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# Factors Affecting The Knowledge Of Pregnant Women In The Third Trimester About Red Ginger Drinks As a Pain Reliever For First Stage Of Labor in The Active Phase Of The Regional General Hospital Of Perdagangan, Simalungun Regency In 2024

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Abstract. Labor pain during the first stage of active phase is visceral, arising from uterine contractions and cervical dilation, processed through sympathetic efferent nerve fibers. One therapy that can be used to reduce this pain is the administration of red ginger extract, which is known to have the highest oleoresin content compared to other types of ginger. This study aims to assess the factors influencing the knowledge of third-trimester pregnant women about the benefits of red ginger drink as a pain reliever during the first stage of active labor at the RSUD Daerah Perdagangan. The study used an analytic cross-sectional design involving 66 respondents who met specific inclusion and exclusion criteria. The results showed that education, age, received information, and culture influenced pregnant women's knowledge about the benefits of red ginger. Based on statistical tests, it was found that education, age, information, and culture have a significant impact on the level of knowledge among pregnant women. This study is expected to contribute to increasing pregnant women's knowledge of alternative pain relief methods using red ginger and to enrich awareness of the importance of health information during pregnancy.

Keywords: Red ginger extract, Labor pain, Pregnant women's knowledge, Education, Alternative therapy.

### 1. BACKGROUND

The background of this study aims to understand the factors that influence the knowledge of pregnant women in the third trimester regarding red ginger drinks as a pain reliever during the first active phase of labor at the Perdagangan Regional Hospital. First stage labor pain is visceral and caused by uterine contractions and cervical dilation, which are innervated by sympathetic efferent fibers and transmitted to the spinal cord at the T10-L1 segment (Maryunani, 2014). Pain and emotional tension during labor can increase cortisol and catecholamine levels in the body, which in turn affect the duration and intensity of labor. This also has an impact on blood pressure, fetal heart rate, and maternal concentration which can be disturbed during the labor process (Indiarti, 2014).

Pain during labor is often a source of anxiety for pregnant women. Despite the joy of welcoming the birth of a baby, pregnant women are often haunted by the excruciating pain during the labor process. Therefore, physical and mental preparation of the mother is very important in order to reduce anxiety and pain. Emotional support from health workers, as well

as the use of alternative techniques such as warm water compresses, red ginger drinks, and back massages, can help mothers stay calm and reduce pain (Rahmawati, 2016).

Ginger (Zingiber Officinale Rose) is a herbal plant that is widely used in traditional medicine because of its analgesic, antipyretic, and anti-inflammatory properties. Ginger rhizomes contain essential oils that have anti-inflammatory effects, including gingerol which can block prostaglandins, thereby reducing pain (Hidayati and Rahma, 2015). Red ginger, as one of the ginger variants, has a higher content of essential oils and oleoresins compared to other variants, making it more effective as a herbal pain reliever (Arfiana, 2014).

Previous studies have shown that red ginger can be used to reduce pain, although its effects on labor pain still require further research. Rahmawati's (2016) study showed that giving red ginger drinks at certain doses can reduce pain intensity in mothers in labor. For example, giving 50 grams of red ginger can reduce pain intensity by 2.00, while 25 grams of red ginger can reduce pain intensity by L.40.

According to research conducted in the United States, around 70%-80% of women expect labor to be painless, and they look for ways to reduce pain during labor (Purwaningrum et al., 2016). The use of ginger as an anti-inflammatory has been proven in various studies, including research in Georgia which showed that ginger extract given for 10 days was able to reduce pain by 25% (Rahmawati, 2016). Therefore, giving red ginger drink in the right dose can be a solution to reduce pain during labor.

Maternal and Child Health (MCH) issues are still a major concern in Indonesia, especially related to the high maternal and infant mortality rates. Based on the 2012 SDKI, the maternal mortality rate (MMR) is still high, which is 359 per 100,000 live births, while the infant mortality rate (IMR) is 32 per 1,000 live births (Ministry of Health of the Republic of Indonesia, 2016). Labor accompanied by pain is also still a major problem, with around 90% of labors experiencing varying degrees of pain, ranging from mild to very severe (Rejeki and Hartiti, 2015).

Based on a preliminary study at Perdagangan Regional Hospital, it was found that there were 42 pregnant women in their third trimester who checked their pregnancies at Perdagangan Regional Hospital in July. The results of brief interviews with 10 pregnant women showed that 3 pregnant women already knew the benefits of red ginger drinks to reduce pain, while 7 other mothers had never heard of the benefits of red ginger. This study is expected to provide a better understanding of the factors that influence the knowledge of pregnant women in their third trimester about red ginger drinks as a pain reliever for the first active phase of labor at Perdagangan Regional Hospital.

e-ISSN: 3047-793X, p-ISSN: 3047-7948, Page 07-23

### 2. THEORETICAL STUDY

### **Concept of Childbirth**

# a. Understanding

Labor is the process of spontaneous expulsion of the full-term conception product through the vagina. This process involves uterine contractions that cause thinning and dilation of the cervix to push the fetus out. Labor pain occurs due to quite painful myometrial contractions. Early signs of labor include the descent of the fetal head, frequent urination, and cervical secretions mixed with blood (Mochtar, 2013; Prawirohardjo, 2014). Jones (2012) added that signs of true labor also involve rhythmic contractions and discharge from the vagina.

### b. Stages of Labor

Labor is divided into four stages:

- First Period: Cervical opening from 0 to 10 cm which is divided into latent and active phases.
- Stage II: Expulsion of the fetus, marked by the desire to push and the opening of the vulva and perineum.
- Stage III: Expulsion of the placenta.
- Period IV: Monitoring the mother to detect postpartum bleeding (Prawirohardjo, 2014).

# **Causes of Childbirth**

The mechanism of labor is not fully understood, but several theories explain the causes, including decreased estrogen and progesterone hormones, aging placenta, uterine distension, and mechanical irritation due to pressure from the fetal head on the cervix (Mochtar, 2013).

# **Basic Concept of Red Ginge**

# a. Understanding

Red ginger (Zingiber officinale Roscoe) is a spice that is widely used in traditional medicine. Red ginger has a higher content than regular ginger, such as essential oils and oleoresins, which provide more significant health benefits (Rahmawati, 2016).

### **b.** Content and Benefits

Red ginger contains active compounds such as gingerol, shogaol, and zingerone, which have antioxidant, anti-inflammatory, and analgesic effects (Hernani & Winarti, 2012). Ginger is also effective in reducing labor pain by inhibiting the synthesis of the same prostaglandins

as ibuprofen (Arfiana, 2014). Rahmawati's (2016) research shows that red ginger can significantly reduce labor pain, especially at a dose of 50 grams.

### The Effect of Red Ginger on Reducing Labor Pain

The use of red ginger to reduce labor pain can be done with non-pharmacological methods, which are cheaper and more effective without side effects. Red ginger contains essential oils that inhibit prostaglandins, which play a role in reducing pain in pregnant women (Arfiana, 2014).

# **Factors Affecting Labor Pain**

Labor pain is caused by uterine contractions that stimulate the sympathetic nervous system. If left untreated, pain can increase anxiety, worsen pain, and prolong the labor process (Bobak, 2012). Labor pain can be influenced by internal factors such as previous experience, age, and physical activity, as well as external factors such as religion, culture, and environment (Andarmoyo, 2013). In primigravida mothers, for example, anxiety can increase catecholamine secretion which worsens the labor process.

# Knowledge

### a. Understanding

Knowledge or cognitive influences how individuals react to stimuli and information received. Behavior based on knowledge tends to be more durable than behavior that is not based on knowledge. The process of forming knowledge includes several stages: awareness, interest, evaluation, experimentation, and adaptation (Sunaryo, 2014).

### b. Level of Knowledge

A person's knowledge can be analyzed at six levels: knowing, understanding, application, analysis, synthesis, and evaluation. Higher levels of knowledge increase an individual's ability to make decisions, including choosing the right labor pain management method (Efendi & Makhfudli, 2014).

### **Factors Affecting Knowledge**

Knowledge is influenced by several factors, including education, age, information, and culture. Higher education makes it easier for someone to accept and process new information, while older age tends to be associated with better knowledge in pain management (Aisyah,

2016; Notoatmodjo, 2012). Information obtained through various sources, such as print media, electronic media, family, friends, and health workers, also affects a person's level of knowledge (Notoatmodjo, 2012).

# **Hypothesis**

Based on the theoretical framework that has been explained, it can be concluded that there is a relationship between education, age, information, and culture with the knowledge of pregnant women regarding the use of red ginger as a pain reliever in labor during the active phase of the first stage. Good knowledge about labor pain management can improve the quality of labor experience for mothers and babies, so it is important to understand the factors that influence this knowledge.

### 3. RESEARCH METHODS

This study used a cross-sectional design to analyze the correlation between risk factors and their impacts on pregnant women in the third trimester at Perdagangan Hospital. The study population was all pregnant women in the third trimester totaling 187 people, with a sample of 66 respondents selected using the accidental sampling technique. Data collection was carried out using a questionnaire containing 30 questions covering the variables of knowledge, education, age, information, and culture. The collected data were analyzed univariately to describe the frequency and percentage distribution, and bivariately using the Chi-Square test to test the relationship between variables. Testing the validity and reliability of the instrument showed adequate results and could be interpreted as valid and reliable.

### 4. RESULTS AND DISCUSSION

### **Results**

# **Univariate Analysis**

Based on the results of univariate analysis of independent variables including education, age, information and culture and univariate analysis of the dependent variable, namely the knowledge of pregnant women in the third trimester about red ginger drinks as a pain reliever in the first stage of active labor conducted on 66 respondents, the frequency distribution of these variables is known.

### a. Frequency Distribution of Respondents According to Knowledge

# Table 1.Frequency Distribution of Knowledge of Pregnant Women in the Third Trimester About Red Ginger Drinks as a Pain Reducer in the First Stage of Active Labor at Perdanagan Regional Hospital

Knowledge Variable	Frequency	Percentage	
	(f)	(%)	
Good	8	12.1	
Enough	24	36.4	
Not enough	34	51.5	
Total	66	100	

Table 1. shows that of the 66 pregnant women in the third trimester, the majority had knowledge in the poor category about red ginger drinks as a pain reliever for labor. which is 51.5%. While sufficient knowledge is 36.4% and good knowledge is 12.1%.

# b. Frequency Distribution of Respondents According to Education

Table 2.Frequency Distribution of Education of Pregnant Women in the Third

Trimesterat Perdanagan Regional Hospital

Education Variable	Frequency	Percentage
	(f)	(%)
Tall	17	25.8
Intermediate	28	42.4
Base	21	31.8
Total	66	100

Table 2. shows that of the 66 pregnant women in the third trimester, the majority had secondary education, namely by 42.4%. Meanwhile, pregnant women with basic education were 31.8% and higher education was 25.8%.

# c. Frequency Distribution of Respondents by Age

Table 3.Frequency Distribution of Age of Pregnant Women in Third Trimester at
Perdanagan Regional Hospital

Age Variable	Frequency	Percentage
	(f)	(%)
Early Adulthood	31	47.0
Middle Adult	35	53.0
Late Adulthood	0	0
Total	66	100

Table 3. shows that of the 66 pregnant women in their third trimester, the majority were middle-aged adults (36-45 years). which is 53.0% while pregnant women of early adulthood are 47.0%.

# d. Frequency Distribution of Respondents According to Information

Table 4.Frequency Distribution of Information on Pregnant Women in the Third

Trimester at Perdanagan Regional Hospital

Information Variables	Frequency	Percentage
	(f)	(%)
Yes	13	19.7
No	53	80.3
Total	66	100

Table 4. shows that of the 66 pregnant women in their third trimester, the majority did not receive information about red ginger drinks as a pain reliever during labor. which is 80.3% while those who obtained information were 19.7%.

# e. Frequency Distribution of Respondents According to Culture

Table 5.Frequency Distribution of Pregnant Women's Culture in the Third Trimester

At Perdanagan Regional Hospital

Cultural Variables	Frequency	Percentage
	(f)	(%)
Positive	28	42.4
Negative	38	57.6
Total	66	100

Table 5. shows that of the 66 pregnant women in the third trimester, the majority had a culture in the negative category. which is 57.6% while the culture in the positive category is 42.4%.

# **Bivariate Analysis**

The bivariate analysis conducted aims to determine the influence between independent variables, namely education, age, information and culture on the dependent variable, namely the knowledge of pregnant women in the third trimester about red ginger drinks as a pain reliever in the first stage of active labor . The results of the bivariate analysis will be presented in the following tables:

### a. The Influence of Education on Knowledge

Table 6.The Influence of Education on the Knowledge of Pregnant Women in the Third

Trimester About Red Ginger Drinks as a Pain Reducer in the First Stage of Active Labor at

Perdanagan Regional Hospital

Education	Know Trime	_	Pregna	e Third	Total	p value			
	Good	Good Enough Not enough							
	n	%	n	%	n	%	n	%	
Tinggi	5	29.4	10	58.8	2	11.8	17	100	
Welcome	2	7.1	9	32.1	17	60.7	28	100	0.003
Dasar	1	4.8	5	23.8	15	71.4	21	100	
Jumlah	8	12,1	24	36,4	34	51,5	66	100	

Table 6. shows that of the 17 highly educated pregnant women in their third trimester, they have sufficient knowledge. of 58.8, 28 pregnant women with secondary education mostly have less knowledge, which is 60.7% and pregnant women with basic education also have less knowledge, which is 71.4%. Based on the *chi-square statistical test, the P value* is 0.003. Where the *P* value  $<\alpha$  (0.05), it can be concluded that Ha is accepted, meaning that the education factor influences the knowledge of pregnant women in the third trimester about red ginger drinks as a pain reliever for the first stage of active labor.

### b. The Effect of Age on Knowledge

Table 7.The Effect of Age on the Knowledge of Pregnant Women in the Third Trimester

About Red Ginger Drinks as a Pain Reducer in the First Stage of Active Labor at Perdanagan

Regional Hospital

Age	Know Trime	ledge of ster	Pregna	ant Wom	e Third	Total		p value	
	Good	Good Enough Not enough							
	n	%	n	%	n	%	n	%	
Early Adulthood	6	19.4	14	45.2	11	35.5	31	100	
Middle Adult	2	5.7	10	28.6	23	65.7	35	100	0.035
Late Adulthood	0	0	0	0	0	0	0	0	
Amount	8	12.1	24	36.4	34	51.5	66	100	

Table 7. shows that of the 31 pregnant women in the third trimester who were in the early adulthood category, 45.2 % had sufficient knowledge and of the pregnant women in the third trimester who were in the middle adulthood category, 45.2% had insufficient knowledge. by 65.7%. Based on the *chi-square statistical test*, *the P* value is 0.035. Where the *P value*  $< \alpha$  (0.05), it can be concluded that Ha is accepted, meaning that the age factor influences the

knowledge of pregnant women in the third trimester about red ginger drinks as a pain reliever for the first active phase of labor.

# c. The Influence of Information on Knowledge

Table 8.The Influence of Information on the Knowledge of Pregnant Women in the Third

Trimester About Red Ginger Drinks as a Pain Reducer in the First Stage of Active Labor at

Perdanagan Regional Hospital

Information	Know Trime	ledge of ster	Pregna	Total		p value			
	Good		Enou	gh					
	n	%	n	%	n	%	n	%	
Yes	6	46.2	6	46.2	1	7.7	13	100	
Tidak	2	3,8	18	34,0	33	62,3	53	100	0.000
Jumlah	8	12,1	24	36,4	34	51,5	66	100	

Table 8. shows that of the 13 pregnant women in the third trimester who received information, 46.2 % had good knowledge and of the 53 pregnant women in the third trimester who did not receive information, 46.2% had poor knowledge. by 62.3%. Based on the *chisquare statistical test*, *the P* value is 0.000. Where the *P value*  $< \alpha$  (0.05), it can be concluded that Ha is accepted, meaning that the information factor influences the knowledge of pregnant women in the third trimester about red ginger drinks as a pain reliever for the first active phase of labor.

### d. The Influence of Culture on Knowledge

Table 9.The Influence of Culture on the Knowledge of Pregnant Women in the Third

Trimester About Red Ginger Drinks as a Pain Reducer in the First Active Phase of Labor at

Perdanagan Regional Hospital

Culture		Knowledge of Pregnant Women in the Third Trimester						Third Total			
	Good	ood Enough Not enough									
	n	%	n	%	n	%	n	%			
Positive	7	25.0	11	39.3	10	35.7	28	100			
Negatif	1	2,6	13	34,2	24	63,2	38	100	0.010		
Jumlah	8	12,1	24	36,4	34	51,5	66	100			

Table 9. shows that of the 28 pregnant women in the third trimester with a culture in the positive category, 39.3 % had sufficient knowledge and of the 38 pregnant women in the third trimester with a culture in the negative category, 39.3% had insufficient knowledge. by 63.2%. Based on the chi-square statistical test, the P value is 0.010. Where the P value  $< \alpha$ 

(0.05), it can be concluded that Ha is accepted, meaning that cultural factors influence the knowledge of pregnant women in the third trimester about red ginger drinks as a pain reliever for the first active phase of labor.

### 5. DISCUSSION

# The Influence of Education on Knowledge

Table 1. shows that of the 17 highly educated pregnant women in their third trimester, they have sufficient knowledge. of 58.8, 28 pregnant women with secondary education mostly have less knowledge, which is 60.7% and pregnant women with basic education also have less knowledge, which is 71.4%. Based on the *chi-square statistical test, the P value* is 0.003. Where the *P* value  $<\alpha$  (0.05), it can be concluded that Ha is accepted, meaning that the education factor influences the knowledge of pregnant women in the third trimester about red ginger drinks as a pain reliever for the first stage of active labor.

The results of a study in line with those conducted by Elisa (2014) were the results of a study of 41 Primigravida mothers who were examined at the Ungaran Health Center Area, West Ungaran District, Semarang Regency. Most of the mothers (65.9%) had secondary education and from the level of knowledge, most of the mothers' knowledge levels were sufficient (53.7%). This proves that education affects knowledge because a person's level of education will affect the response that comes from outside. Educated people will think about how much benefit they might get from the idea. Educated Primigravida mothers will certainly make many changes to what they did in the past. Low levels of education affect the quality of health due to minimal knowledge about reducing labor pain.

Education is a basic and planned effort to create a learning atmosphere from the learning process so that students actively develop themselves to have spiritual religious character, self-control, personality, intelligence, noble morals, and skills for themselves, society, and the country (Pidarta, 2014).

The results of the study are in line with the opinion put forward by Aisyah (2016) who explained that education is a process of internalizing culture into students and society. Education is not just a transfer of knowledge but must include 3 important things, namely cognitive which is reflected in the capacity of thinking power to recognize and develop knowledge, affective which is reflected in norms and psychomotor which is reflected in technical skills.

Another opinion that is in line with the research results was put forward by Suparyanto (2013) who explained that education means guidance given by someone to another person

about something so that they can understand. It is undeniable that the higher a person's education, the easier it is for them to receive information, and in the end the more knowledge they have. On the other hand, if a person's level of education is low, it will hinder the development of a person's attitude towards acceptance, information and newly introduced values.

The researcher assumes that the education factor of pregnant women affects the knowledge of pregnant women about red ginger drinks that can reduce pain during labor. Based on the results of the study, it is known that the majority of pregnant women in the Trienggadeng Health Center work area have secondary education, which is 60.7%. With this educational background, mothers still have limited knowledge and do not understand that ginger drinks can reduce pain during labor. The results of the study also showed that 51.5% of mothers had less knowledge about ginger drinks that can reduce pain during labor. So researchers can conclude that the higher the mother's education, the better the level of understanding and knowledge of the mother about the efficacy of ginger drinks as a pain reliever for labor. This is evidenced by the results of the study where pregnant women with higher and secondary education backgrounds have sufficient knowledge and better understand the questions in the research questionnaire.

### The Effect of Age on Knowledge

Table 2. shows that of the 31 pregnant women in the third trimester who were in the early adulthood category, 45.2 % had sufficient knowledge and of the pregnant women in the third trimester who were in the middle adulthood category, 45.2% had insufficient knowledge. by 65.7%. Based on the *chi-square statistical test*, *the P* value is 0.035. Where the *P value*  $< \alpha$  (0.05), it can be concluded that Ha is accepted, meaning that the age factor influences the knowledge of pregnant women in the third trimester about red ginger drinks as a pain reliever for the first active phase of labor.

Research that is in line with this research was conducted by Elisa (2014) From the results of the study, most mothers were aged 20-35 years as many as 31 respondents or 75.6%. At this age is a good age for pregnancy and childbirth because the reproductive organs are ready to accept pregnancy and childbirth, in addition to psychological and emotional maturity to face pregnancy and childbirth. Age is one factor that can describe a person's psychological and social maturity, so that someone is better able to respond to the information obtained. This will affect a person's ability to understand the information obtained, so that it can affect a person's knowledge.

According to Notoatmodjo (2012) age is a variable that is always considered in epidemiological investigations. Morbidity and mortality rates almost all show a relationship with age.

The results of this study are in line with the theory put forward by Elisa (2014) which explains that at a relatively young age, a person may lack experience in obtaining information. Factors that influence knowledge include exposure to mass media and experience. Age is one factor that can describe a person's psychological and social maturity, thus making a person better able to respond to the information obtained. This will affect a person's ability to grasp the information obtained, so that it can affect a person's knowledge.

In line with the theory above, Suparyanto (2013) also explains that as a person ages, changes will occur in the physical and psychological (mental) aspects. In general, there are four categories of physical growth changes, first, changes in size, second, changes in proportion, third, loss of old characteristics, fourth, the emergence of new characteristics. This occurs due to the maturation of organ function. In the psychological or mental aspect, the level of thinking is increasingly mature and adult.

The researcher's assumption is that the older the pregnant mother is, the better her thinking ability will be. Based on the results of the study, it is known that the majority of pregnant women in the Trienggadeng Health Center work area are middle-aged, namely between 36-45 years old and have less knowledge about warm ginger drinks that can reduce labor pain, namely 65.7%. These pregnant women do not know the benefits of warm ginger drinks and consider them to be just ordinary drinks to provide freshness to the body, especially when catching a cold. Thus, the study can conclude that although increasing age will increase the ability and understanding of pregnant women, if the pregnant woman does not try to find out the benefits of red ginger drinks, then the pregnant woman will still not know the relationship between reducing labor pain and red ginger drinks during labor. Based on the results of the study, it also shows that pregnant women who are early adults, namely 21-35 years old, are better able to understand and have better insight into reducing labor pain compared to pregnant women aged 36-45 years.

### The Influence of Information on Knowledge

Table 3. shows that of the 13 pregnant women in the third trimester who received information, 46.2 % had good knowledge and of the 53 pregnant women in the third trimester who did not receive information, 46.2% had poor knowledge. by 62.3%. Based on the *chisquare statistical test*, *the P* value is 0.000. Where the *P value*  $< \alpha$  (0.05), it can be concluded

that Ha is accepted, meaning that the information factor influences the knowledge of pregnant women in the third trimester about red ginger drinks as a pain reliever for the first active phase of labor.

The results of the study are in line with the study conducted by Elisa (2014). From the results of the study, it was found that most mothers obtained health information (65.9%), and (34.1%) did not obtain information. This is in accordance with the theory that states that factors that influence knowledge include exposure to mass media and experience.

According to Notoatmodjo (2012), information is data that is processed into a form that has meaning for the recipient and has real and felt value for current or future decisions, information that comes from the sender of the message addressed to the recipient of the message. In addition, information can be obtained from print media, electronic media, non-media such as family, friends, health workers.

The research results are in line with the opinion put forward by Suparyanto (2013) who explained that the ease of obtaining information can help speed up a person's ability to obtain new knowledge.

Information obtained from various sources will affect a person's level of knowledge. If a person obtains a lot of information, he tends to have extensive knowledge. The more often people read, the better their knowledge will be than just hearing or seeing. And it can be proven by the many interests in reading (Notoadmodjo, 2012).

The researcher's assumption is that the information obtained by pregnant women affects the insight and increase in knowledge of pregnant women. Based on the results of the study, it shows that the majority of mothers did not receive information and had insufficient knowledge about red ginger drinks as a pain reliever for labor, which was 62.3%. From the interview results, it was also found that mothers who received information on average obtained it from the experiences of their parents and close friends who had told that during pregnancy they often drank red ginger and during labor there were no obstacles and the labor process went smoothly. Meanwhile, pregnant women who had received information about red ginger drinks as a pain reliever for labor, either from health workers, friends or television, also said that this was good and worth implementing to help reduce pain during labor. On the other hand, pregnant women who had never received information still did not have confidence in the truth of it.

### The Influence of Culture on Knowledge

Table 4. shows that of the 28 pregnant women in the third trimester with a culture in the positive category, 39.3 % had sufficient knowledge and of the 38 pregnant women in the third trimester with a culture in the negative category, 39.3% had insufficient knowledge. by 63.2%. Based on the chi-square statistical test, the P value is 0.010. Where the P value  $<\alpha$  (0.05), it can be concluded that Ha is accepted, meaning that cultural factors influence the knowledge of pregnant women in the third trimester about red ginger drinks as a pain reliever for the first active phase of labor.

According to Noorkasiani et al (2013) culture means things related to reason. Culture is in the form of creation, will and feeling. Culture means all human ideas and works that must be accustomed to learning along with the whole of their morals. There are three ideas of culture, namely: the form of culture as a complex of ideas, concepts, values, norms, and regulations, the form of culture as a complex of patterned activities and actions in society, the form of culture as objects produced by humans.

The results of the study are in line with the theory put forward by Notoatmodjo (2012) that along with the development of culture, the way humans think also develops. From here humans have been able to use their reasoning in gaining knowledge and giving birth to ways of thinking indirectly through statements and then looking for the relationship so that a conclusion can be made.

Another opinion is also put forward by Bakker (2013) who explains that culture is a work process. Culture is an activity. A process of human action in an effort to perfect their lives. This understanding displays the dynamic aspect that human culture experiences changes. With culture, humans are able to remain gradual in their environment and utilize the environment.

According to the assumption of researchers, tradition and culture greatly influence the improvement of the health of pregnant women. For pregnant women in the Trienggadeng health center, they are very enthusiastic and have a positive response to the tradition of using natural medicines as a pain reliever during labor. However, due to the lack of knowledge about red ginger drinks as a pain reliever during labor, more pregnant women give a negative response in consuming it. This is indicated by the results of the study, 57.6% of pregnant women are in the negative response category. So far, they only consider red ginger drinks to maintain body health and increase endurance so that they do not get sick easily, so they do not consume the drink during pregnancy. On the other hand, pregnant women who know the

benefits of the drink consider the drink to be very good and useful in reducing pain during labor later.

### 6. CONCLUSION AND SUGGESTIONS

### Conclusion

Based on the results of research and discussion regarding factors that influence the knowledge of pregnant women in the third trimester about red ginger drinks as a pain reliever in the first active phase of labor, the following conclusions can be drawn:

- 1. Most pregnant women in their third trimester have insufficient knowledge about red ginger drinks as a pain reliever for labor, namely 51.5% of 66 respondents.
- 2. The education factor has been proven to influence the knowledge of pregnant women in the third trimester about red ginger drinks as a pain reliever for labor with a p-value of 0.003.
- 3. Age factor also influences the knowledge of pregnant women in the third trimester regarding red ginger drink as a pain reducer in the first stage of active labor with a p-value of 0.035.
- 4. The information factor showed a significant influence on the knowledge of pregnant women in the third trimester about red ginger drinks as a pain reliever for labor with a p-value of 0.000.
- 5. Cultural factors also play a role in increasing the knowledge of pregnant women in the third trimester about red ginger drinks as a pain reliever for the first active phase of labor with a p-value of 0.010.

### **SUGGESTION**

### **For Pregnant Women**

It is hoped that the results of this study can be input for pregnant women in the third trimester in the Trienggadeng Health Center work area to increase knowledge and insight on how to overcome labor pain by consuming warm red ginger.

### For Researchers

This research is expected to provide additional information for research institutions and other researchers to develop and conduct further research on non-pharmacological pain management during childbirth.

### **Research Location**

This research can contribute to the development of obstetrics and health sciences, especially related to non-pharmacological pain management, as well as the use of warm red ginger to reduce pain in mothers giving birth in the first stage of labor.

### **For Educational Institutions**

This research is expected to add to the literature and become additional knowledge for students and lecturers in the health sector, especially those related to reducing labor pain.

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