenza, meningitis, and urinary tract infections. Babies who are not breastfed will be susceptible to infectious diseases. The incidence of infants and toddlers suffering from recurrent infectious diseases will further lead to malnutrition and underweight.[11]

Various attempts were carried out by midwives to overcome the problem of lack of milk production. Non-pharmacological interventions are an alternative choice to reduce the risk of exposure to pharmacological therapy. Lactogogums such as moringa leaves, Moringa Oleifera, papaya fruit vegetables, soy milk, oxytocin massage, massage oketani, acupressure and almond juice are relatively effective and economical choices to increase breast milk production.[5,6,9,10,13]

Almonds contain protein, fiber, fat, vitamin E, calcium, phosphorus, iron and magnesium. The composition of almonds also includes zinc, selenium, copper, niacin and tannins. The omega-3 inside almonds can help balancing hormones in the body of nursing mothers. This will improve psychological condition of the mother to be better so she can produce more abundant milk.

The results of T-test had a significance of 0.000 and this value was smaller than alpha (0.05) which indicated that the management of giving amor smoothies had an effect on increasing the volume of breast milk.[9]

Method

1. Research design

This current study uses a Quasi Experiment control Time Series design as a research method with various data measurements through quantitative analysis

2. Setting and samples

The measurement aims to understand the differences in the volume of breast milk from 15 respondents in the case group and 15 respondents in the control group. Respondents were selected through purposive sampling in which each respondent was filtered through predetermined inclusive and exclusive criteria

3. Intervention (applies to experimental studies)

In this case intervention was given to the experimental group in the form of giving almond juice which was given 2 times a day in the morning and at night for 1 week

4. Measurement and data collection

The instrument used in this study was the Observation Sheet Procedure to identify the breastmilk production in postpartum mothers the smooth release of breastmilk. In addition, the instrument was made by the researcher according to Standard Operation Procedures.

5. Data analysis

Data were analyzed through paired T test and Independent T test.

Result

Table 1.
Respondent Characteristics Data

Characteristics of Mother	Frequency (f)	Percentage (%)
Age		
20-35 year old	23	77%
>35 year old	7	23%
Parity		
Primipara	6	20%
Multipara	24	80%

Of the 30 respondents, most respondents were in the age range of 20-35 years as much as 77% with 80% of respondents have multiparous status.

Table 2.
Total volume of breast milk before being given almond juice in the experimental group and the control group

Group	Mean	Median	Std.Deviation	Minimum	Maximum
Experiment	5.47	5.70	2.282	0	10
Control	5.89	5.70	1.768	3	10

The total volume of breast milk in postpartum mothers was 5.47 ± 2.282 mL for the case group; while 5.89 ± 1.768 mL for the control group.

Table 3.
Differences in the volume of breast milk before and after being given almond juice in the experimental group

Case Group	Volume of Breast Milk			*P value*
	Mean	**SD**	**N**	
Before	5.473	2.281		0.000
After	327.927	26.595	15	

There was a significant difference observed in the volume of breast milk before drinking Almond juice in the case group with a P value of 0.000. Breast milk volume increases as much as 322,454.

Table 4.
Differences in the volume of breast milk before and after being given almond juice in the control group

Control Group	Volume of Breast Milk			P value
	Mean	SD	N	
Before	5.893	1.768		0.000
After	198.570	24.860	15	

There was a significant difference observed in the volume of breast milk before drinking Almond juice in the case group with a P value of 0.000. Breast milk volume increases as much as 192,677.

Discussion

From the observation period, it was noted that the majority of respondents in the age group of 20-35 years were 23 respondents (77%), while a small number of respondents (7 respondents) were in the age group more than 35 years (23%). According to Hidayati (2012), the ages of 20-35 years are considered as a healthy reproductive period for pregnancy, childbirth, and breastfeeding because it allows exclusive breastfeeding support. On the other hand, the ages less than 20 years is considered to be physically, mentally, and psychologically immature in dealing with childbirth, pregnancy, and breastfeeding. The majority of respondents belong to the multipara parity group with 24 people (80%), while a small proportion is primiparas, namely 6 respondents (20%). A study conducted by Ida Ayu (2015) strengthens this idea with the fact that both primiparas and multiparas have a fast onset of lactation so that parity does not affect the onset of lactation ($p > 0.05$).

There was a significant difference in the volume of breast milk before Almond juice was given in the case and control groups based on measurements (P value 0.000). The Academy of Pediatrics reported that there is an increase in breast milk volume from day to day. The average milk volume on day 1 is 7 mL, day 2 is 14 mL, and day 3 is 38 mL.

Based on table 3, it can be concluded that the volume of breast milk given almond juice is the same as the experimental group or the control group. The results describe 5.47 ± 2.282 mL with a range of 0-10 for the case group; while 5.89 ± 1.768 mL with a range of 3-10 for the control group.

Various other studies have also found the same results. The volume of milk at the beginning of breastfeeding in postpartum mothers tends to be low. That is strongly influenced by pain, comfortable position in doing breastfeeding, nutrition, and delays in hospitalization. Respondents from the case group were shown to secrete more volume of breast milk than the control group

(327,927 ± 26,595 mL vs 189,570 ± 24,860 mL) after being given almond juice. The increased volume of breast milk was higher in the respondent group given almond juice. This was due to the lactogogum contained in it which increased the level of secretion and milk production. Besides that, the fat composition found in almonds has low level of cholesterol.[1]

The results of a study at the Institute of Obstetrics and Gynecology, Government Hospital for Women and Children, Chennai, showed the effectiveness of almond powder composition in increasing milk production.[7] In addition, massage using almond oil, according to research findings, is an effective alternative therapy for increasing the adequacy of breast milk.[8]

Breast milk volume also increased in respondents who did not consume almond juice because the volume of breast milk would increase in nursing mothers physiologically from the first week to the end of the first year and would decrease again. This was conveyed by the pediatrician association. According to the Indonesia pediatrician association, milk production on the first and second days indeed very little but production will increase rapidly on the fifth day and remain stagnant from the sixth week onwards.[3] According to Elisabeth (2015) in the first week of birth, the volume of breast milk is around 50-100 mL and increases in the second week to reach 400-500 mL.[12]

Limitation

There are some mothers who add milk so that the almond juice tastes better.

Conclusion

Most of the respondents were in the range of 20-35 year old and multipara parity with a prevalence of 77% and 80%. The volume of breast milk in mothers who were given almond juice increased significantly compared to those who did not receive almond juice.

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Stunting Risk Prediction Application in Pendeglang Regency, Banten Province, Indonesia

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Abstract

Background: *The World Health Organization* (WHO) states that Indonesia is among the third countries with the highest prevalence of *stunting* toddlers in the Southeast Asian region. There is short-term *stunting* causing growth failure, motor and cognitive barriers, metabolic disorders, and non-optimal physical size of the body. In the long term, *stunting* affects brain development, thereby reducing intellectual capacity, impaired structure and function of nerves and brain cells that are permanent.

Purpose: To determine stunting risk prediction model

Methods: Used in stages 1 and 2 is a *mixed method* to determine the determinants associated with stunting events and is used as a basis for building a stunting risk prediction model, with a sample of 170 mothers who have children aged 24-59 months. In stages 3 and 4 there isala h stage of building the system and conducting trials to test the effectiveness of the application carried out on mothers who have children aged 6-24 months and analyzed using the Spearmank Rank test.

Result: This study shows that 60% of mothers who have children aged 6-24 months state that stunting risk prediction applications are effective. The average value of all variables is in the excellent category, namely system quality (23.53), information quality (21.97), service quality (22.30). User satisfaction (13.50) and net profit (13.33). The Spearman Rank test showed that there was a correlation between system quality (0.808), information quality (0.866), service quality (0.929), user satisfaction (0.890) and net profit (0.850) with application effectiveness. The strength of correlation across all variables is very strong with a positive direction.

Conclusion: The application has proven to be effective for stunting risk prediction. If it is good for the quality of the system, information, application services, the more effective the application is to use because it provides satisfaction and benefits for users.

Keywords: Application, Stunting

Introduction

Indonesia is one of the developing countries that has serious problems related to the next generation of the nation, namely children with disorders in body growth known as short or *stunting*. The Health Data and Information Center of the Republic of Indonesia in 2018 explained, that in 2017 it was found that 22.2% of toddlers in the world were *stunted* and more than half of them came from Asia (55%) [4,18]. The World Health Organization (WHO) stated that Indonesia is among the third countries with the highest prevalence of

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stunting toddlers in the Southeast Asian region with an average prevalence in 2005-2017 of 36.4% .[18]

Stunting is caused by chronic malnutrition and repeated infections during the First 1000 Days of Life (HPK). This condition can be found in pregnant women with pregnancy complications, such as chronic lack of energy (SEZ), anemia and having other infectious diseases, pregnant women are said to be at risk of SEZ if the results of measuring the circumference of the upper arm < 23.5 cm. Basic Health Research (Riskesdas) in 2018 showed that the prevalence of SEZ risk in pregnant women aged 15-49 years was 17.3%. SEZ is caused by insufficient energy and protein intake. The cause of malnutrition in pregnant women and children in Indonesia is inseparable from the economic level of the community which is still concerning. Especially now with the COVID-19 pandemic, there are many work stoppages and lack of sales levels, bringing families increasingly to the poverty line. This circumstance, of course, affects the family's ability to meet the nutritional needs of the body. The body with malnourished conditions is very vulnerable to various diseases, so it also affects the growth and development of children.[4,5]

The impacts that can occur in children who experience a lack of nutritional intake for 1000 HPK include low cognitive abilities and intelligence of children in the future. In the short term, *stunting* causes growth failure, motor and cognitive barriers, metabolic disorders, and non-optimal physical size of the body. In the long run, *stunting* affects brain development so that it decreases intellectual capacity, impaired structure and function of nerves and brain cells that are permanent causing a decrease in the ability to absorb lessons in school and affecting its productivity as an adult.[14]

Banten is a province with a high *stunting* rate. The results of Nutritional Status Monitoring (PSG) in 2017, the average stunting (combined stunting and *severe stunting*) in toddlers 0-23 months is 20% and Banten Province is at this threshold. In toddlers aged 0-59 months, Banten Province is also at the average threshold of *stunting*, which is 29.6% (Siswati, 20218). In 2018, the prevalence of *stunitng* toddlers was 33% (stunting 16.6%, *severe stunting* 16.4%) and the highest was in Pandeglang Regency at 38.6%. The purpose of this study was to find a stunting risk prediction instrument in the form of a website application as a promotional and preventive effort against *stunting* events.[5]

Methods

1. Research design

The overall research took place from September 2021 to July 2022. Phase 1 and 2 research using *mixed methods* was carried out in February-March 2022 in the Kaduhejo Health Center area and the Bangkonol Health Center area, Pandeglang Regency, Banten Province.

2. Setting and samples

Qualitative methods: The source of information consisted of 10 main informants, namely the main caregivers of toddlers aged 24-59 months who were stunted. The supporting informants are 10 nutrition officers, 1 village head, 10 cadres and 10 toddler families. As many as 10 key informants are village midwives in the main informant's residence.

Quantitative methods: The sample was a mother who had a toddler aged 24-59 months who used *purposive sampling.*

3. Measurement and data collection

Before the qualitative and quantitative research was carried out, the researcher had received a letter of approval from the Pandeglang Health Office and from respondents in the form of a signed approval sheet. Phase 3 and 4 research using the *cross sectional* method was conducted in May-July 2022 at the Wanakerta Health Center, Karawang Regency, West Java Province. In stage 3, an analysis was carried out using PLS-SEM to obtain determinants of stunting. This stage is the stage of designing and testing a *stunting* risk prediction model. The trial was conducted on 30 respondents, namely mothers who had toddlers aged 6-24 months. Respondents can enter the application through the www.mencegahstunting.com page, On the homepage there are some basic questions related to the age, gender and height of children under five. Furthermore, entering the consultation menu, there were 25 questions and the results provided conclusions in the form of stunting risk factors in the first 1000 days of life, namely from pregnancy to babies born two years old. At the end, the conclusion will come out that the results of the prediction of children are at risk of stunting or not at risk. Next is to assess the effectiveness of the application using a google form that contains questions about the quality of the system, the quality of information, the quality of service (5 questions each), user satisfaction and net profit (3 questions each).

4. Data analysis

Qualitative data were analyzed using data triangulation and theory. Quantitatif data were analyzed using the Chi Square test with a meaningfulness level of 95%.

Result

Of the 30 respondents, 18 (60%) said that stunting risk prediction applications are effective. The assessment of the application is carried out on 5 items and the results are obtained:

Table 1.

Average Score of Application Assessment

Variable	N	Mean	Median	Std. Deviation	Minimum	Maximum
System Quality	30	23,53	25,00	2,013	19	25
Information Quality	30	21,97	21,00	2,341	18	25
Quality of Service	30	22,30	22,00	2,277	19	25
User Satisfaction	30	13,50	13,50	1,333	12	15
Net Profit	30	13,33	13,00	1,493	10	15

From table 2 shows that the average value of system quality is 23.53 with a standard deviation of 2.013, information quality of 21.97 (standard deviation of 2.341). Quality of Service 22.30 (Standard Deviation 2.277), User Satisfaction 13.5 (Standard

Deviation 1.333) and Net Profit 13.33 (Standard Deviation 1.493). It can be said that the overall stunting risk prediction application is considered effective and very useful.

Table 2.
Correlation of System Quality, Information Quality, Service Quality, Customer Satisfaction and Net Profit with Application Effectiveness

Variable	Application Effectiveness			
	Sig. (2tailed)	Correlation Coefficient	Correlation Value	Correlation Direction
System Quality	0,000	0,808	Very Strong	+
Quality of information	0,000	0,866	Very Strong	+
Quality of service	0,000	0,929	Very Strong	+
Customer satisfaction	0,000	0,890	Very Strong	+
Net profit	0,000	0,850	Very Strong	+

The results of the analysis using the Spearmank Rank test showed that all variables with a p value of < 0.05 which means that there is a correlation between all variables and the effectiveness of the application. All variables have a correlation strength value of > 0.80, which means that the correlation between system quality, information, service, customer satisfaction and net profit with application effectiveness is very strong and in a positive direction. It can be said that the better the quality of the system, the more effective the application used, the higher the user satisfaction, the more effective the application used.

Discussion

Based on the results of statistical analysis, it shows that the majority of mothers who have children aged 6-24 months who use stunting risk prediction applications state that the application is effective. For system quality, information, service, customer satisfaction and net profit the majority of the average is in the excellent category. The results of the correlation analysis show a correlation with a very strong correlation strength in a positive direction. This means that the better the quality of the system, the more effective the application, or the better the quality of information, the more effective the stunting risk prediction application will be.

Effectiveness is a way of assessing how well a program is performing by measuring predetermined indicators. A program is said to be effective if the established indicators are achieved. To find out the effectiveness of a program, it must measure how well it works. Measurement of the effectiveness of stunting risk prediction applications was only carried out in this study, because this application was newly created and did not exist before, so there are no previous studies that can support the results of research on the effectiveness of this application. [9]

The first indicator of stunting risk prediction applications is that the quality of the system is a combination of hardware and software in the information system. System quality is a measure that can be used to determine the success of an Indictaor system that is used to measure the quality of DeLone and McLean's systems, namely the convenience of access, the flexibility of the system, the reliability of user expectations. The next factor is the quality of information relating to the characteristics of the output produced as a result of the use of a system. The quality of information can be judged by accuracy, timeliness, ease of understanding, completeness, relevance, security and consistency.[9]

Another factor of the application is the quality of service with indicators of measuring service quality namely responsiveness, assurance, empathy. Next is user satisfaction which is determined by the user experience with satisfaction measurement i.e. effective efficiency. User satisfaction in terms of the quality of information provided in an application must be comprehensive since input-process-output. Another factor that becomes a series of applications is net benefits, namely the impact of the existence and use of information systems on the quality of user performance both individually and organizationally, including productivity, increasing knowledge and reducing the length of time for searching for information.[8,10]

In this study, the majority of users stated that they were very satisfied with the stunting risk prediction application used. This application is a new instrument offered as a promotional and preventive effort against stunting events. In this application, stunting risk predictions are assessed based on knowledge of nutrition during pregnancy, history of exclusive breastfeeding, history of supplementary feeding, support from health workers, socioeconomics, history of pregnancy, history of infectious diseases, height and age of the baby. This application is easily accessible with any smartphone and is easy to use so that it helps health workers and mothers who have children under 2 years old in getting information.

According to researchers, the resulting stunting risk prediction application is mostly good because there has not been a similar application before. In addition, the basic concept of this application is promotive and preventive so that mothers who have children identified as at risk of stunting can immediately improve the child's condition according to the remaining time span before reaching two years. For mothers who have children already before two years, if stunting has been identified, they can immediately take their children to health care facilities, so that the long-term impact of stunting is sought to be as minimal as possible.

Conclusion

From phase 1 and 2 research conducted in Pandeglang Regency, Banten Province, several determinants were found as a basis for designing a stunting risk prediction application model in stages 3 and 4. Furthermore, an application effectiveness test was carried out on 30 mothers who had children aged 6-24 months. It was obtained that the majority stated that the application predicted the risk of stunting effectively and the average value on the variables of system quality, information quality, service quality, user

satisfaction and net profit of the application showed good value. Bivariate analysis shows that there is a correlation between system quality, information quality, service quality, user satisfaction and net profit with the effectiveness of stunting risk prediction applications, with the strength of correlation across all variables is very strong with a positive direction.

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THE EFFECT OF PERINEAL MASSAGE ON THE SPONTANEOUS PERINEAL RUPTURE IN MATERNITY MOTHERS

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Abstract

Background: Perineal rupture is the main cause of postpartum maternal bleeding. Postpartum bleeding is the main cause of 40% of maternal deaths in Indonesia. The number of cases of maternal deaths decreased from 4,999 in 2015 to 4912 in 2016. Perineal rupture is caused by parity, birth spacing, infant weight, labor delivery, cunam extraction, vacuum extraction, tool trauma and episiotomy.

Purpose: The aim was to examine the effect of perineal massage on spontaneous perineal rupture among labor mother at the Paramitra Medika 1 Clinic in intervention and control groups.

Methods: This research was used pre-experiment by using static group comparison. The sample size was 30 labor mother who consisted of 15 in the experimental group and 15 in the control group. Observation form as an instrument. Univariat and bivariate variable were used and used paired t-test with alpha 0,05.

Result: The results showed that 60.0% of mothers given perineal massage did not experience perineal rupture, the average rupture was 1.47 with a standard deviation of 0.64 and as many as 46.7% of mothers who were not given perineal massage had a secon degree rupture, on average rupture is 1.40 with a standard deviation of 0.986. Perineal massage has an effect on the spontaneous perineal rupture in maternal (p value 0.008).

Conclusion: It was expected that further study, such as sample are pregnant women so that the massage results are not different.

Keywords: Labor, Perineal Massage, Spontaneous Perineal Rupture.

Introduction

Data of worldwide in 2015 were 2,7 million cases of rupture perineum in maternity mothers. This data was estimated to reach 6.3 million by 2050, along with increasing data of midwives who did not know how well midwifery care.[1]

In Asia, rupture perineum was also a considerable problem in society, 50% of

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incidence of the rupture perineum in the world occurs in Asia. The prevalence of labor with rupture perineum in Indonesia has in 25-30 years old was 24%, while in maternity mothers 32-39 years old was 62%. Perineal rupture is one of causes in postpartum maternal hemorrhage.[2]

Perineal trauma is a common problem seen after vaginal delivery, which has negative effects on different aspects of women's lives. Poor skin elasticity has been introduced as a predictor of perineal trauma. Due to its complications in severe cases, it has negative effects on the physical, psychological, and social aspects of women's lives.[3]

Perineal massage is a well-known treatment modality that has been shown to stimulate nerve endings in the skin, enhance perineal blood circulation, improve the elasticity and ductility of perineal tissue, broaden the vaginal opening, reduce the probability of perineal incision, and reduce perineal tear. In addition, it facilitates vaginal delivery and probably reduces the risk of perineal injury by stimulating the child's head during childbirth.[4]

Postpartum hemorrhage is the leading cause of 40% of maternal deaths in Indonesia. The number of maternal deaths decreased from 4,999 in 2015 to 4912 in 2016 and in 2017 (first semester) as many as 1712 cases.[5]

In West Java Province, the cause of maternal death in 2015 was caused by bleeding was 46 (30.8%) cases, hypertension was 35 (23.4%) cases, infections were 7 (4.6%) cases, circulatory system disorders were 10 (6.7%) cases, metabolic disorders were 3 (7.0%) cases and others were 48 (32.2%) cases.[5] Based on the recording and reporting of public health center and hospitals in Bekasi City in 2014, the number of maternal deaths was 22 peoples.

The results of presurvey conducted in January 2019 at the Paramitra Medika 1 Bekasi Clinic on 10 maternity mothers, obtained as many as 7 mothers (70%) experiencing perineal rupture. In interview with the midwife were confirmed that no efforts have been made to prevent perineal rupture such as by doing perineal massage.

From the results of the presurvey above, researchers were interested in conducting a study with the title "The Effect of Perineal Massage Administration on the Incidence of Rupture Perineum Spontaneous Pada Ibu Bersalin at the Paramitra Medika Clinic 1 in Bekasi".

Method

1. Research design

The type of research used in this study was quantitative with pre experiment design. This design was used to reveal cause-and-effect relationships by involving only one group of subjects, so that there was no control for these variables. The design in this study is static group comparison, the existence of a comparison or control group.

2. Setting and samples

This reasearch did in Paramitra Medika Clinic 1 in Bekasi.

3. Intervention (applies to experimental studies)

In this research used sample was 15 mothers in experiment group who gave perineal massage and 15 mothers in control group who did not give anything.

4. Measurement and data collection

The purpose of collecting data for this study was observation sheets.

5. Data analysis;

Analysis for this research with paired t test with p value 0,05.

Results

Table 1.

Characteristics of Respondents

Variable	Category	Sum	Percentage
	18-20 years	2	6.7
	2 1-25 years	6	20.0
Age	26-30 years	10	33.3
	31-35 years	9	30.0
	3 6-40 years	3	10.0
Total		**30**	**100**
	First (G1)	9	30.0
Pregnancy	Second (G2)	16	53.3
	Third (G3)	5	16.7
Total		**30**	**100**

Based on table 1, it is known that the most age is 26-30 years old, which is 10 mothers (33.3%), the most pregnancy is the first pregnancy (G2) which is 16 mothers (53.3%).

Table 2.

Frequency of Spontaneous Perineal Rupture Incidence in two groups

Variable	No Tearing	1st degree	2nd degree	3rd degree	N
Experiment group	9 (60%)	5 (33,3%)	1 (6,67%)	0 (0%)	15 (100%)
Control group	3 (20%)	4 (26,7%)	7 (46,7%)	1 (6,7%)	15 (100%)

Based on this table showed the frequency of no perineal rupture in mothers who gave perineal massage (experiment group) was 60%, while mothers who did not give perineal massage (control group) was 20%.

Table 3.

Normality test

Variable	Skewness	Std. Error	Desc.
Experiment group	1.085	0.580	Normal
Control group	-0.315	0,580	Normal

Based on table 4.4 above, each variable has a skewness value and an er r or standard, if the *skewness* value divided by the standard *err* or produces a number ≤ 2, then the distribution is normal, if the data is normally distributed, it can be continued for the test (*t dependent*).[6]

Table 4.
Effect of Perineal Massage on Spontaneous Perineal Rupture In Maternity Mothers

Result	Mean	SD	T-Test	*p-value*	N
Experiment group	0,47	0,640	-3.108	0.008	15
Control group	1,40	0,910			15

Based on the results of the analisis bivariate test in table 4 above, the statistical test results were obtained p-value = 0.008 (*p-value* $< \alpha = 0.05$) which means that there was effect of perineal massage with spontaneous perineal rupture in maternity mothers at Paramitra Medika Clinic 1 In Bekasi.

Discussion

Based on this research of results obtained was 60.0% of mothers who were given perineal massage did not experience perineal rupture and 46.7% of mothers who were not given perineal massage experienced 2nd degree perineal rupture.

Perineal rupture is a tear that occurs at the moment when the baby is born either spontaneously or by the use of tools or actions. Perineal tears generally occur in the midline and can become widespread if the head of the fetus is too fast. Perineal tearing occurs in almost all primiparas.[7]

The perineum consists of the skin and muscles between the vagina and rectum. When head of the fetus appear in the vagina, the perineum naturally stretches to give the fetus a way out. Perineal massage performed in the last months of pregnancy increases hormonal changes that soften the connective tissue, so the perineal tissue is more elastic and stretches more easily. At the same time trains the future mother to actively relax the perineum when feeling pressure when the baby's head appears. This can also reduce pain from stretching. Increased elasticity of the perineum will prevent the occurrence of perineal tears and episiotomy. Perineal massage is also very important for successful hypno-birthing.[8]

In line with research conducted by Savitri (2014), the effect of perineal massage on primigravida on the incidence of perineal rupture during childbirth at the Independent Practice Midwife in Bengkulu City in 2014. The incidence of perineal rupture in the intervention group after perineal massage was only 21.4%.[9] Dartiwen's research (2015) The Effect of Perineal Massage on Primigravida on the Incidence of Perineal Lacerations During Childbirth in Independent Practice Midwives (BPM) Working Area of the Margadadi Health Center, Indramayu Regency in 2015, the results of research conducted on 45 primigravida, namely the incidence of perineal lacerations in the Experimental group after perineal massage was carried out only 13.3%.[10]

Same with Anggraini's research (2015), entitled the relationship between perineal massage and birth canal tears in primiparous maternity mothers in BPM South Metro District, Metro City in 2015. The results showed the results that out of 70 mothers with tears who did not do perineal massage as many as 46 people. Research by Dartiwen (2015), Effect of Perineal Massage on Primigravida on the Incidence of Perineal Laceration During Labor, namely the incidence of perineal laceration in the

control group 63.3%.[11]

Based on the table of research results, p-value = 0.008 (p-value < α = 0.05) was obtained, which means that there was effect of perineal massage decrease the incidence of spontaneous perineal rupture in maternity mothers at the Paramitra Medika Clinic 1 in Bekasi.

Perineal tearing can actually be prevented with a very simple method and can be done by everyone, namely by doing a massage on the perineal area. Research shows, that massage of the perineal area reduces tearing and possible episiotomy, improves the ability of the perineum to stretch at the time of opening during I labor, improves blood flow, nourishes the tissues around the perineum, and reduces the use of other labor aids. Many mothers feel a change in the stretching power of their perineal area after one to two weeks of massage.[8]

The theory states that by doing regular perineal massages after 34 weeks of gestation, it can help the muscles of the perineum and vagina become elastic, thereby reducing the risk of tearing and episiotomy. This may also be supported because the mother is properly placed and gets the right way to support the perineum during childbirth.[11]

Antenatal Perineal Massage (APM) reduces the incidence of episiotomy and increases the incidence of women with an intact perineum after vaginal delivery. It also reduces the risk of flatus incontinence after childbirth without increased maternal or neonatal complications. Women should therefore be counseled on the likely benefits of APM and the information provided during antenatal care. Obstetricians should consider the technique as routine prenatal care for nulliparous women so as to reduce the incidence of perineal trauma during vaginal birth.[12]

Based on the results of this study, in the experimental group there were 9 mothers who did not experience the perineal rupture event, while in the control group it was found that as many as 3 mothers did not experience the perineal rupture event, as many as 7 mothers experienced the 2nd degree of rupture and 2 mothers experienced the 3rd degree of rupture. From the results, it can be seen that in the experimental group that did not experience more rupture degree events when compared to the control group.

In the opinion of researchers from this research was still mothers who do perineal massage but have a perineal rupture of 2nd degree who mothers on 18 years old

and pregnancy is now the first pregnancy, opinion of researchers the tearing that occurs is something that can happen in connection with the age of the mother who is still young, with that age the perineum is usually still is very stiff and thick so it is very likely that if you do not do exercises for the elasticity, it will be torn and based on the results of observations it was also seen that mothers often forget and lazy to do recommendations from researchers, where researchers recommend to daily perineal massage which is carried out in the morning and evening but in the observation results it can be seen that the mother did not carry out the recommendations that have been conveyed by the researcher.

If the perineal massage is done regularly, the benefits can be felt. For best results, perineal massage needs to be done constantly every day. The result will not be obtained within a day. In addition, the occurrence of perineal tears is also influenced by several factors, namely maternal, fetal and auxiliary factors. Maternal factors include a fragile perineum, primigravida, narrowness of the lower door of the pelvis, flexibility of the birth canal, straining too strongly, partus prespitatus, and childbirth with such actions as vacuum extraction, forceps. Factors of the fetus include a large fetus, an abnormal position, and shoulder dystocia. Helper skills, including how to lead straining when the opening is complete and contractions have arisen, how to communicate with the mother, keterampilan holding the perineum at the time of expulsion of the fetal head, and at the time of the position of meneran.

According to researchers, perineal massage has various advantages that are pseudo-aimed at reducing the incidence of trauma during childbirth. The advantages include stimulating blood flow to the perineum which will help speed up the healing process after childbirth, helping the mother relax more during vaginal examination (*Vaginal Touche*), helping to mentally prepare the mother for the pressure and strain of the perineum when the baby's head is about to come out and avoiding episiotomy or tearing of the perineum during childbirth by increasing the elasticity of the perineum.

Limitation

There are limitations in this study was the implementation of perineal massage was not carried out by the researchers themselves so that the results of the massage could differ from one respondent to another.

Conclusion

As many as 60.0% of mothers who gave perineal massage did not experience perineal tearing, and 46.7% of mothers who did not give perineal massage experienced a degree 2 rupture. There was effect of perineal massage for reducing spontaneous perineal rupture in maternity mothers at the Paramitra Medika Clinic 1 in Bekasi (p value 0.008). Researchers argue that the sooner a perineal massage is performed, the better the results will be. Within a few weeks after performing a perineal massage, the mother will feel that the perineal area becomes more elastic. Perineal massage can be given or done when pregnant women take mother's classes.

Acknowledgment

Conflict of Interest

There is no a conflict of interest among authors.

Author contribution

The first, second, and third authors played a role in this research and data processing, the second author revised the discussion formulation for the article.

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The Influence of Reproduction Media and Animation Videos on Knowledge and Attitudes Regarding Reproduction and Sexuality in Elementary School Students

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Abstract

Background: Sexual violence in children occupies the highest position, 50% -62%. The Indonesian Child Protection Commission (KPAI) released that in early 2018, there was 117 sexual violence against children, while in 2017, there were 393 cases in Schools plays an important role in increasing students' knowledge and sexual education. So far, sex education has been implemented only with the introduction of reproductive organs, forms of violation, danger and impact. Furthermore, the children try to find other knowledge to satisfy their curiosity.

Purpose: To determine the effect of media flipcharts and video animation on knowledge and attitudes about reproduction and sexuality in elementary school students.

Method: Experimental research with one group pretest-posttest design in which the design consisted of one group then observed (pretest), after which intervention was given in the form of counselling using flipchart media and animated video and then observed again (posttest).

Result: difference test in two measurements paired-samples T-Test which showed the average of students' knowledge before giving information about reproduction and sexuality using flipchart media and animated videos on students, which was an average of 7.72 and the average after a given intervention to 10.64. While the attitude of students before being given information about reproduction and sexuality by using the media flipchart and animated video is an average of 32.96, and after being given an intervention, the average becomes 35.34.

Conclusions: It was concluded that the media of flipcharts and animated videos influence knowledge and attitudes about reproduction and sexuality in elementary school students. Thus, the school is advised to provide reproductive and sexual education by applicable norms and can use flipcharts and animated videos.

Keywords: Attitude; Knowledge; Reproduction; Sexuality.

Introduction

Sexual violence against children occupies the highest position, namely 50% - 62% of other forms of violence against children.[1] WHO defines child sexual abuse/abuse as the involvement of a child in sexual activity which is not fully understood. There is no explanation for it which violates the norms and rules of society.

Child sexual abuse is an activity between a child and an adult or another child that aims to satisfy another person's needs.[2]

Sexual violence against children is one of the many reproductive health problems that Indonesia is currently facing. The Indonesian Child Protection Commission (KPAI) released that at the beginning of 2018, there was 117 sexual violence against children, while throughout 2017, there were 393 cases (Akbar NA, 2018).

Sexual violence cannot be separated from the role of the family and school. Schools and families have a responsibility to help children understand their sexual health. However, with limited access to school, the family has an important role in providing early sex education to their children. But in reality, parents still need support and facilitation to have the ability to provide sex education to their children.[4]

Even though teachers think that sex education is important in this modern era, it turns out that they still consider sex education a taboo thing to talk about.[5] Early childhood sex education includes an introduction to reproductive organs and how to keep them clean. The impact of giving sex education will be intact if it is integrated with parents so that children have a good understanding and are not misinterpreted.[6] The impact of giving sex education will be intact if it is integrated with parents so that children have a good understanding and are not misinterpreted.

Given that parents have an important role in the growth and development of their children, building communication between parents and children needs to be done in introducing children's reproductive organs, their functions and how to care for them.[1] Several factors influence sexual behaviour and sexual education programs, including family values, parental relationships and the lack of information and knowledge about sex from both parents and teachers at school.

Method

1. *Research design*

   This was an experiment with a one-group pretest-posttest design.

2. *Setting and samples*

   The research was conducted at SD Negeri 01 Dukuh with 50 students as respondents.

3. *Intervention (applies to experimental studies)*

   A group was given a pretest, after which intervention was given in the form of flipchart media and infographic-based animated videos regarding reproductive health education and was observed. Then, a posttest was carried out.

4. *Measurement and data collection*

   Sampling technique with purposive sampling. The instrument in this study was the observation sheet.

5. *Data analysis;*

   Data analysis in this study was univariate and bivariate analysis with Paired T-Test. The software used is the SPSS application.

Results

Univariate Analysis

Table 1.

Distribution of Average Knowledge of Students Before and After Given Reproductive Health and Sexuality Education to Students

Knowledge	Mean	Median	Modus	n	Min	Max	Std. Deviation
Pretest	7.72	7	7	50	3	13	2.382
Posttest	10.64	11	11		5	15	2.164

Based on the table above, it can be explained that prior to conducting Reproductive Health and Sexuality education, the average knowledge of students was 7.72. Meanwhile, after conducting health education about reproductive health and sexuality, the average knowledge of students became 10.64. So it is said that there is a change before and after education is given. Based on the results of data processing and the specific objectives of this study, namely to find out the description of students' knowledge before and after being given information about reproduction and sexuality, the results obtained were the average value (mean) of knowledge before being given reproductive health and sexuality education (pretest) of 7. 72 with a Standard Deviation of 2.382 and after the intervention of reproductive health and sexuality (posttest), the average knowledge increased to 10.62 with a Standard Deviation of 2.164. It can be seen that the mean difference between before and after education is 2.92.

Table 2.

Distribution of Average Student Attitudes Before and After Provided Reproductive Health and Sexuality Education to Students

Attitude	Mean	Median	Modus	n	Min	Max	Std. Deviation
Pretest	32,96	32,50	31	50	26	40	3,410
Posttest	35,34	36,00	37		40	40	3,173

Based on the results of data processing and the specific objectives of this study, namely to find out the description of students' attitudes before and after being given information about reproduction and sexuality, the results of the average value (mean) of attitudes before being given reproductive health and sexuality education (pretest) were 32.96 with a Standard Deviation of 3.410, and after being given reproductive health and sexuality education (posttest) 35.34, with a Standard Deviation of 3.173. It can be seen that the mean difference between before and after education is 2.38.

Bivariate Analysis

Table 3.

The Influence of Turnsheet Media and Animated Videos on Knowledge of Reproduction and Sexuality in Students

Variable	Measurement	n	Mean	SD	SE	P Value
Knowledge	Pretest	50	7.72	2.382	.337	0,000
	Posttest		10.64	2.164	.306	

Table 3 shows the results of the two-measurement difference test (Paired T-Test), which shows that before the educational intervention on Reproductive health and Sexuality in Students, the average student knowledge was 7.72 (st. Deviation 2.382) and after being given an educational intervention on health Reproduction and Sexuality in Students The average knowledge of students is 10.64 (st. Deviation 2.164). The results of the Paired T-Test analysis show a P-Value of 0.000 <0.05, so it can be concluded that Flipchart Media is influenced before and after being given education on student knowledge.

Table 4.

The Influence of Leaflet Media and Animated Videos on Attitudes Regarding Reproduction and Sexuality in Students

Variable	Measurement	n	Mean	SD	SE	P Value
Attitude	Pretest	50	32.96	3.410	.482	0,000
	Posttest		35.34	3.173	.449	

Table 4 shows the results of the two-measurement difference test (Paired T-Test), which shows that before the educational intervention on Reproductive Health and Sexuality in Students, the average student attitude score was 32.96 (st. Deviation 3.410) and after the educational intervention was given about Reproductive Health and Sexuality in Students the average value of students' attitudes is 35.34 (st. Deviation 3.173). The results of the Paired T-Test analysis show a P-Value of 0.0001 < 0.05, so it can be concluded that Flipchart Media is influenced before and after being given education on student attitudes.

Discussion

In line with research in 2013 regarding education using flipchart media for workers on K3 knowledge, it found an increase in knowledge in the group that was given education with flipcharts. The average value before health education was 11, while after being given health education using flipchart media, the average value of

knowledge increased to 14. Therefore, it was concluded that flipchart media and animated videos could affect one's knowledge of certain things because the media flipcharts and animated videos are displayed according to the information and need to be addressed.[8]

Based on the results in 2019 analysis of questionnaires using educational media such as posters, videos, flipcharts, leaflets and modules obtained an average score of students' attitudes before being given health education was 10.23 and after being given health education was 11.86. The statistical test results obtained a mean difference of 1.62, so it can be concluded that there are differences before and after the provision of reproductive health and sexuality education to students.

Based on the results in 2016, the average change in knowledge of the respondents in the pretest group before counselling was -0.04, while in the posttest group, it was 3.20. The results of the statistical test obtained a probability value of 0.000, meaning that at alpha 5%, there is an average difference in changes in respondents' knowledge scores before and after counselling between the two groups, so it can be said that there is a significant effect of counselling using flipchart media on changes in K3 hazard knowledge and prevention in welding workshop workers in Ciputat, Pisangan Village in 2014.[9]

In line with Saban's research (2017) on the educational use of video compared to leaflet media for female students at SMAN 2 Ngaglik Sleman, audiovisual video media is more effective in increasing health knowledge than using flip chart media. Research subjects who are given health education using video will more easily understand information because it activates more senses than just using flipcharts. Information from this video will add to your understanding so that your knowledge can be better.

Limitation

The limitation of this study is that it was only carried out in one group.

Conclusion

It was concluded that the media of flipcharts and animated videos influence knowledge and attitudes about reproduction and sexuality in elementary school students. Thus, the school is advised to provide reproductive and sexual education by applicable norms and can use flipcharts and animated videos.

Ethical Considerations

The ethical commission has reviewed this research.

Acknowledgement

Conflict of Interest

There is no conflict of interest.

Author contribution

The first, second, and third authors play a role in research and data processing. The correspondence author makes revisions to the formulation of discussions for articles.

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ANALYSIS OF SEXUAL ORIENTATION IN ADOLESCENTS AT JUNIOR HIGH SCHOOL JAKARTA

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Abstrack

Background: In adolescence, sexual urges will appear more easily, there is a possibility of choosing a non-heterosexual sexual orientation. To prevent this, it is necessary to be identified in early adolescence.

Purpose: to determine the sexual orientation of adolescents at SMP 1 Barunawati Jakarta and to analyze the relationship between perceptions, attitudes, parenting styles, intensity of access to pornography, environment and trauma to sexual orientation using the Chi Square statistical test.

Methods: This research is a descriptive study with a cross-sectional research design with a research instrument using a questionnaire. The population in this study were all students of class VII and VIII at SMP 1 Barunawati Jakarta with a total sample of 139 people.

Results: Based on the results of univariate analysis, it was found that 67.6% of adolescents were heterosexual and 32.4% were at risk of non-heterosexuality. Meanwhile, the results of the bivariate analysis showed that the variables of perception, attitude and intensity of access to pornography had a significant relationship to sexual orientation with P values of 0.000, 0.009 and 0.003.

Conclusions: Students at SMP 1 Barunawati Jakarta have a sexual orientation that is in accordance with societal norms. Perceptions, attitudes and intensity of access to pornography have a significant relationship to the formation of sexual orientation. It is hoped that midwives can detect changes in sexual orientation in adolescents from an early age so that they can be treated immediately.

Keywords: Adolescent, Heterosexual, Non-Heterosexual, Sexual Orientation

Introduction

A common sexual orientation in society is heterosexuality, while homosexuality is considered a deviation from the sexual orientation of society [1]. Deviant sexual orientation followed by deviant sexual behavior will have a very detrimental impact, especially the health impact on both the perpetrator and society [2].

Current estimates of lesbian, gay, bisexual, and transgender (LGBT) cases in America show that from 11 million people in the United States there has been an increase from 4.5% in 2017 to about 5.6% of the U.S. adult population in 2020. In Canada the number of homosexuals is about 1% of the total population from the age of 18–59 years [1]. Based on a CIA (Central Intelligence Agency) survey in 2015 Indonesia is the country

with the 5th largest LGBT population in the world after China, India, Europe, and America.

The Indonesian Ministry of Health stated that the number of sexual orientations in Indonesia reached 780 thousand people, statistic data described 58.3% of men classified as bisexual, 5.6% of women are lesbians and 0.7% are transgender [3]. The Ministry of Health of the Republic of Indonesia stated that there are 5 provinces with the highest number of LGBT people in Indonesia, namely West Sumatra recorded approximately 18 thousand people, DKI Jakarta there are around 43 thousand people, Central Java around 218 thousand people, East Java around 300 thousand people and West Java there are around 302 thousand people as LGBT [4].

Based on the estimated cause of death of the world's population by 2030, deaths from HIV/AIDS continue to increase. Effective HIV/AIDS prevention strategies can be applied when the main risk factors for the spread of HIV/AIDS are correctly identified [1].

Gays, bisexuals, and other men who have sex with men (LSL) are the highest risk groups for HIV infection (Cherry et al., 2017). Based on WHO data in 2019, there are 78% of new HIV infections in the Asia Pacific region. For aids cases the highest for the last eleven years in 2013, which was 12,214 cases. UNAIDS (United Nations Programme on HIV and AIDS) stated that the incident had a major impact on the number of HIV/AIDS cases in Indonesia reaching its peak in 2019, which was 50,282 cases.

Based on initial observations at Barunawati 1 Junior High School Jakarta, there are female students who look like male students (tomboys), there are 2 female students who are often together both in class and outside the classroom, and when PJOK (Physical Education, Sports, and Health) subjects, both male and female students often change clothes in groups and not infrequently female students defecate in the toilet in groups.

Based on the survey above, researchers are interested in the phenomenon that occurs in schools to conduct a study entitled "Analysis of Sexual Orientation in Adolescents at Junior High School Jakarta".

Method

1. Research design

This research uses a descriptive type of research with a Cross sectional research design where independent variables (causal/risk factors) and dependent variables (effect factors/influence factors), are collected at the same time which means that the measurement of subject variables is carried out at the time of examination and the researcher does not follow up on the measurements made.

2. Settings and samples

The study was conducted in January 2023 at Barunawati 1 Junior High School Jakarta. The population in this study was all students of grades VII and VIII at Barunawati 1 Junior High School Jakarta which amounted to 214 people and obtained a total sample of 139 people using Proportionate stratified random sampling and Simple random sampling techniques.

3. Measurement and data collection

The research instrument used in this study is in the form of a questionnaire or questionnaire adopted and modified from Wijayanti's research in 2022 [5]. The instrument used in this study is intended to produce accurate data, namely by using the Likert scale. There are 7 categories of questionnaires, namely about sexual orientation, perceptions about LGBT, attitudes about LGBT, parenting, intensity of pornography access, environment and trauma. Validity and Reliability The instrument used in this study is the validity of Corrected Item-Total Correlation. With the results of the r-table calculation of 0.361 and the value of Cronbach's Alpha Coefficient of 0.6 with the number of respondents 30 people. The collection of research data was carried out by the researchers themselves by distributing questionnaires accompanied by BK (Counseling Guidance) teachers.

4. Data analysis

Data analysis using SPSS (Statistical Package for the Social Sciences) software with a test using the Chi Square statistical test with a meaningfulness limit (α) = 0.05 provided that the null hypothesis is accepted when the p value ≥ 0.05 (p value $\geq$ α) means that the statistical test shows no significant relationship, while the null hypothesis is rejected if the p value < 0.05 (p value $<$ α) means that the statistical test shows a relationship between the free variable and the related variable.

Results

Based on the characteristics, it is known that the subjects of the study were mostly (61.9 %) had a positive perception (against) of sexual orientation, most (71.2 %) had a positive attitude (against) towards sexual orientation, most (66.2 %) had democratic parenting, most (66.9 %) had a low intensity of access to pornography, most (60.4 %) had a positive environment and most (66.9 %) did not experience trauma.

The results showed that the perception, attitude, and intensity of pornography access had a significant relationship with sexual orientation because the P Value < 0.05.

Table 1.
Characteristics of Respondents

Variables	Sum (n)	Percentage (%)
Sexual Orientation		
Risk of non heteroseksual	45	32,4
Heteroseksual	94	67,6
Total	139	100
Perception		
Negatif	53	38,1
Positif	86	61,9
Total	139	100

Attitude		
Negatif	40	28,8
Positif	99	71,2
Total	139	100
Parenting		
Authoritarian	16	11,5
Democrntic	92	66,2
Permissive	31	22,3
Total	139	100
Intensity of pornographic access		
Hight	46	33,1
Low	93	66,9
Total	139	100
Milieu		
Negatif	55	39,6
Positif	84	60,4
Total	139	100
Trauma		
Yes	46	33,1
No	93	66,9
Total	139	100

Table 2.
Characteristics of Respondents with Sexual Orientation

Characteristic	Sexual Orientation				P Value
	Non heterosexual risk		Heteroseksual		
	n=45	%	n=94	%	
Perception					
Negatif	32	60,4	21	39,6	0,000
Positif	13	13,1	73	84,9	
Attitude					
Negatif	20	50	20	50	0,009
Positif	25	25,3	74	74,4	
Parenting					
Authoritarian	1	6,3	15	93,8	0,055
Democratic	32	34,8	60	65,2	
Permissive	12	38,7	19	61,3	
Intensity of pornographic access					0,003
Hight	23	50	23	50	
Low	22	23,7	71	76,3	
Milieu					
Negatif	18	32,7	37	67,3	1,000
Positif	27	32,1	57	67,9	

Trauma					
Yes	19	41,3	27	58,7	0,165
No	26	28	67	72	

Information: P Value = Chi Square Test

Discussion

The results showed that some adolescents had a positive perception (against) of sexual orientation and bivariate analysis showed that the value of P = 0.000 (P< 0.05) could be concluded that perception has a significant relationship with adolescent sexual orientation.

In research in 2018 shows that there is a relationship between perception and LGBT stikma. The facts show a negative view that occurs more due to social constructions in society that consider that LGBT is deviant behavior [6]. The formation of perceptions is influenced by the environment (both social and family) and religion. Poor perceptions of LGBT people drive teens away from such deviant behavior. Based on research in 2018 Individuals who have LGBT identity are unable to understand their own religion[7].

In terms of positive law and moral norms, there is no justification when sexual orientation deviations become legal in Indonesia [8]. In terms of LGBT religious law, it is contrary to Law Number 1 of 1974 concerning marriage, that the essence of a marriage is to obtain legal offspring by channeling biological desires led by Sharia law. While LGBT actions themselves are contrary to the principles and rules of marriage [9].

The results showed that some adolescents had a positive attitude (against) towards sexual orientation and bivariate analysis showed that the P value = 0.009 (P< 0.05) could be concluded that attitudes have a significant relationship with adolescent sexual orientation.

In research in 2020 shows that a person who has friends with a sexual orientation will tend to be kind and tend to have significantly low sexual prejudices, compared to someone who has low contact or has no contact with sexually oriented friends at all, they tend to think badly gays and lesbians, and tend to have higher sexual prejudices [10].

Based on the theory proposed in 2021 states that the perception process will affect attitudes and behavior. Perceptions and attitudes are things that become an interconnected whole. In adolescents who have a positive perception (oppose) tend to have a positive attitude (against) also towards deviations in sexual orientation and vice versa [11].

The results showed that some adolescents had democratic parenting and bivariate analysis showed that the value of P = 0.055 (P> 0.05) could be concluded that parenting did not have a significant relationship with adolescent sexual orientation.

This is contrary to research in 2019 showing a relationship between parental parenting and sexual orientation tendencies, students who have democratic parenting with sexual orientation tend to be low [12]. However, according to research conducted in 2020 states that the relationship level of respondents raised with democratic parenting tends to be low, indicating that parenting is not the only factor that causes a person to

deviate sexual orientation. [13].

Other external factors such as the search for parenting after adulthood, because the parenting style applied by children who were taken care of as a child was taken care of with neglectful (neglectful/ negligent) patterns. Parenting by ignoring the role of one of the parents also increases the chances of sexual orientation deviations. The role of parental education is no less important, John Locke said that the purpose of education is the formation of disposition, human development as moral, physical and mental roundness. Individual behavior can also be obtained through a continuous learning process. In the hope that individuals who receive higher education will not have the potential for homosexual orientation [13].

The results showed that some adolescents had a low intensity of access to pornography and bivariate analysis showed that the value of $P = 0.003$ ($P < 0.05$) can be concluded that the intensity of access to pornography has a significant relationship with the sexual orientation of adolescents.

This is in line with a research survey conducted by Hawskin states that people who watch porn once a week are at 13.09% risk of being bisexual. While those who watch movies several times a week are at 19.73% risk of being bisexual, and those who watch porn every day are at 23.01% risk of liking the same sex and the opposite sex [14].

Theory shows that there is a spread of information media and sexual stimulation through mass media, namely with the existence of sophisticated technology such as the internet, magazines, television, video. Teenagers tend to be curious and eager to dabble and want to imitate what they see and hear, especially because teenagers in general do not know the full sexual problems of their parents. Hormonal development in adolescents is spurred by exposure to mass media that invites curiosity and provokes the desire to experiment in sexual activity [15].

The results showed that some adolescents had a positive environment and bivariate analysis showed that the value of $P = 1.000$ ($P > 0.05$) could be concluded that the environment did not have a significant relationship with the sexual orientation of adolescents.

This is in line with research conducted on 2017 which states that there is no meaningful relationship between the social environment and sexual orientation in adolescents[1]. However, contrary to research conducted in 2022 states that the environment has a significant effect on sexual orientation[16].

In theory, the environment triggers the occurrence of deviations in sexual orientation, for example due to wrong associations. In making friends, it is appropriate for us to "choose" friends who have good behavior. When someone befriends a person who belongs to LGBT, there is a tendency that he or she will become a member of LGBT [17]. However, the questionnaire instrument used by the researcher did not specifically discuss the social environment with someone who tends to have a deviant sexual orientation but rather general activities carried out by respondents both in family, social and school settings.

The results showed that some adolescents did not have trauma and bivariate analysis

showed that the value of P = 0.165 (P> 0.05) can be concluded that trauma does not have a significant relationship with adolescent sexual orientation.

This is contrary to the results of a literature study conducted in 2018 states that experiences or traumas in childhood such as, the violence experienced by children in terms of physical, mental and sexual aspects that make a woman hate all men. Trauma to social and environmental habits such as when the child is in a separate school dormitory between men and women can invite gay and lesbian relationships [18].

Based on the theory, trauma in general is the emotional and psychological stress that results from unpleasant or violence-related events or experiences that cause undue stress [19]. But from the view of psychology, the American Psychiatric Association (APA) removed the diagnosis of homosexuality as a mental disorder from the reference diagnosis of mental health experts or the Diagnostic and Statistical Manual (DSM) edition II. In Indonesia, according to the Guidelines for the Classification and Diagnosis of Mental Disorders (PPDGJ) also does not consider sexual orientation including homosexuals to be mental disorders or disorders. The condition that a phenomenon is considered a disorder or mental disorder is characterized by the presence of suffering (distress) and inability (disability). Homosexuals can be called mental health disorders, if a person feels uncomfortable with their sexual orientation [20].

Limitations

In this study, there are still limitations with the large number of variables and questionnaires of questions being less specific.

Conclusion

There is a significant relationship between the perception, attitude and intensity of pornography access and the sexual orientation of adolescents. What can be recommended for both the social and family environment is to shape adolescent perceptions and attitudes that sexual orientation is something that deviates and is not legalized from both positive laws and religious norms. And teachers and parents should always pay attention to children's consumption of spectacles so as not to fall into deviant orientation behavior.

For BK (Guidance Counseling) teachers in the future, they can work with counselors who have competence (professional) to provide more in-depth counseling related to sexual orientation in adolescents at the junior high school level. Further researchers are expected to discuss more specifically one of the variables so that the questionnaire of questions can be more specific and with this research it is hoped that the midwife profession will be able to reduce the rate of HIV/AIDS transmission that occurs due to this sexual orientation phenomenon.

Ethical Considerations

This research has earned an ethically worthy statement from Komisi Etik Penelitian Kesehatan (KEPK) Prima Indonesia University.

Conflict of Interest

No conflict of interest.

Authors Contribution

AHP compiles and designs research analyzes and interprets data and prepares a draft of the manuscript. AHP, PA, and VS were involved in the analysis and interpretation of the data. PA and VS mutually reviewed the manuscript. All authors read and approved the final manuscript.

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OPTIMIZATION OF ANEMIA PREVENTION IMPROVEMENT AMONG TRIMESTER II PREGNANT WOMEN THROUGH EDUCATIONAL VIDEOS AT SALEMBARAN JAYA HEALTH CENTRE TANGERANG REGENCY

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Abstract

Background: Anemia is a condition in which the number of red blood cells or the capacity of red blood cells to carry oxygen is insufficient to meet physiological needs. Anemia pregnant women are pregnant women with Hb levels <11.0 g/dl who are examined at the first visit (K1). Pregnant women with anemia have a higher risk of giving birth to babies with iron deficiency anemia which can last throughout the child's early years and inhibit the growth of the child's brain cells and other body cells, resulting in delayed growth and development.

Purpose: To determine the average value and influence on the knowledge and attitudes of second trimester pregnant women before and after being given educational video counselling.

Methods: This quasi-experimental study used a one group pretest-posttest design. The sample in the study was 58 pregnant women. The sampling technique used purposive sampling. The research instrument consists of a questionnaire about questions aimed at respondents regarding anemia causes, characteristics, impact, prevention, how to overcome, treatment, good habits to prevent anemia.

Result: The results showed that there was a significant effect on the average value before and after being given educational video counselling to second trimester pregnant women at the Salembaran Jaya Health Center, Tangerang Regency.

Conclusions: Health education for pregnant women is very important so that pregnant women are expected to participate in every counselling activity to increase knowledge and attitudes to prevent anemia. characteristics, impact, prevention, how to overcome, treatment, good habits to prevent anemia.

Keywords: Anemia, Anemia in Second Trimester Pregnant Women, Educational Video

Introduction

Pregnancy is a physiological process that occurs in women as a result of fertilization between male sex cells and female sex cells. In other words, pregnancy is the fertilization of

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the ovum by spermatozoa, so that it undergoes nidation in the uterus and develops until the birth of the fetus.[1]

Pregnancy usually lasts 40 weeks or 280 days, from the first day of the last menstrual period. Pregnancy that passes 294 days or 42 weeks is a postdate pregnancy, a diagnosis of gestational age of more than 42 weeks is obtained from calculations such as the Neagle formula or with the height of the uterine fundus. Post term pregnancy has an influence on fetal development until fetal death. There are babies whose weight continues to increase at 42 weeks or more, some do not increase, some are born with less weight than they should, or die in the womb due to lack of food or oxygen. Post term pregnancy has a close relationship with mortality, perinatal morbidity, or macrosomia. Meanwhile, the risk for post term mothers can be in the form of postpartum haemorrhage or increased obstetrical procedures.[2]

Most women experience anemia during pregnancy, both in developed and developing countries. The World Health Organization (WHO) estimates that 35-75% of pregnant women in developing countries and 18% of pregnant women in developed countries experience anemia. However, many of them have anemia at the time of conception, with an estimated prevalence of 43% in non-pregnant women in developing countries and 12% in more developed countries.[3]

Anemia is a condition in which the number of red blood cells or the capacity of red blood cells to carry oxygen is insufficient to meet physiological needs. Anemia pregnant women are pregnant women with Hb levels <11.0 g/dl who are examined at the first visit (K1). Pregnant women with anemia have a higher risk of giving birth to babies with iron deficiency anemia which can last throughout the child's early age and inhibit the growth of the child's brain cells and other body cells, resulting in delayed growth and development.[4]

The impact of pregnant women who are not compliant in consuming Fe tablets and experience anemia, the impacts that can be caused include decreased immune function, increased risk of infection, decreased quality of life so that it will have an impact on miscarriage/abortion, bleeding which can result in maternal death, premature birth from 9 months, babies are born with low body weight (BB<2500gr) and short (PB<48 cm), and if the mother is in a state of severe anemia, the baby is at risk of experiencing stillbirth.

World Health Organization (WHO) the prevalence of anemia in pregnancy globally reaches 38.8% or 32 million pregnant women experience anemia and the prevalence of anemia during pregnancy in Southeast Asia reaches 48.2%. The prevalence of anemia in pregnant women in Indonesia is based on Riskesdas data for 2018, with the proportion of anemia in pregnant women in Indonesia reported at 48.9%.[4] Data from the World Health Organization (WHO) estimates that around 33% of people in the world suffer from anemia, with iron deficiency considered as the main cause, and anemia accounts for nearly 9% year to year with disability problems. It is also estimated that around the world 32 million pregnant women are anemic and 496 million non-pregnant women are anemic.

In Indonesia it is estimated that the prevalence of anemia in pregnant women is 37.1% and the proportion is almost the same between urban areas (36.4%) and rural areas (37.8%) Then the prevalence of anemia in pregnant women increased by 48.9% and the proportion was almost the same between urban (48.3%) and rural areas (49.5%).[4] Data from the Salembaran Jaya Health Center, the prevalence of anemia in pregnant women in January 2022 was 1.44%,

then it increased in the next 6 months to 4.03% and during the year the incidence of anemia in pregnant women was 4.22%.[5]

Based on the above data, efforts that can be made to increase pregnant women's knowledge about anemia are through the provision of information or health education from health workers. One of the factors that influence the health education process is the tools or media used to convey information. Media information that is conveyed in an interesting way can help recipients of the information easily receive and learn the message conveyed so that they adopt positive behavior. This states that interesting media will provide confidence, so that cognitive affective and psychomotor changes can be accelerated.[12]

Audiovisual media is a health education media that combines 2 elements, namely audio and visual. This media is a learning medium that is varied and creative so that it can increase motivation and make it more interesting to use as a media for health education. In addition, video media has a significant influence on increasing the knowledge of pregnant women. This is because pregnant women find it easier to grasp the information provided by using these 2 elements, namely audio and visual elements.[6]

Study data found that pregnant women in the Puskesmas area did not know what anemia was, the causes and signs and symptoms of anemia during pregnancy. Bearing in mind, the impact of anemia during pregnancy is one of the indirect causes of maternal death and previous research data shows that pregnant women's knowledge about anemia is still low. The results of a research reported that students were very interested in using videos by 52.08% compared to using leaflets by 41.67%, because the videos contained many pictures compared to using leaflets. Health education using video media is more effective in increasing health knowledge than using flip chart media.[11]

Methods

1. Research design

The research design used a quasi-experiment with the one group pre post test approach.

2. Setting and samples

This research was conducted at the Salembaran Jaya Health Center, Tangerang Regency in December-January 2023. The sample in this study were 58 pregnant women in the second trimester who were selected by purposive sampling with the criteria of being willing to become suspects, second trimester pregnant women who checked their pregnancies at the Salembaran Jaya Health Center.

3. Intervention)

The samples will be given educational video counselling.

4. Measurement and data collection

The data were collected using a questionnaire to assess changes in knowledge and attitudes of pregnant women consuming blood supplement tablets.

5. Data analysis;

Data analysis using univariate analysis, t test and Wilcoxon test.

Results

Table 1.

Frequency distribution of age from respondents

Variables	Videos	
	frequency	**Percentage (%)**
age		
20-35 Years	50	80.6
< 20 and > 35 years	12	19,4
Total	62	100

Table 2.

Frequency distribution of education characteristics of respondents

Variables	Videos	
	frequency	**Percentage (%)**
Education		
Low	38	61.3
High	24	38,7
Total	62	100

Table 3.

Frequency distribution of respondents' knowledge characteristics before and after being given video media

Knowledge Variables	frequency		Percentage (%)	
	Pretest	**Posttest**	**Pretest**	**Posttest**
Not enough	40	8	64.5	12,9
Enough	13	19	21	30,6
Good	9	35	14.5	56.5
Total	62	62	100.0	100.0

Table 4.

Frequency distribution of respondents' attitude characteristics before and after being given video media

Attitude Variables	frequency		Percentage (%)	
	Pretest	**Posttest**	**Pretest**	**Posttest**
Negatives < 30	53	9	85.5	14.5
Positives > 30	9	53	14.5	85.5
Total	62	62	100	100

Table 5.

The average value of knowledge and attitudes of pregnant women before and after being given counseling with video media

Variables	test	N	MeanValue	Different Means
Knowledge	Pretest	62	7.35	**3.54**
	Posttest	62	10.89	
attitude	Pretest	62	25.94	**8,27**
	Posttest	62	34,21	

Table 6.

Results of the normality test for the knowledge variable

Variables	N	mark Kolmogorov Smirnov	Asymp sig (2-tailed)
Knowledge	62	**0.094**	**0.200**

Table 7.

The average value of increasing knowledge of pregnant women before and after being given video media

Variables	test	Means	Sig (2-tailed)
Knowledge	Pretest Posttest	**-3,532**	**0.000**

Table 8.

Normality test results on the attitude variable

Variables	N	mark *Kolmogorov Smirnov*	*Asymp sig (2-tailed)*
attitude	62	**0.141**	**0.004**

Table 9.

The average value of attitude improvement in pregnant women before and after being given video media

Variables	N	Wilcoxon results Z-values	Asymp sig (2-tailed)
Attitude	62	**-6,533**	**0.000**

Discussion
Univariate Analysis

Based on univariate analysis table 1 and 2 the characteristics of the age respondents are known as the frequency the most age is 20-35 years with a total of 50 people (80.6%). Meanwhile, based on univariate analysis, it is known that the educational characteristics of the respondents are known to have a low level of education (SD-SMP) with a total of 38 (61.3%).

Age is very important in relation to a person's level of knowledge. The older a person is, the more experience he has, and vice versa. Age can also affect a person's memory and memory. The older a person is, the more knowledge will be obtained.[7]

The education level of the mother is related to the mother's knowledge and ability to understand the health information that the mother gets so that the mother can implement healthy behaviors during pregnancy.[8] The education of a person lives has an influence on increasing the ability to think, where a person with a higher education will be able to make more rational decisions, generally open to accept changes or new things compared to individuals with a lower education. The higher the education, the easier it is to live independently, creatively and sustainably.[9]

According to the researchers, the factors that influence the incidence of anemia in pregnancy are education, environmental and social factors, increasing client health professional interactions, knowledge, age, family support. In terms of trust, people who are more mature will be trusted more than people who are not mature enough. Lack of experience causes limited knowledge that the mother has. The relationship between the age of pregnant women and adherence. This is as a result of the experience and maturity of his soul. The more mature a person is, the way of thinking is more mature to make changes in behavior.

Education will influence pregnant women in choosing, evaluating and deciding something that is good for their own health and pregnancy. Sensing someone through sight and hearing will produce a knowledge. Higher education will affect a person's knowledge and tend to get easier information about health during pregnancy and its benefits so that pregnant women are more quickly motivated to improve health during pregnancy.

Based on table 3 The results obtained from 62 respondents obtained the frequency of pretest knowledge before being given video media, the level of knowledge was less than 40 pregnant women (64.5%), the level of knowledge was sufficient, 13 pregnant women (21%) and the level of knowledge was lacking, 9 pregnant women (14.5%). Meanwhile, the frequency of posttest knowledge after being given video media, the level of knowledge was lacking 8 pregnant women (12.9%), the level of knowledge was sufficient 19 pregnant women (30.6%) and the level of good knowledge was 35 pregnant women (56.5%).

In line with the theory of Notoatmodjo, which explains a person's cognitive processes to gain a sense of knowing in remembering information will be obtained from the activities carried out and it takes approximately several days to be calculated after obtaining the information. The cognitive process dimension consists of remembering, understanding, applying, analyzing, evaluating and creating. The dimensions of remembering and understanding can be obtained by memorizing more efficiently in certain circumstances. Media is a tool for education which is a channel for conveying health information.[12]

According to the researchers, learning media provides great benefits in the learning process for both instructors and respondents. Learning media functions and is useful for clarifying teaching materials, making it easier for instructors to convey and present material in a systematic, varied and structured manner, as well as providing a fun and not boring experience.

Based on table 4 The results obtained from 62 respondents obtained that the frequency of pretest attitudes before being given video media had a negative attitude of 53 pregnant

women (85.5%) and a positive attitude of 9 pregnant women (14.5%). Meanwhile, the frequency of posttest attitudes increased after being given video media had a negative attitude of 9 pregnant women (14.5%) and a positive attitude of 53 pregnant women (85.5%).

This is in line with the results of research on 2021 in South Africa that video media has the potential to be an effective health promotion tool. This provides an opportunity to enhance health promotion programs due to its low cost, ability to have virtual communities and ease of access that removes geographic barriers. This allows information to spread much more quickly and regardless of the credibility of the information source.[10]

According to researchers that attitude can be formed or learned throughout development and related to the object. In this study, the attitude of pregnant women to identify and prevent anemia in pregnancy can be influenced by the video media that has been given.

Analysis Bivariate

The results of the analysis are based on table 5 with N = 62 data it can be seen that the Kolmogorov-Smirnov value is 0.094. The Kolmogorov-Smirnov significance value shows a value of 0.200, which means that the data is normally distributed, because the significance value is > 0.05. Thus, the requirements or assumptions of normality in using the paired sample t test are met.

The results of the analysis are based on table 6 the results of the paired sample t test are determined by the significance value. The significance value (2-tailed) < 0.05 indicates a significant difference between the initial variable and the final variable. It can be concluded that there is an increase in the level of pretest knowledge before being given video media and posttest after being given video media with a mean value of -3.532 so that the result is a significant value (2-tailed) 0.000 <0.05 indicate a significant difference.

This result is in line with the previous research that reportedstudents were very interested in using a video of 52.08% compared to using a leaflet of 41.67%, because the video contains a lot of pictures compared to using a leaflet. The results of research report that health education using video media is more effective in increasing health knowledge than using flip chart media.[11]

Audiovisual media is a health education media that combines 2 elements, namely audio and visual. This media is a learning medium that is varied and creative so that it can increase motivation and make it more interesting to use as a media for health education. In addition, video media has a significant influence on increasing the knowledge of pregnant women. This is because pregnant women more easily capture the information provided by using these 2 elements, namely audio and visual elements.[6]

According to the researcher, providing counseling with video media about anemia significantly increases knowledge of pregnant women, increased knowledge can be seen from the results of the posttest after being given video media compared to the pretest before being given video media, this shows that providing health education using video media is better for understanding and understood.

The results of the analysis are based on table 7 with N = 62 data it can be seen that the Kolmogorov-Smirnov value is 0.141. The Kolmogorov-Smirnov significance value shows a value of 0.004 which means that the data is not normally distributed, because the significance

value is <0.05. Thus, the requirements or assumptions of normality in using the paired sample t test cannot be fulfilled, so the test is carried out using the Wilcoxon statistical test. In table 4.6. The results of the Wilcoxon test analysis on maternal attitudes are presented pretest before being given video media and posttest after being given video media.

The results of the analysis are based on table 8 the results of the attitude pretest before giving video media and posttest attitudes after giving video media, obtained a value of z = -6.533 and p-value = 0.000 which means "Ha is accepted" then video media is found to be effective in influencing health counseling to pregnant women about anemia at the Salembaran Health Center Jaya Tangerang Regency.

The value of Asymp.Sig (2-tailed) < 0.05, namely 0.015, that Ha is accepted, and Ho is rejected so it can be concluded that there is an increase in knowledge by counseling using video media and leaflets, where in the video media group showed better results on knowledge.

According to the researcher, it can be seen from the results of the analysis that attitudes can be formed or learned throughout development and related to the object. In this study, the attitude of pregnant women to know and prevent anemia in pregnancy can be influenced by video media that have given pregnant women more easily to understand and understand.

Limitation

Researchers realize there are limitations in the implementation of this research. The limitations of this research are the short research time and the time in filling out the questionnaire is also less efficient because the respondents are sometimes busy with their activities so that answering questions is faster so there is a possibility of bias in filling out the questionnaire.

This study used direct counseling with video media in which researchers had to collect samples from each posyandu, in this case the researchers had difficulty collecting samples because at the time of the research it required a considerable distance so with the help of the village midwife team at the Salembaran Jaya Health Center, Tangerang Regency who collects samples so that researchers can conduct counseling.

Researchers adopted the previous research questionnaire, because they had not been able to make a validated questionnaire because it required a long time. Researchers used previous research media so that there were slight differences in material such as fulfillment in order to avoid anemia having to consume fruits and vegetables. There were slight differences in what fruits and vegetables should be consumed.

Conclusion

In the results of the frequency distribution of the characteristics of the age and education of the respondents. The highest frequency of ages 20-35 years is 80.6%, while the frequency of low education is 61.3%. The pretest knowledge before being given educational videos with less knowledge was 64.5%, while the posttest knowledge score with good knowledge was 56.5%. The results of the attitude pretest before being given the educational video had a negative attitude of 85.5%, while the posttest attitude results had a positive attitude of 85.5%. The average value of pretest and posttest knowledge before and after being given an educational video was 3.54. The average value of pretest and posttest attitudes before and after

being given an educational video was 8.27. There is a significant effect of providing educational videos on the knowledge and attitudes of second trimester pregnant women.

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ANALYSIS FACTORS OF THE PHYSICAL ENVIRONMENT ON THE RISK OF STUNTING IN PREGNANT WOMEN

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Abstract

Background: Stunting can occur before delivery due to inadequate nutrition during pregnancy, the causes of stunting also include social, physical, and biological environmental factors. Based onthe results of the study, it was found that 52 pregnant women in the second and third trimesters with high-risk pregnancies had the potential to give birth to children at risk of stunting.

Purpose: This study aims to determine the relationship between physical environmental factorssuch as sanitation, clean water, family latrines, residential settings, and cigarette smoke pollutantswith the risk of stunting in the working area of the Batu City Health Center, Bogor Regency.

Methods: This type of research is an analytic survey with a cross sectional approach.The research sample was 100 pregnant women. The research was conducted in September2022 usinga questionnaire. Data analysis was performed univariately and bivariately using the Chi Squere statistical test. The frequency distribution of high-risk pregnant women is 52.0%, physicalenvironmental factors are not good sanitation is 68.0%, water is not clean 61.0%, does not have atoilet 55.0%, residential settings are at risk 55.0%, andcigarette smoke pollutants are 67.0%.

Result: The results of statistical tests showed that there was a significant relationship between physical environmental factors and the risk of stunting with a p-value below 0.05.

Conclusion: There is a significant relationship between sanitation, clean water, family latrines, residential settings, cigarette smoke pollutants with a high risk of pregnancy which has the potential for mothers to give birth to children at risk of stunting. It is expected to improve health education for pregnant women even beforeconception to create a superior generation free from stunting.

Keywords: Clean water, Family latrines, Pregnancy, Sanitation, Stunting

Introduction

Stunting is a chronic nutritional problem caused by low dietary intake for a long time due to the provision of food that does not match dietary needs. So that toddlers are declared to have a short length or height compared to age [1]. According to the World Health Organization (2021), the occurrence of stunting in theworld will reach 22% or 149.2 million in 2020. Apart from stunting, another problem that many toddlers experience is

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malnutrition. WHO states that 49% of the 10.4 million under-five deaths in developing countries are related to malnutrition [2].

Indonesia is the third country with the highest prevalence of stunting in the Southeast Asia/Southeast Asia Regional (SEAR) region. Until now, the prevalence of stunting nationally is better in terms of several ASEAN countries, such as Myanmar (35%), but itis still higher than Vietnam (23%), Malaysia (17%), Thailand (16%), and Singapore (4%)[3].

Based on the results of the Indonesian Nutrition Status Study (SSGI) and the Ministry of Health (Kemenkes), the national stunting rate shows improvement, decreasing by 3.3%, from 27.7% in 2019 to 24.4% in 2021. One of the global nutrition targets for 2025 is to reduce the prevalence of stunting, as well as a good step towards achieving the RPJMN target (2020-2024) to reduce stunting rates [4].

Indonesia's Health Profile in the results of a study on Indonesia's nutritional status by the BKPK Ministry of Health of the Republic of Indonesia in 2021, it is known that the proportion of stunting in West Java shows a decrease of 24.5% so that the average decrease in stunting in the last three years in West Java is around 1.35%. West Java Province is one of the provinces with an accelerated reduction in stunting. Based on datareleased by SSGI, out of 27 regencies/cities in West Java, four regencies/cities have a high prevalence of stunting (30-39.9%), namely Garut Regency, Cianjur Regency, Bandung Regency, and Cirebon City [5].

Bogor Regency is one of the priority districts for stunting intervention in West Java. Based on published data on the nutritional status of toddlers in 2022, the prevalence of stunting in Bogor Regency in 2021 will drop to 9.89%, and then in 2022, it will drop to 4.78% [6]. Stunting can occur before birth and is caused by low nutritional intake during pregnancy. There are two factors that cause stunting namely direct and indirect causes.

The direct causes are health-related, such as lack of nutrition and infectious diseases. In contrast, the indirect causes include access to nutritious food, health services, proper sanitation and clean water, and education. According to the Ministry of Health (2018), factors for stunting in children occur before conception and during pregnancy, and after birth. This is consistent with the results of Nirmalasari's research (2020), which revealed that the risk factors for stunting consistently in Indonesia are mother, child, and environmental factors [7].

The causes of stunting are also very complex, including social, physical, and biological environmental factors. Social factors include macro-level political and social policies. In contrast, physical environmental factors include clean water, sanitation, family latrines, residential arrangements, and exposure to domestic pollutants (cigarette smoke and cooking fuel). Meanwhile, for biological factors, there are gender and age of children under five, as well as consumption of micronutrients [8].

Based on data from the Technical Implementation Unit (UPT) of the Kota Batu Publi Health Center in 2022, there are three villages in their working area: Mekarjaya Village, Parakan Village, and Kota Batu Village. Of the villages with 2,885 children, 1.07% or 31 were stunted. Based on the survey above, the researcher is interested in conducting an "Analysis of Physical Environmental Factors on the Risk of Stunting in Pregnant Women

in the Working Area of the Kota Batu Public Health Center, Bogor Regency."

Method

1. Research design

This type of quantitative research uses an analytic survey method with a cross-sectional approach, where the researcher studies the dynamics of the correlation between the independent and dependent variables through an observation approach or data collection is carried out all at once.

2. Setting and samples

Conducting research from December 2022 to January 2023 in the working area of the Kota Batu Public Health Center, Bogor Regency. The population in the study were all pregnant women in the second and third trimesters who had their pregnancies checkedat Kota Batu Health Center, totaling 134 peoples. Sampling technique with Accidental sampling. The number of samples was calculated based on the Slovin formula because the number must be representative so that the research results can be generalized, namely N = N/ (1+ (N x e2)) so that a sample of 100 pregnant women was obtained.

3. Measurement and data collection

Data collection techniques are questionnaires or questionnaires that have been tested for validity and reliability to obtain valid questionnaire items. SPSS software is used to test the validity of the Pearson product-moment test, it is known that the results of the r-table calculation are 0.361, and the reliability test uses Cronbach's alpha below 0.7 with 30 respondents. In this type of closed questionnaire, the respondent only must give a choice of one of the answers that are considered correct with the Guttman scale measurement scale, namely "Yes" and "No," which consists of 25 questions with five variables, namely factors of sanitation, clean water, family latrines, residential settings, and cigarette smoke pollutants. Data collection by distributing questionnaires in the work area of the Kota Batu Public Health Center

4. Data analysis

The data was processed by tabulating data using the Chi-Square statistical test withthe SPSS Windows 25 application. The conclusion of the statistical test is the decision toaccept or reject H0. If the p-value is lower than the value α (0.05), then H0 is rejected. Itis interpreted that the dependent and independent variables have a significant correlation.In the health sector, the risk ratio odds ratio (OR) is used to assess the strength of the corellation.

Results

Based on the characteristics of the respondents, it is known that the majority of pregnant women (52.0%) are at high risk of stunting, 68.0% have poor sanitation, 61.0% have an unclean water environment, 55.0% do not have latrines, 56.0% have risky residences, and 67.0% have smoking families. The results showed that sanitation, water hygiene, family latrines, residential settings, and cigarette smoke significantly correlated with pregnant women's risk of stunting their babies (p-value <0.05).

Table 1.
Characteristics of Respondents

Variable	Sum (n)	Percentage (%)
Stunting Risk		
High Risk	52	52.0
Low Risk	48	48.0
Total	100	100.0
Sanitation		
Not good	68	68.0
good	32	32.0
Total	100	100.0
Water		
Not clean	61	61.0
clean	39	39.0
Total	100	100.0
family latrines		
Do not have	55	55.0
have	45	45.0
Total	100	100.0
Residential arrangements		
risky	56	56.0
No risk	44	44.0
Total	100	100.0
Cigarette smoke pollution		
smoke	67	67.0
Do not smoke	33	33.0
Total	100	100.0

Table 2.
Relationship between Respondent Characteristics and Stunting Risk

Characteristic	Stunting Risk						P-Value
	High Risk		Low Risk		Total		
	f	%	f	%	N	%	
Sanitation							
Not good	30	44.1	38	55.9	68	100.0	0,037
good	22	68.1	10	31.2	32	100.0	
Water							
Not clean	26	42.6	35	57.4	61	100.0	0,032
Clean	26	66.7	13	33.3	39	100.0	
Family Latrines							
Do not have	34	61.8	21	38.2	55	100.0	0,049
have	18	40.0	27	60.0	45	100.0	
Residential arrangements Risky							
	35	62.5	21	37.5	56	100.0	0,030
No risk	17	38.6	27	61.4	44	100.0	
Cigarette smoke pollution							
Smoke	40	59.7	27	40.3	67	100.0	0.047
Do not smoke	12	36.4	21	63.6	33	100.0	

Information: P Value = Chi Square Test

Discussion

Sanitation

The results showed that most of the pregnant women lived in an environment with poor sanitation. The results of the Chi Square test obtained a value of P = 0.037 (<0.05) which means that there is a significant relationship between poor sanitation and pregnant women at risk of stunting in their children.

The results of this study are in line with Olo (2021) which says that children who live in environments with inadequate sanitation have a 40% risk of experiencing stunting. For example, in an environment where garbage is disposed of, it will become a nest for cockroaches, mosquitoes, rats, and others, which is indirectly related to the high incidence of common diseases, especially diarrhea, which will have an impact on the nutritional status of pregnant women [9]. This research is also in line with the results of Zalukhu's research (2022) which shows that there is a significant relationship between sanitation and the risk of stunting [10]. However, the results of Lestari's research (2018) show that KEK is very influential on the incidence of stunting because a poor diet causes susceptibility to infection, thereby inhibiting growth and the risk of stunting in pregnant women and toddler [18].

Researchers assume that most pregnant women with poor sanitation have a high chance of experiencing a high risk of pregnancy which results in babies being born will experience stunting due to behavior that does not maintain environmental cleanliness resulting in poor sanitation, such as there are no landfills which result in environmental pollution so that it disturbs health. There are a small number of pregnant women who have good sanitation but are at low risk of stunting. According to researchers, even though sanitation is good, risk factors can occur due to other factors; for example, diet during pregnancy and non-adherence to taking Fe tablets will experience anemia, thus putting pregnant women at high risk of stunting in their childbirth

Water hygiene

The results showed that there were some pregnant women who did not have clean water for their daily needs. The results of the Chi-Square test obtained a value of P =0.032 (<0.05), meaning that there is a significant relationship between unclean water and the risk of stunting in pregnant women for their children.

Mustika's research (2021) in Torlesse (2016) states that in Indonesia, there is a relationship between poor sanitation and clean water quality as risk factors for stunting. Sources of drinking water are said to be good, namely tap water, springs, and protected wells. The minimum distance between the well and the septic tank or cattle shed, waste disposal, and landfill is about 10 meters [11].

Based on the theory put forward by Nisa (2020) states that the lack of cleanliness of water sources used for daily needs can cause infection with various diseases such as diarrhea and intestinal worms, which will result in digestive disorders, which can reduce weight. If this goes on for a long time and often, it will cause stunting [12].

According to the researchers' assumptions, pregnant women who have poor- quality

water sources will be susceptible to various diseases that affect their pregnancy, causing various complications that put pregnant women included in the high-risk category for stunting in their children. Clean water that is not contaminated will improve public health status, but of course, it is not easy to find sources of clean wateror water treatment that is not according to standards causes water to be easilycontaminated with bacteria.

Family latrines

The results showed that some pregnant women did not have their latrines, so theyused shared latrines. The Chi-Square test results showed a value of P = 0.049 (<0.05),meaning there is a significant relationship between latrine ownership and the risk of stunting in the children they give birth. The OR value is 2.429, which means that mothers who do not have a latrine have 2.429 times the risk of experiencing stunting compared to mothers who have a latrine.

A latrine is one thing that every family must have. A latrine used together allowsfor contamination of the water source from the latrine, which impacts pollution disorders such as diarrhea. The use of healthy latrines is also influenced by knowledge, attitudes, and ownership of latrines [13].

Using a shared latrine or not having a latrine is at risk for diseases such as intestinal worms. Latrines are closely related to worms because they are associated with feces, the transmission medium for worms. Worm or worm infection can cause anemia because people infected with worms can then experience decreased food intakeand malabsorption of nutrients. The incidence of anemia significantly occurs in pregnant women who have worm infections [14].

Olo's research (2021) states that if a family does not have latrine facilities, they will defecate in the open. This is related to the incidence of stunting because this behavior causes environmental pollution due to the spread of germs. If these germs aretouched by a child who is still growing, such as by putting a finger in his mouth, handsthat have been contaminated with germs will infect the intestines. Intestinal infection conditions can be in the form of diarrhea, which can affect nutritional status by reducing appetite and disrupting nutrient absorption, which causes children to experience malnutrition and interfere with growth [9].

The researcher assumes that most pregnant women do not have family latrines and only have shared ones. This happened because the density of settlements meant that there was no land for making a septic tank, so many families used shared latrines.In addition, there is also a need for more awareness about the importance of owning alatrine.

Residential settings

The study results show that some pregnant women have a risky residence. The Chi-Square test results showed a value of P = 0.030 (<0.05), meaning a significant relationship exists between residential settings and the risk of stunting. The OR valueis 2.647, meaning pregnant women whose homes are at risk have 2.647 times the riskof experiencing stunting in their children compared to mothers whose homes are not at risk.

Based on the theory put forward by Agustina (2021), the quality of the living environment can reflect environmental health, which can be seen from indicators of

environmental quality, including residential density, quality of drinking water, conditions of garbage disposal, distance to stables, and environmental cleanliness. Environments with high residential densities, close to trash cans and animal pens, willhave lower health than environments with good residential densities [15]. Poor housingconstruction, such as houses that are too open, houses that are close to livestock pens,and neighborhoods with lots of stagnant water, all of which make the living environment a risk for disease breeding which increases [16].

The researcher assumes that why do most respondents have residential settings that are at high risk of stunting due to the demographics of areas close to rivers, the density of people making settlements close together, and the distance to healthfacilities difficult to reach, which makes most pregnant women at high risk because pregnant women do not get facilities continuous health. Neighborhoods with high residential density, poor sanitation, and poor garbage disposal will also have poor health compared to areas that are not too densely populated.

Cigarette smoke pollution

The results showed that there were some pregnant women who had families who smoked. The results of the Chi-Square test showed a P value = 0.030 (<0.05), which means that there is a significant relationship between cigarette smoke pollutants and the risk of stunting, where pregnant women who are exposed to cigarette smoke for along time will experience health problems, thereby putting their pregnancy at risk. TheOR value is 2.593, meaning that pregnant women who are exposed to cigarette smokehave 2.593 times the risk of experiencing stunting at birth compared to those who arenot exposed to cigarette smoke.

Cigarette smoke is the biggest cause of indoor pollution, and cigarette pollution can cause fetal growth disorders. Nicotine can be absorbed quickly from the respiratory tract into the mother's bloodstream, breast milk, and baby's breath. This pollution accumulates so that the baby suffers from respiratory problems, lung and earinfections, vomiting, diarrhea, increased heart rate, and colic growth disorders. The nicotine and carbon monoxide in cigarettes also cause new blood vessels to narrow. Asa result, the transport of oxygen and nutrients to the fetus is hampered, so the fetus will experience growth disturbances and the development of nerves and other organs [8].

Research conducted by Ayu et al. (2020) stated that smoking behavior is a person's activity which is the person's response to external stimuli, namely the factors that influence a person to smoke and can be observed directly. Human behavior can be divided into three domains, namely, knowledge, attitudes, and skills (psychomotor practice). One of the factors that affect children's growth is exposure to pollution fromcigarette smoke. The ingredients in the form of carbon monoxide and benzene can reduce the number of red blood cells and damage the spinal cord, which will have an impact on the risk of anemia. One of the effects of anemia is a decrease in the numberof nutrients in cells, tissues, and glands, especially the glands that produce the hormonethyroxine and growth hormone. These two hormones greatly influence the incidence of stunting[17].

Researchers assume that smoking behavior or families exposed to cigarette smokeare

the most dominant factors for a high risk of stunting because exposure to cigarettesmoke during pregnancy will cause babies to be born with low birth weight (LBW), which will disrupt the child's growth so that they are at risk experiencing stunting.

Limitations

Limitations in this study are due to the distance and the place that is far from the research location, as well as dense settlements so that access roads that are far from the main road make it difficult for data collection.

Conclusion

There is a significant relationship between the physical environmental factors of sanitation, clean water, family latrines, residential settings, and cigarette smoke pollutants with the risk of stunting in pregnant women for the birth of their children. This research is recommended for families or health workers to further improve health education for pregnant women even before conception to create a superior generation free from stunting.

It is recommended that village midwives and posyandu cadres can play an active role in preventing stunting in children since pregnancy, starting from the process of approaching and assisting families until the baby is born in good co ndition and improving eating patterns, parenting patterns, and improving the environment to increase health status. In future research, research will be carried out on the relationship between genetic factors and parenting styles for stunting in children.

Ethical Considerations

His research has earned an ethically worthy statement from Komisi Etik Penelitian Kesehatan (KEPK) Prima Indonesia University, Number through a review from the ethical commission, Number 022/KEPK/UNRI/I/2023

Conflict of interest

There is no conflict of interest.

Author's contribution

RPP performs research preparation and design and analyzes and interprets data. AHP, SP,and JAS were involved in analyzing and interpreting the data. SP and JAS assisted critically and reviewed the manuscript. All authors read and approved the final manuscript.

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THE RELATIONSHIP BETWEEN PARENTING AND PEERS TOWARDS ADOLESCENT SEXUAL BEHAVIOR AT SMK AL-HUSNA, TANGERANG REGENCY 2023

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Abstract

Background: Adolescence is a transitional period, and in any transitional period, the status of the individual is unclear and the role to be played is questioned. Today's teenage dating style tends to be risky. For example, by kissing, touching sensitive parts to having sexual intercourse before marriage. Such sexual activity violates both religious and social norms. This has to do with parenting and the role of peers.

Purpose: to find out the relationship between parental parenting and the role of peers in adolescent sexual behavior at SMK AL-Husna, Tangerang regency 2023.

Methods: This research is a descriptive study with a cross-sectional research design with research instruments using questionnaires. The population in this study was all class XI and XII students at SMK AL-Husna, Tangerang Regency with a total sample of 74 people.

Result: Based on the results of the study, it showed that there was a significant relationship between parental parenting and adolescent sexual behavior with the results of the Spearman rho test analysis obtained a P value = 0.000 and an r value = 0.404 meaning that the correlation strength is quite strong and the direction of choleration is positive. And there is a significant relationship between the role of peers and adolescent sexual behavior as a result of the Sperman rho test analysis obtained a P value = 0.000 and an R value = 0.447, the value of r correlation strength is quite strong or the correlation direction is positive which indicates the direction.

Conclusion: Students at SMK AL-Husna, Tangerang Regency, have non-risky sexual behavior that is in accordance with community norms. Parental parenting, and the role of peers have a significant relationship to the formation of sexual behavior.

Keywords: Parenting, Peers, Sexual Behavior, Teens.

Introduction

Adolescence is a transitional period, and in any transitional period, the status of the individual is unclear and the role to be played is questioned. Youth groups in Indonesia make up about one-fifth of the total population. The group of adolescents in Indonesia accounts for approximately one-fifth of the total population. This is in accordance with the proportion of adolescents in the world, namely the number of adolescents is estimated at 46 million or 17% of the total population of the world.[1]

According to the 2020 Population Census Data The number of adolescents (aged 10-24 years) is 67 million people or 24%, % of the total population of Indonesia, then adolescents are the focus of important attention in national development., The number of age groups 15-19 years in Indonesia is around 23.1 million population among them, around 11.9 million adolescent boys and 11.2 million adolescent girls.[2]

The large population of this group of teenagers will greatly affect population growth in the future, knowing the very large number of teenagers, then teenagers as the next generation of the nation need to be prepared to become healthy human beings physically, mentally and spiritually. Adolescence is a transition period from childhood to adulthood with a unique transition period, characterized by various physical and psychic changes. Various changes that occur in adolescents can cause problems that can interfere with their development in the future.[3]

A survey by the Indonesian Central Statistics Agency (BPS) in 2021 showed that the Adolescent Pregnancy Rate (AKR) aged 15-19 years reached 11.07 per 1,000 pregnancies. Research by the Central Statistics Agency of DKI Jakarta Province in 2021 found that pregnancies at the age of less than 19 years mainly occur in rural areas with a proportion of 26.18% per 1,000 pregnancies. Births in adolescents also provide a higher risk of maternal death compared to women aged 20-30 years. The birth rate in adolescents accounts for 11% of the total maternal deaths in the world. Adolescents are at risk of unsafe abortions and deaths and more than 65% of adolescents develop fistulas in the reproductive organs due to complications of childbirth.[4]

There are three major cities in Indonesia with the highest number of pregnant students out of wedlock. In fact, one of them was recorded to reach thousands of students pregnant out of wedlock, among which the number of student pregnancies in this city has increased significantly. The latest data in 2021 recorded around 276 cases of pregnancy outside of marriage, then the city of Jogjakarta based on data on the number of students pregnant outside of marriage in 2022 was 45,589 cases.and the last one Madiun Regency early marriage experienced a significant increase even recorded reaching more than 100 percent from the previous year. The increase in the number of pregnant students outside of marriage is due to the Covid-19 pandemic which makes most students unable to do learning at school and spend a lot of their activities through online associations, then family, economic, and social factors. In this case the learners fall into the trap and begin to fall under the influence of promiscuous sex. [5]

According to the Tangerang Regency Women and Children Protection Service (DPAP) in 2016, among the female population, there were 66 cases of pregnant students out of 72 cases outside of marriage, the most at a very young age (<15 years), although with a very small proportion (0.02 %), mainly occurring in rural areas (0.07%). The proportion of pregnancies in adolescence (15-19 years) was 1.97 percent, rural (2.71%) higher than urban (1.28%) [6].

Increased sexual behavior leads to many instances of early marriage. The Ministry of pemberdayaan Perempuan dan Perlindungan Anak (PPPA) stated that there was an increase in the number of child marriages during the Covid-19 pandemic, those

under the age of 18 and generally students. And according to the Ministry of National Development Planning / Bappenas about 400-500 girls aged 10-17 years are at risk of early marriage. In 2020 an increase in the rate of unplanned pregnancies as well as the filing of marriage dispensation or underage marriages of more than 64 thousand submissions [7]

According to Elizabeth B.Hurlock, several factors influence a teenager to have sexual intercourse. These factors include developmental factors in themselves, namely coming from the family where the child begins to grow and develop. External factors, namely including school conditions / formal education that play a sufficient role in the development of adolescents in reaching their maturity. Community factors, namely customs, associations and developments in all fields, especially technology that reaches humans.[8]

Parents play an important role in providing the basics of a teenager's personality. Parents play a role in guiding adolescents to make responsible decisions, including regarding sexuality issues. One of the factors that influence first-time sexual intercourse in adolescents is the lack of supervision of parents.

The impact of peer role relationships on sexual knowledge is to change the personality, attitudes and behaviors of adolescents. Meanwhile, the impact of the lack of parental education is the lack of knowledge of sexual information in adolescents so that many adolescents do not know about sexuality in adolescents.[9]

In this era, many parents prefer to use permissive parenting. Parents are more entrusted to the child to carry out all his own activities . Especially in a big city like Tangerang, parents provide very little time and even rarely take the time to communicate with their children. This is due to the increasing busyness of parents so that if the child cannot manage activities or with whom the child associates then most likely the child will do things that should not be done by teenagers, such as having premarital sex.

Based on a preliminary study that the author conducted on September 15, 2022 by interviewing 3 students, alumni and teachers and traders at SMK AL-Husna Pasir Nangka Village, Tigaraksa District, Tangerang Regency, Banten Province in 2023, about sexual behavior, it is known that there are students who exceed reasonable limits of dating such as mojok in dark places, kissing lips, hugging, even sleeping with their partners, It was also found that there was an incident of getting pregnant out of wedlock at the school. This is supported by the statements of the alumni and teachers and traders around the school who stated that there was an incident of pregnancy outside of marriage, so the student was expelled from the school. The teacher also said many of her students are dating around the school.

Based on the survey above, researchers are interested in conducting a study entitled "The Relationship between Parenting and Peers towards Adolescent Sexual Behavior at SMK AL-Husna, Tangerang Regency in 2023".

Method

1. Research design

This research uses a descriptive type of research with a Cross sectional research design where independent variables (causal / risk factors) and dependent variables (effect factors / influence factors), are collected at the same time which means that the measurement of subject variables is carried out at the time of examination and the researcher does not follow up on the measurements made.

2. Settings and samples

The research was conducted in January at SMK AL-Husna, Tangerang Regency in 2023. The population in this study was all class XI and XII students at SMK AL-Husna, Tangerang Regency in 2023, which amounted to 316 people and obtained a total sample of 74 people using the Proportionate stratified random sampling technique..

3. Measurement and data collection

The research instrument used in this study is in the form of a questionnaire or questionnaire adopted from the research of Utari Ahlina Batubara (2017) 10, Badaki and Adeola (2017) [11], and research Muflih & Endang Nurul Syafitri (2018)[12] The instruments used in this study are intended to produce accurate data, namely by using the Likert scale and the Guttman Scale. There are 3 categories of questionnaires, namely about Parental Parenting, peer roles, and sexual behavior. The collection of research data was carried out by the researchers themselves by distributing questionnaires accompanied by BK (Counseling Guidance) teachers.

4. Data analysis

Data analysis using SPSS (Statistical Package for the Social Sciences) 23.0 For Windows software, with Spearman's rho Statistc Test test There are two stages that are carried out in using this correlation test, namely to find out if there is a significant relationship between parenting, peers and adolescent sexual behavior. [13] test the relationship of the two variables, and if there is a relationship, use the value Sig.(2-tailed), or Deny H0 If a < the value of Sig, and it will be seen how strong the relationship is. The strength of the relationship between two variables is obtained from the value of the Spearman coefficient [14].

Result

Based on the characteristics it is known that the subjects of the study were mostly (58.1 %) Sexual behavior was not at risk, the vast majority (40.5%) were permissive parenting, most (48.6%) peer roles (Low). The results showed that parenting and peer roles have a significant relationship with adolescent sexual behavior

Table 1.
Characteristics of Respondents

Variables	Sum (n)	Percentage (%)
Sexual behavior		
Risk	31	41,9
Not risk	43	58,1
Total	74	100
Parenting		
Permissive	30	40,5
Authoritarian	19	25,7
Democracy	25	33,8
Total	74	100
The role of peers		
High	23	31,1
Keep	15	20,3
Low	36	48,6
Total	74	100

Table 2.
Characteristics of Respondents with Sexual Behavior

Characteristic	Sexual Behavior				R	P Value
	Risk		Not Risk			
	n	%	n	%		
Parenting						
Permissive	17	56,7	13	43,3		
Authoritarian	12	63,2	7	36,8	0,404	0,000
Democracy	2	8,0	23	92,0		
The role of peers						
High	17	73,9	28	26,1	0,447	0,000
Keep	6	40,0	9	60,0		
Low	8	22,2	6	77,8		

Information: P Value = Uji Spearman'rho

Discussion

The results of the Spearman rho test analysis obtained a value of P = 0.000 (P < 0.05) and it can be concluded that there is a relationship between parental parenting and sexual behavior in adolescents. From the results of the analysis, the value of R = 0.404 means that the correlation strength is quite strong and the direction of the correlation is positive, which indicates in the same direction, the more positive the parenting pattern, the better the value of sexual behavior in adolescents, meaning that a person's sexual behavior can be influenced by the parenting style applied by his parents.

This is in line with Amalia's research (2019) that there is a permissive parenting relationship to adolescent sex behavior, and the relationship is negatively patterned, meaning that the more indulgent the parenting style the less good the adolescent sex behavior. Among them have a high-categorical permissive parenting.[15]

In theory Permissiveness is a type of parenting that can be interpreted as a pattern of parental behavior in interacting with the child, which frees the child to do what he wants to do without questioning. This parenting style does not use strict rules and even less guidance is given, so there is no control or control and demands on the child.[16]

The results of the statistical test of the Sperman rho test obtained a value of P = 0.000 (P < 0.05) then it can be concluded that there is a significant relationship between the role of peers and adolescent sexual behavior. From the results obtained also the value R = 0.447, the value of r, the strength of the correlation is quite strong or the direction of the correlation is positive which indicates the same direction, the greater or higher the value of the role of peers, the greater the value of risky sexual behavior in adolescents.

This is in line with the results of research conducted by Kosati (2018) that there is a negativ relationship between the role of peers and risky sexual behavior, there is a relationship between peers and risky sexual behavior in adolescents. The direction of the strength of the relationship is positive which indicates the unidirection, the greater the value of the role of peers, the greater the value of risky sexual behavior.[17]

Positive peers make teenagers not at risk for doing negative deeds such as premarital sex, teenagers who are active in extracurricular activities at school can also make teenagers avoid negative activities because they are more focused on non-academic activities at school than activities that only gather and play with their peers, peers not only have a positive influence but also have a negative influence, among others solidarity, dependence on friends and following what is trending in his circle. This is because teenagers are still unstable in making decisions and are still looking for their identity so that they can be recognized and accepted in their environment. [18]

Limitations

In this study, it still has limitations with the lack of a number of variables, so that researchers can only see from the parenting perspective of parents and peers, the questionnaire questions are less specific.

Conclusion

There is a significant relationship between parenting and the role of peers in sexual behavior. Things that are recommended both to family and peers (social environment) to form good sexual behavior, since premarital sexual behavior is something deviant and is not legalized by law, morals or religious norms. And parents must be able to apply good parenting to children and adolescents, allow adolescents to control themselves, and adolescents to be able to control themselves and not be affected by the wrong things and be able to stay on the right path

It is recommended that BK (Bimbingan Konseeling) teachers in the future can

work with counselors who have competence (professional) to provide more in-depth counseling related to sexual behavior in adolescents at the vocational level, and provide counseling about risky sexual behaviors and their impacts. In addition, the school can hold meetings between parents to provide counseling on good parenting. Researchers are then expected to more specifically discuss one of the variables so that the question questionnaire can be more specific and with this study, it is hoped that the midwife profession will be able to reduce the rate of pregnancy outside of marriage and early marriage, which occurs due to this risky sexual behavior.

Ethical Approval

The study has gone through a review from the ethics commission.

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Conflict of Interest

No conflict of interest.

Authors contribution

AHP Compiles and designs research, conducts analysis and interprets data and compiles the draft manuscript. AHP, PA and VS are involved in the analysis, interpretation of data. PA and VS critically reviewed the manuscript. All authors read and agree on the final manuscript.

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THE EFFECTIVENESS OF GIVING BOILED EGGS AND PAPAYA FRUIT AGAINST CHANGES IN HEMOGLOBIN LEVELS IN PREGNANT WOMEN AT PMB F BEKASI

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Abstract

Background: Anemia in pregnant women is categorized as a global health problem. One of the factors for the high maternal mortality rate is the existence of high-risk pregnancies, diseases that are included in high-risk pregnancies, including anemia. The impact of anemia on pregnant womencan cause obstacles to the growth of the fetus, both body cells and brain cells, abortion, prolonged labor due to lack of uterine thrust, bleeding, and infection.

Purpose: To determine the effectiveness of boiled eggs and papaya fruit on changes in hemoglobin levels in pregnant women at PMB Fitria Wulandari, Bekasi in 2023.

Methods: This study used a quasi-experimental pretest-posttest control group design. The research sample consisted of 30 respondents consisting of 15 people in the intervention group and15 people in the control group. Sampling was done by using total sampling.

Result: The average hemoglobin level of the control group before administration of Fe tablets was 10.687 gr/dl and after consuming Fe tablets was 10.773 gr/dl. While the average hemoglobin level in the intervention group before being given FE plus boiled eggs and papaya fruit was 10.473 gr/dl and after consuming Fe tablets plus boiled eggs and papaya fruit was 11,313 gr/dl. The statistical test results obtained p value: 0.000.

Conclusion: There is an effectiveness in changing hemoglobin levels in pregnant women after consuming boiled eggs and papaya fruit at PMB Fitria Bekasi in 2023. Pregnant women can use eggs and papaya fruit as an alternative option to help increase hemoglobinlevels.

Keywords: Anemia, Boiled eggs and papaya fruit, Hemoglobin levels, FE tablets

Introduction

Hemoglobin is a protein in red blood cells that functions to transport oxygen from the lungs throughout the body. A decrease in the level of hemoglobin in the blood is called anemia. Anemia is caused by many factors including bleeding, low nutrition, iron levels, folic acid, low vitamin B12. The symptoms are weak body, lethargy of firefly eyes and pallor, especially in the conjunctiva, while the increase in hemoglobin levels in the blood is called polycytemi.[1]

The prevalence of anemia globally occurred in 204 countries from 1990 – 2019. Based on data from the World Health Organization (WHO), anemia in pregnant women is categorized as a global health problem with a prevalence of 29.6% in 2018, where in Indonesia itself the latest data from Riskesdas 2018 which states that 48.9% of pregnant women experience anemia. As many as 84.6% of anemia in pregnant women occurs in the age group of 15-24 years.[2]

One of the factors for the high mortality rate of childbirth is the existence of high-risk pregnancies, namely, pregnancies that are accompanied by diseases or conditions that can have a bad impact on the mother or the fetus. The diseases included in high-risk pregnancy include anemia, hypertension, heart disease and diabetes.[3]

Anemia in pregnant women is generally caused by physiological changes during pregnancy and is aggravated by malnutrition. This happens because of the increasing need for iron to supply the fetus and placenta, in order to enlarge tissues and the period of red blood cells.

The treatment and prevention of anemia can be done by consuming foods that contain vitamins and minerals that support the formation of red blood cells as prevention, fortification of foodstuffs with iron, and iron supplementation. The mother's iron requirement during pregnancy is 800 mg of iron including 300 mg for the placental fetus and 500 mg for the increase of maternal erythrocytes, for that pregnant women need 2-3 mg of iron every day.[4] Consume diverse foods rich in iron, folate, vitamin B12, and vitamin C such as those found in the liver, meat, nuts, dark green vegetables, fruits, etc.

Iron in food can take the form of heme and nonheme. Heme iron is iron that binds to proteins, widely found in animal foods such as meat, poultry, and fish. Nonheme iron is commonly found in herbs such as cereals, nuts, vegetables, and fruits. Heme iron is absorbed by 20-30%, while nonheme iron is only absorbed by 1-6%. The results of a study showed that as much as 37% of heme substances and 5% of nonheme substances present in the diet can be absorbed and increased by the intake of vitamin C.[5]

Based on preliminary observations on November 13, 2022 at PMB Fitria Wulandari Bekasi, the number of pregnant women in the 1st – third trimester in the last 3 months was 84 pregnant women. Data obtained as many as 50% of pregnant women experience mild to severe anemia. Based on this description, researchers are interested in researching "The Effectiveness of Giving Boiled Eggs and Papaya Fruit against Changes in Hemoglobin in Pregnant Women at PMB Fitria Wulandari Bekasi in 2023".

Method

1. Research design

The type of research used in this study is a quasi-experimental type of research . The research design used is Pretest-Postest Control Group Design. This design can involve more than two groups although the basic design involves only two groups. Both groups were observed at the beginning and end of treatment [6].

2. Settings and samples

The study was conducted in January 2023 at PMB Fitria Wulandari. The population in

this study was all hami mothers who conducted examinations at PMB Fitria Wulandari which amounted to 84 people and obtained a total sample of 30 people who had met the inclusion and exclusion criteria with the total sampling technique.

3. Measurement and data collection

The research instrument used in this study was in the form of an observation sheet on hemoglobin levels in pregnant women using digital hb. The assessment of both groups of respondents was carried out before and after the treatment. Standard Operating Procedure (SOP) for making boiled eggs and papaya fruit, namely chicken eggs boiled until ripe and for papaya fruit, papaya fruit is peeled off the skin and then washed thoroughly and cut into pieces after that the papaya fruit is weighed with a weight of 200 grams. The method of consumption is 1 boiled egg and papaya fruit consumed in the morning with a consumption distance of 15 minutes.

4. *Data analysis*

Data analysis using SPSS (Statistical Package for the Social Sciences) software with tests using independent statistical t-tests with p Value $0.000 < 0.05$ which means that statistical tests show an influence on the intervention group given the treatment.

Result

Based on the results of data analysis in this study, the following results are known:

Table 1.
Hemoglobin Levels Before Intervention

Hemoglobin Levels	N	Mean	SD	Min	Max
Intervention	15	10,473	0,4431	9,5	11,0
Control	15	10,687	0,2949	10,4	12,3

Based on table 1, the average value of hemoglobin levels before being given intervention in the intervention group with a total of 15 respondents had a mean value of 10.473 with a standard deviation of 0.4431 while the average value of hemoglobin levels in the control group with the number of 15 repsondens had a mean value of 10.687 with a standard deviation of 0.2949. From the two data, there is no difference in the average value which is very different because in the two groups both have not been given treatment and monitoring.

Table 2.
Hemoglobin Levels After Intervention

Hemoglobin Levels	N	*Mean*	SD	Min	Max
Intervention	15	11,313	0,6198	10,2	11,3
Control	15	10,773	0,4114	10,0	10,5

Based on table 2, the average value of hemoglobin levels after being given intrevention in the intervention group with a total of 15 respondents had a mean value of 11.313 with a standard deviation of 0.6198 while the average value of hemoglobin levels in the control group with the number of 15 repsondens had a mean value of 10.773 with a standard deviation of 0.4114. Thus, the monitoring results of the two groups showed the effectiveness of giving boiled eggs and papaya fruit in the intervention group (treatment group)

Table 3.
Effectiveness of Giving Boiled Eggs and Papaya Fruit against Changes in Hemoglobin Levels in Pregnant Women

Group	Hemoglobin Levels	N	*Mean*	Std. deviasi	Sig. (2-tailed)
Intervention	Before	15	10,473	0,4431	0,000
	After	15	11,313	0,6198	
Control	Before	15	10,687	0,2949	0,255
	After	15	10,773	0,4114	

Based on the data above, the results of pretest analysis were obtained in the intervention group with a total of 15 respondents having a mean value of 10.473 with a Standard deviation value of 0.4431, while in the control group with a total of 15 respondents, a mean value of 10.687 was obtained with a standard deviation value of 0.2949 and the results of the analysis in the posttest were obtained a mean value in the intervention group of 11.313 with a standard deviation value of 0.6198, while the mean value in the control group was 10.773 with a standard deviation value of 0.4114.

The results of the paired t-test analysis can be concluded that the value of significant values in the intervention group obtained a p-value of 0.000 ($p < 0.05$) which means that there is effectiveness in giving boiled eggs and papaya fruit against changes in hemoglobin levels in pregnant women.

Table 4.
Average Difference in Hemoglobin Levels of Intervention Group and Control Group

Variable	Group	N	*Mean*	Sig. (2-tailed)
Hemoglobin Levels	Intervention	15	11,313	0,009
	Control		10,773	

Based on table 5 after an independent T-test obtained the results of the difference in the average hemoglobin level in the intervention group of 11,313 while the results of the analysis from the control group obtained the average result of changes in hemoglobin levels of 10.773 with a p-value of 0.009 < 0.05 so that Ho was rejected and H1 was accepted, it can be concluded that there was a difference after the intervention between the intervention group and the control group. Because there is a significant difference, it can be said that there is an effectiveness in giving boiled eggs and papaya fruit against changes in hemoglobin levels in pregnant women

Discussion

Based on the results, it was found that the intervention group had an average hemoglobin value of 10.473 gr / dL with a standard deviation value of 0.4431, while in the control group an average value of 10.687 gr / dL was obtained with a standard deviation value of 0.2949. The most common anemia experienced by pregnant women is anemia due to iron deficiency. This is not surprising because protein deficiency leads to reduced hemoglobin formation and red blood cell formation. Anemia in pregnancy is defined as a mother with Hb levels <11.0 gr / dl.[7]

The impact of anemia during pregnancy for the mother can cause abortion, premature delivery, inhibition of fetal growth and development in the womb, increased risk of infection, threat of cardiac decompensation if Hb is less than 6.0 g / DL, mola hidatidosa, hyperemesis gravidarum, antepartum bleeding, or premature rupture, while the impact of anemia on the fetus can occur abortus, low birth weight and low infant intelligence levels.[8]

One way to prevent anemia or increase Hb levels for pregnant women is to consume foods that are high in iron and rich in vitamin C such as chicken eggs and fruits. The nutritional content of eggs is rich in high-grade protein. The average protein content of eggs is 12-16% or about 7-8 grams of protein in one fairly large egg.[9]

The results of the study in the intervention group had an average hemoglobin value of 11.313 gr / dL with a standard deviation value of 0.6198, while in the examination of hemoglobin levels of the control group obtained an average value of 10.773 gr / dL with a standard deviation value of 0.4114, which means that there is an increase in Hemoglobin levels in pregnant women after the intervention of papaya fruit and boiled eggs for 7 days.

In line with the study in 2021 on India where 30 people with iron deficiency anemia were selected to consume papaya twice a day and the results were obtained there was an increase in Hb values of 0.6 gm / dl and 0.4 gm / dl and the researcher concluded that papaya fruit was proven to be more efficient in the treatment of iron deficiency anemia.[10] As for other research on the benefits of papaya fruit conducted in 2020.[11.]

Also supported by research in 2020 shows that pregnant women who consume boiled eggs have hemoglobin levels before treatment on average 9.21 gr% and hemoglobin levels after treatment are 10.99 gr%. The results of the statistical test obtained a p value of 0.001 where the p value < 0.05 so that there is an influence of purebred chicken egg consumption on the hemoglobin levels of pregnant women.[12]

The results of the analysis based on the paired t-test showed that the average nilsi after intervention in the intervention group was 11.313 with a standard deviation value of 0.6198. When viewed from the results of these statistical calculations, the average respondent is in the category of normal hemoglobin levels. Normal chemoglobin levels in pregnant women are not < 11.

Meanwhile, the average in the control group that was not treated had an average value of 10.687 with a deviation standard of 0.2949 and these results were seen from the statistical results, the average respondent was in the category of mild anemia.

Based on the analysis in the intervention group, sig results were obtained. 0.000 < 0.05 so that it can be concluded that there is an effectiveness of giving boiled eggs and papaya fruit against changes in hemoglobin levels in pregnant women. This is in line with research conducted on 2022) in the Taminabuan Health Center Working Area, Sorong Regency, where based on the results of the analysis of statistical test results using an independent t-test, a Sig value was obtained. (2-tailed) of 0.006 is smaller than the alpha value of 0.05 (p < α 0.05), then according to the basis of decision making with the test results, it means that there is a significant difference between papaya fruit and boiled eggs against the increase in levels hemoglobin.[9]

Anemia is a medical condition in which the number of red blood cells or hemoglobin is less than normal. Anemia is mostly caused by iron deficiency. There are many ways that can be done in reducing the incidence of anemia in pregnant women, one of which is by taking Fe tablets, or by eating additional foods that contain vitamin C such as papaya fruit and boiled eggs.

Vitamin C itself plays an important role in the process of iron absorption, namely by converting ferrous iron ($Fe3 +$) into ferrous ($F2 +$) in the intestine so that it is easily absorbed.[9]

While the nutritional content of boiled chicken eggs is rich in high-grade animal protein. Boiled eggs also contain very important and quite high substances, namely iron 6.5 mg, the iron content of chicken eggs is 6.5 mg in whole eggs, 0.2 mg in egg whites and 6.3 mg in egg yolks. The zinc content in chicken eggs is 6.0 mg of whole eggs and 0.2 mg of egg yolks and egg whites of 5.8 mg and the content of selenium substances in chicken eggs is 5.8 mg of whole eggs, 1.6 mg of egg whites and 4.2 mg of egg yolks.[13]

Limitations

In the implementation of this study, there were several limitations and obstacles experienced by researchers, namely requiring a longer time, requiring complete experimental equipment and finding research respondents for quite a long time because respondents had to get interventions, namely boiled eggs and papaya fruit.

Conclusion

There is an effectiveness of giving boiled eggs and papaya fruit against changes in hemoglobin levels in pregnant women at PMB Fitria Wulandari Bekasi in 2023, with an independent t test obtained a p value of 0.000 (< 0.05). It is recommended that pregnant women can consume boiled eggs and papaya fruit as another option to be able to help increase hemoglobin levels in addition to consuming Fe tablets.

Ethical Approval

The study has gone through a review from the ethics commission.

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Conflict of Interest

No conflict of interest.

Authors contribution

AHP Compiles and designs research, conducts analysis and interprets data and compiles the draft manuscript. AHP, PA and VS are involved in the analysis, interpretation of data. PA and VS critically reviewed the manuscript. All authors read and agree on the final manuscript.

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Factors Related to Exclusive Breastfeeding During The COVID-19 Pandemic: Literature Review

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Abstract

Background: The COVID-19 pandemic has created several challenges in exclusive breastfeeding, even though WHO has provided recommendations to continue exclusive breastfeeding during the COVID-19 pandemic.

Purpose: This study aims to summarize the factors that can affect breastfeeding mothers during the COVID-19 pandemic.

Methods: This research is a literature review. Thematic articles were selected from 2020-2023 from the electronic databases Science Direct, PubMed, and Google Scholar. Researchers used the PRISMA method.

Result: From 170 articles, 15 studies were reviewed, and finally, only 10 were analyzed. From the articles analyzed, various supports from husbands, families, and health workers, information support, motivation, beliefs, self-efficacy, delivery settings, age, education level, and work situations influence exclusive breastfeeding.

Conclusion: The factors that most influence the practice of exclusive breastfeeding are support from husbands, and family, support from health workers, and information support. It is hoped that policymakers and health workers will be more active in making socialization programs about the importance of providing exclusive breastfeeding during the COVID-19 pandemic.

Keywords: COVID-19 Pandemic, Exclusive Breastfeeding, Health Worker Support, Husband Support

Introduction

The COVID-19 pandemic has created several challenges in providing nutrition and care for newborns, especially regarding breastfeeding. Few parents are afraid to give exclusive breastfeeding during a pandemic because they are worried about the transmission of SARS-CoV-2.[1,2] However, WHO has recommended that exclusive breastfeeding should still be given to babies even during a pandemic. WHO has also issued breastfeeding guidelines for mothers suffering from COVID-19.[3,4,5]

Many factors, including cultural factors, sociodemographic, the mother's education level, delivery method, place of delivery, psychosocial factors, self-efficacy, applicable policies, and others, still influence breastfeeding practice.[6] Policies that support decision-making for breastfeeding such as maternity leave, including support from the spouse, as well as the availability of professional support for breastfeeding

success.[1,7]

Breastfeeding should be encouraged and facilitated so mothers and babies can be cared for together to establish attachment through skin-to-skin contact, even during the COVID-19 pandemic. If the mother is too sick to breastfeed, it is necessary to facilitate and support the breastfeeding process indirectly so the baby can breastfeed. In this case, the need for information and health care from professionals that can be accessed is essential.[8]

Because the practice of breastfeeding during the COVID-19 pandemic has decreased, this research is needed to summarize the literature to identify what factors can affect breastfeeding mothers during a pandemic, so that it can become a theory when counseling breastfeeding mothers.

Method

1. Research design

This research is a literature review.

2. Setting and samples

The research results according to the theme were selected from 2020-2023. The inclusion criteria of this study were articles with full text, which can be accessed free of charge, in English, and reports with cross-sectional, cohort, case-control, and mixed-method research designs. Exclusion criteria are articles in the form of conference papers, chapters, editorials, theses and dissertations, and are not open access.

3. Measurement and data collection

The data sources for this study were articles found in the electronic databases Science Direct, PubMed, and Google Scholar. The researcher used the following search strategy in each database with the keywords "exclusive breastfeeding", "exclusive breastfeeding during the pandemic", and "exclusive breastfeeding during the COVID-19 pandemic".

4. Data analysis;

Researchers use the Preferred Reporting Items for Systematic Reviews and Meta-analyses Statement (PRISMA) method to follow the correct research steps or protocol, as shown in Figure 1.

Results

Based on the search strategy and selection criteria that have been carried out, from 170 articles in total, 15 studies were reviewed in full. Finally, only 10 studies could be analyzed to the end. The selection process for this study is presented in Figure 1.
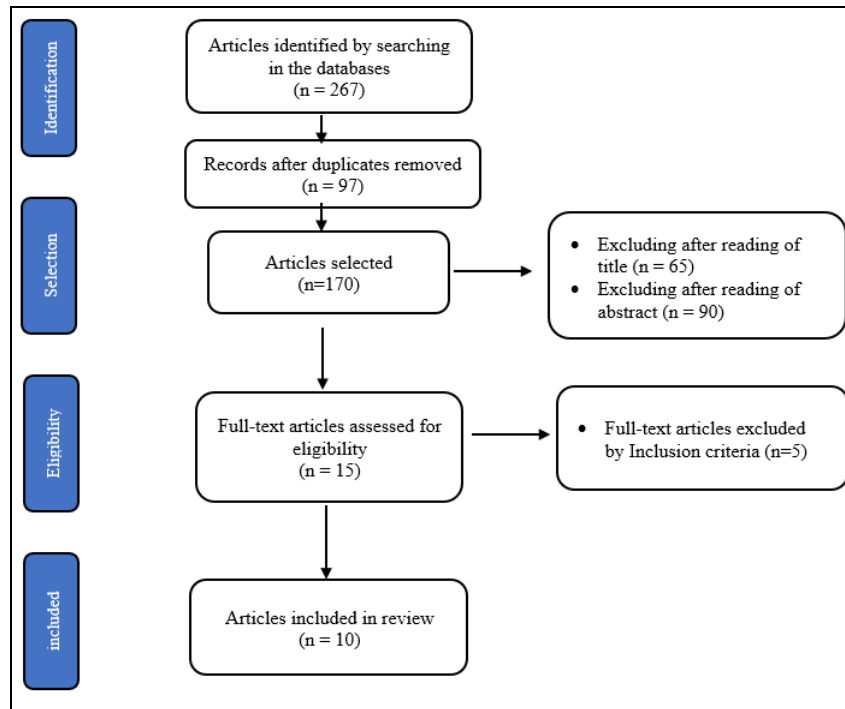
Figure 1. The selection process of studies based on PRISMA

Table 1.
Result of article analysis

No	Author	Title/Journal	Method	Result
1	Samaria D, Marcelina LA, Florensia L	The COVID-19 pandemic's impact on breastfeeding self-efficacy: A path analysis, Enfermería Clínica, 2023, Vol. 33.	Cross-sectional	Factors that influence exclusive breastfeeding during a pandemic are self-efficacy, family support, social support and health workers, level of anxiety, and bonding with the baby.
2	Agrina, Afandi D, Suyanto, Erika, Dewi YI, Helina S, Pramita D, Safira N.	Analysis of Supporting Factors Associated with Exclusive Breastfeeding Practice in the Urban Setting during the COVID-19 Pandemic, Children, 2022, Vol. 9 (1074).	Mix-method	Emotional and informational support are the most critical factors influencing exclusive breastfeeding during a pandemic. In addition, the support of the husband, family, mother's age, higher education level, and duration of work also influence.
3	Nisa F, Damayanti NA, Suhariadi F, Herisanty W, Afiyah RA.	Internal factors affecting the mother' psychological capital in exclusive breastfeeding during the COVID-19 pandemic, Journal of Public Health Research, 2022, Vol. 11(3).	Cross-sectional	The factor that influences the psychological capital of mothers related to exclusive breastfeeding during the COVID-19 pandemic is motivation. The mother's ability to provide exclusive breastfeeding also dramatically affects the mother's psychology.

4	Gebretsadik GG, Tadesse Z, Mamo L, Adhanu AK, Mulugeta A.	Knowledge, attitude, and determinants of exclusive breastfeeding during COVID-19 pandemic among lactating mothers in Mekelle, Tigrai: a cross sectional study, BMC Pregnancy and Childbirth, 2022, Vol. 22 (850).	Cross-sectional	The findings of this study highlight that programs that increase women's participation in education and decision-making can improve EBF practices. In addition, during the COVID-19 pandemic, providing breastfeeding mothers with adequate and up-to-date breastfeeding information can significantly enhance EBF practices.
5	Setyowati H, Sofiyanti I, Rezeki IT.	Husband's Support in Giving Exclusive Breastfeeding during the COVID-19 Pandemic, Annals of the Romanian Society for Cell Biology, 2021, Vol. 25 (6).	Cross-sectional	The husband's support greatly influences the mother's success in giving exclusive breastfeeding. Husbands must increase their knowledge about exclusive breastfeeding and support their wives.
6	Chertok IA, Medvedik RA, Arendt M, Sacks E, Otelea MR, Rodrigues C, Costa R, Linden K, Zaigham M, Elden H, Drandic D, Baeschlin SG, Miani C, Valente EP, Covi B, Lazzereni M, Mariani I.	Factors associated with exclusive breastfeeding at discharge during the COVID-19 pandemic in 17 WHO European Region countries, International Breastfeeding Journal, 2022, Vol. 17 (83).	Cross-sectional	The study results highlight the need to educate mothers and families about the importance of exclusive breastfeeding, reduce mother-infant separation, increase professional breastfeeding support, and follow evidence-based practice guidelines to promote breastfeeding in a comprehensive and multi-level manner.
7	Nanishi K, Okawa S, Hongo H, Shibanuma A, Abe SK, Tabuchi T.	Influence of the COVID-19 pandemic on breastfeeding support for healthy mothers and the association between compliance with WHO recommendations for breastfeeding support and exclusive breastfeeding in Japan, PeerJ, 2022, Vol. 10.	Cross-sectional	Multiple logistic regression analysis shows that positive breastfeeding support is the most influential in exclusive breastfeeding during the COVID-19 pandemic. In addition, the mother's age, education level, gravida, and intention to breastfeed are also significant.
8	Behesti MAZ, Alimoradi Z, Bahrami N, Allen KA, Lissack K.	Predictors of breastfeeding self-efficacy during the COVID-19 pandemic, Journal of Neonatal Nursing, 2022, Vol. 28	Cohort	The results of this study indicate that fear of COVID-19 is not a significant predictor of exclusive breastfeeding. Still, social support, support from husbands, and intention to breastfeed are more positively related to complete breastfeeding practices.
9	Nuampa S, Ratinthorn A, Patil CL, Kuesakul K, Prasong S, Sudphet M.	Impact of personal and environmental factors affecting exclusive breastfeeding practices in the irst six months	Mix-method	This study shows that mothers with higher socioeconomic status and working from home have higher EBF success during the COVID-19

		during the COVID-19 pandemic in Thailand: a mixed-methods approach, International Breastfeeding Journal, 2022, Vol. 17 (73).		outbreak.
10	Coca KP, Lee EY, Chien LY, Souza ACP, Kittikul P, Hong SA, Chang YS.	Postnatal women's breastfeeding beliefs, practices, and support during the COVID-19 pandemic: a cross-sectional comparative study across fve countries, International Breastfeeding Journal, 2022, Vol. 17 (58).	Cross-sectional	The results of this study indicate that positive breastfeeding beliefs, family support, and support from health workers affect exclusive breastfeeding practices. The government must emphasize and socialize the importance of safe breastfeeding, especially in Asian countries.

Based on Table 1, seven studies using a cross-sectional design (Samaria et al., 2023; Nisa et al., 2022; Gebretsadik et al., 2022; Setyowati et al., 2021; Chertok et al., 2022; Nanishi et al., 2022; Coca et al., 2022)[9,11-15,18], two studies used a mix method design (Agrina et al., 2022; Nuampa et al., 2022)[10,17], and one study used a cohort design (Behesti et al., 2022)[16].

Most research results in the articles reviewed stated that husband support, family support, health worker support, and information support, such as health education and outreach programs, were the factors that most influenced the success of exclusive breastfeeding during the COVID-19 pandemic.

Discussion

During the COVID-19 pandemic, breastfeeding mothers faced various challenges and changes, including breastfeeding practices. This literature study aims to summarize the factors that can affect breastfeeding mothers during the COVID-19 pandemic because the practice of breastfeeding during the COVID-19 pandemic has decreased in Indonesia and other countries. Many mothers are worried about the transmission of COVID-19 to mothers and babies, even though WHO has issued recommendations to continue giving exclusive breastfeeding to babies.[3,4,5]

WHO has recommended that babies born to mothers infected with COVID-19 should still be given breast milk. This is because breast milk contains substances that can increase the body's immunity to protect it from COVID-19. Breastfeeding is still carried out by paying attention to and implementing strict health protocols, so the baby does not contract COVID-19. Breastfeeding protects neonates, infants and children from morbidity and death. The protective effect is powerful against infectious diseases due to the immediate transfer of antibodies and anti-infective factors and the transfer of long-lasting immunological competence and memory.[4,19]

WHO stated, in the research that had been conducted, as many as 46 mother-infant pairs had their breast milk samples tested for COVID-19. All mothers were

positive for COVID-19, while 13 babies tested positive for COVID-19. Breast milk samples from 43 mothers were negative for the COVID-19 virus, while samples from 3 mothers tested positive for virus particles by RT-PCR. Among the 3 infants whose mothers' breast milk tested positive for virtual RNA particles, not a live virus, one tested positive for COVID-19, but the infant's feeding practices were not reported. Two other babies tested negative for COVID-19; one was breastfed, and the other was given breast milk after the viral RNA particles were no longer detectable. This is evidence that exclusive breastfeeding can still be carried out during the COVID-19 pandemic according to WHO guidelines.[4]

Based on the results of this literature study, various supports from husbands, families, and health workers, information, motivation, beliefs, self-efficacy, delivery settings, age, educational level, and work situations influence exclusive breastfeeding. Older mothers, lower education levels, and overly tiring work situations can make it difficult for mothers to receive correct information regarding exclusive breastfeeding during the Covid 19 pandemic.[10,15]

While most factors related to exclusive breastfeeding are husband and family support, the success of exclusive breastfeeding during a pandemic cannot be separated from the husband's support for breastfeeding mothers. The husband's support is a dominant component of successful exclusive breastfeeding.[20] Husband's support can be in the form of emotional, informational, and instrumental support. Mothers will be more capable and confident if they have the support of those closest to them when breastfeeding their babies.[21]

Next is support from health workers or professional staff. Health workers, especially midwives, have a role as educators and counselors to provide breastfeeding support.[22] Support from health workers can also be done by holding health education programs. During the COVID-19 pandemic, health education can be provided via tele-education. The COVID-19 pandemic creates challenges and requires health workers to innovate in delivering virtual education. This includes support by professionals and providing informational support to mothers.[23]

Hospitalization and place of delivery were also factors related to exclusive breastfeeding during the Covid 19 pandemic. The type of health care provider at birth, professionalism, and promptness of attention was associated with exclusive breastfeeding in a multivariable model. This shows the critical role of healthcare providers in breastfeeding practice. In this case, the critical role of health professionals is needed in providing breastfeeding support during the early postpartum period.[24]

In addition, the motivation and intentions of the mother also influenced the success of exclusive breastfeeding during the COVID-19 pandemic. Motivation is a psychological force that makes a person able to take action. Motivation is the power of individuals to do what must be done, including when and how to achieve their goals. When an individual has strong motivation and intention, this will make the individual not give up easily. Mothers who have high motivation to give exclusive breastfeeding to their babies will have the desire to continue breastfeeding. Strong motivation can help

mothers to stimulate their milk production so that breast milk is sufficient for their babies.[11]

Limitation

The limitations of this literature study still need to be improved sources of related articles.

Conclusion

From the several articles reviewed, the factors that most influenced the practice of exclusive breastfeeding were support from husbands, families, health workers, and information support. Motivation, belief, self-efficacy, birth setting, age, education level, and work situation are other influencing factors. It is hoped that policymakers and health workers will be more active in making socialization programs about the importance of providing exclusive breastfeeding during the COVID-19 pandemic.

Ethical Considerations

This research has considered ethical principles.

Conflict of Interest

There is no conflict of interest.

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