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Relationship Levels of Knowledge About Hepatitis B Disease with HBsAG Checking Measures on Pregnant Women at Puskesmas Dolok Masihul, Serdang Bedagai Regency

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ABSTRACT

The purpose of this study was to determine the relationship between the level of knowledge about hepatitis B disease and HBsAG examination in pregnant women at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in 2020. This research method was a quantitative study with a descriptive correlation research design with a cross sectional approach, at the Dolok Masihul Health Center, Dolok Masihul District, Serdang Bedagai Regency. starting from January to July 2020. The results of this study are: 1 The level of knowledge of pregnant women about hepatitis B at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in 2020 is mostly less (46.8%). 2 The majority of HBsAG examinations for pregnant women at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in 2020 were not carrying out HBsAg examination (72.3%). 3 There is a relationship between the level of knowledge about hepatitis B and the action of HBsAG examination in pregnant women at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in 2020 with pvalue = 0.000.

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Kata kunci:

Pengetahuan Tentang Penyakit Pemeriksaan HBsAG

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ABSTRAK

Tujuan penelitian ini yaitu untuk mengetahui hubungan tingkat pengetahuan tentang penyakit hepatitis B dengan tindakan pemeriksaan HBsAG pada ibu hamil di Puskesmas Dolok Masihul Kabupaten Serdang Bedagai tahun 2020. Metode Penelitian ini Jenis penelitian ini adalah penelitian kuantitatif dengan rancangan penelitian secara deskriptif korelasi dengan pendekatan cross sectional. di Puskesmas Dolok Masihul Kecamatan Dolok Masihul Kabupaten Serdang Bedagai. Dimulai dari bulan Januari sampai dengan bulan Juli 2020. Hasil penelitian ini yaitu: 1 Tingkat pengetahuan ibu hamil tentang penyakit hepatitis B di Puskesmas Dolok Masihul Kabupaten Serdang Bedagai tahun 2020 mayoritas adalah kurang (46,8%). 2 Tindakan pemeriksaan HBsAG pada ibu hamil di Puskesmas Dolok Masihul Kabupaten Serdang Bedagai tahun 2020 mayoritas adalah tidak melakukan pemeriksaan HBsAg (72,3%). 3 Ada hubungan tingkat pengetahuan tentang penyakit hepatitis B dengan tindakan pemeriksaan HBsAG pada ibu hamil di Puskesmas Dolok Masihul Kabupaten Serdang Bedagai tahun 2020 dengan p-value = 0,000.

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INTRODUCTION

Every pregnancy, in its development has a risk of experiencing complications or complications. Therefore, antenatal care must be carried out routinely, according to standards and integrated for quality antenatal services (Kemenkes RI, 2014). Pregnant women must perform prenatal checkups, the prenatal checks given to pregnant women during pregnancy are Antenatal Care (ANC) examinations including VCT (Voluntary Counseling and Testing), HBsAg, Hb, blood type and urine protein (Manuaba et al., 2015).

Infectious diseases that are very dangerous for pregnant women are HIV (Human Immunodeficiency Virus), HBsAg (hepatitis B surface antigen) and TORCHS (Toxoplasmosis, Rubella, Cytomegalovirus, Herpes simplex virus, and Syphilis) which can interfere with reproductive health and fetal development in the mother's body. pregnant (Prawirohardjo, 2015).

All pregnant women should have a hepatitis B (HBV) test at the first prenatal visit. This test has also become a recommendation from health organizations both worldwide and in Indonesia. Hepatitis B test in pregnant women is the easiest way to identify hepatitis B virus infection early. By doing a hepatitis B test, viral infection can be prevented in

parent and child before or during birth. Moreover, the transmission of hepatitis B from mother to child must be watched out for. So if the Hepatitis B test is carried out on pregnant women, the risk can be reduced or prevented during pregnancy (Handayani, 2020).

The World Health Organization (WHO) estimates that in 2015, 257 million people were living with chronic hepatitis B infection. In 2015, hepatitis B resulted in approximately 887,000 deaths, mostly from cirrhosis and hepatocellular carcinoma (i.e. primary liver cancer). In 2016, 27 million people (10.5% of all people estimated to be living with hepatitis B) were aware of their infection, while 4.5 million (16.7%) of those diagnosed were on treatment. According to the latest WHO estimates, the proportion of children under five years of age chronically infected with HBV fell to just under 1% in 2019 down from about 5% in the pre-vaccine era from the 1980s to the early 2000s (WHO, 2010). 2020).

The World Health Assembly (WHA) through the Global Health Sector Strategy (GHSS) program (2016-2020) targets the world to be free from hepatitis virus infection by 2030 by conducting a program to prevent HBV transmission to infants in 90% of pregnant women (World Health Organization, 2019). The American Congress of Obstetrics and Gynecology (ACOG) recommends HBV screening in pregnant women because of the risk of vertical transmission (70-90%) in HBeAg positive pregnant women because HBV crosses the placenta and induces T-cell tolerance in the uterus. In addition, high serum levels of HBV DNA are also a risk for intra uterine HBV infection through the uteroplacental circulation (Yuliana & Melyani, 2020).

Transmission of Hepatitis from mother to child or vertically has a probability of about 90% to 95%. Based on the Hepatitis and Gastrointestinal Infectious Diseases Information System (SIHEPI) 2018-2019, the number of pregnant women who were tested for hepatitis B was 1,643,204 in 34 provinces. As a result, as many as 30,965 reactive pregnant women (infected with hepatitis B virus), and 15,747 newborns from hepatitis B reactive mothers were given Hepatitis B Immunoglobulin (HBIg). (Ministry of Health RI, 2019).

The target of districts/cities that carry out Hepatitis B Early Detection in 2019 is 80% (411 districts/cities). In 2019,

early detection of Hepatitis B in pregnant women/risk groups had been carried out in 464 districts/cities or 90.27% spread across 34 provinces. The number of pregnant women who were examined for Hepatitis B using the HBsAg Rapid Diagnostic Test (RDT) in 2019 was 2,540,158 people or 48.25% of the target for pregnant women. The results of the RDT HBsAg examination found that as many as 46,064 (1.81%) pregnant women were detected with HBsAg Reactive (Positive). (Ministry of Health RI, 2020).

The government continues to make efforts to accelerate the control of Hepatitis B in Indonesia. Because as of June 2020, there were around 73.2% of districts/cities that carried out early detection and had not reached the target, the achievement of the number of pregnant women checking for early detection of Hepatitis B in the second quarter of 2020 only reached 724,497 people, while the coverage of HB0 immunization for the period January to June 2020 is only about 40%. The expected vaccination should be 80-90%. This means that Indonesia still has to work hard, in order to reach the 90% target (Widyawati, 2020).

The results of the 2018 Riskesdas, that in North Sumatra Province showed the proportion of people with hepatitis was 0.3%, by gender (0.43% male) and 0.31% female, according to the location of residence (urban 0.43% and rural 0.30%). Meanwhile, only 1.59% of pregnant women who carry out an early detection of Hepatitis B check (Dinkes Sumut, 2019). Meanwhile, the percentage of HBsAg reactive pregnant women in North Sumatra Province is 1.76% (Kemenkes RI, 2020).

Data from Serdang Bedagai Regency in 2019, from 3,217 pregnant women in Serdang Bedagai Regency, only 4.31% carried out an early detection of Hepatitis B. This shows that hepatitis B examination in pregnant women is still very minimal (Dinkes Sergai, 2019).

The National Program for the prevention and control of the hepatitis B virus currently focuses on preventing mother-to-child transmission (PPIA) because 95% of hepatitis B transmission is vertical, namely from mothers who are positive for hepatitis B to their babies. Since 2015 the Hepatitis B Early Detection (DDHB) activity has been carried out for pregnant women served by basic health services (Puskesmas) and their networks (Surmiasih et al., 2020)

The form of activity from the national program to prevent mother-to-child transmission of Hepatitis B is that pregnant women who are HBsAg reactive are referred for further treatment; HBIg is given to babies born to HBsAg reactive mothers; all pregnant women must perform integrated ANC and DDHB and their babies are monitored; administration of HBO <24 hours is mandatory for all newborns and mandatory hepatitis B immunization (3 doses) is given to all infants (Widyawati, 2020).

The risks for pregnant women who are infected with HBV include abortion, premature delivery and bleeding. Pregnant women who are infected with HBV can also transmit the infection vertically to their fetuses during delivery or immediately after delivery. Infants who are infected with HBV have a 90% chance of developing chronic hepatitis B during their life and have a high chance of suffering from liver cirrhosis and liver cancer (Surmiasih et al., 2020).

According to research (Zulfian et al., 2019), that viral hepatitis is a complication that affects 0.2% of all pregnancies. Abortion, IUFD and preterm delivery are the most common complications in pregnant women with hepatitis infection.

Hepatitis B examination in pregnant women is carried out through blood tests using the HBsAg Rapid Diagnostic Test (RDT). HBsAg (Hepatitis B Surface Antigen) is a surface antigen found in the hepatitis B virus which indicates the presence of hepatitis B infection. Babies born to mothers who have detected Hepatitis B (HBsAg Reactive) are given a passive vaccine, namely HBIg (Hepatitis B Immunoglobulin) before 24 hours births are accompanied by active immunization according to the National program (HB0, HB1, HB2 and HB3). HBIg is a hepatitis B specific antibody serum that provides direct protection to infants (Surmiasih et al., 2020).

According to the results of the study (Zulfian et al., 2019), that from the data analysis that has been carried out using the chi square test, the results show that there is a significant relationship between the mother's level of knowledge on the incidence of hepatitis B in pregnant women (p-value = 0.021). The existence of a relationship between maternal knowledge about hepatitis B disease and the incidence of hepatitis B in pregnant women is influenced by several factors, including predisposing factors, namely the knowledge of mothers who are in the poor category have not done proper prevention and knowledge about hepatitis B disease is still minimal. In addition, driving factors such as the role of local health workers have not been optimal in providing health education to residents or the surrounding community. So that people's behavior is still not good.

Based on a preliminary survey that was carried out at the Dolok Masihul Health Center, Dolok Masihul District, Serdang Bedagai Regency in January 2020, by interviewing 10 pregnant women about hepatitis B and HBsAg examination. From the interviews, it was found that 4 mothers said they did not know about hepatitis B. They also said that they had never tested for HBsAg. Meanwhile, 3 mothers know about hepatitis B, but only 1 mother has tested for HBsAg. In addition, according to available data, 2 cases of hepatitis B were found in pregnant women.

The low level of knowledge of mothers through the initial survey that has been carried out, in addition to increasing the scope of HBsAG examination, the researchers are interested in researching "The Relationship of Knowledge Levels about Hepatitis B with HBsAG Examination Actions in Pregnant Women at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in 2020"

METHODS

This type of research is a quantitative research with a descriptive correlation research design with a cross sectional approach, which aims to describe phenomena or events in depth and systematically in the form of quantitative data, to determine the relationship of the independent variable (risk) with the independent variable (effect) which is collected relatively systematically. together (one day) (Endra, 2017). In this case, this study was conducted to determine the relationship between the level of knowledge about hepatitis B disease and the action of HBsAG examination in pregnant women at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in 2020.

Research Location and Time

The study was conducted at the Dolok Masihul Public Health Center, Dolok Masihul District, Serdang Bedagai Regency with the consideration that 2 cases of hepatitis B were found in pregnant women. And from the survey conducted, there are still many pregnant women who do not

know about hepatitis B so they are reluctant to do HBsAg examination

The research time starts from the submission of the title to the trial of the results starting from January to July 2020.

Population and Research Sample

The population is a group of subjects who want to be subject to generalization of research results that have shared characteristics or characteristics that distinguish them from other subject groups (Endra, 2017). The population of this study were all pregnant women who had a pregnancy check-up at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in June 2020 as many as 47 people.

The sample is in whole or in part taken from the entire object that has been studied and is considered to represent the entire population (Endra, 2017). The sampling technique in this study was using a total sampling technique, namely all the population was used as a research sample as many as 47 pregnant women who did a pregnancy check at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in June 2020.

Data Measurement Method

Research Instruments

The research instrument is a questionnaire sheet that has been prepared by the researcher and filled out by the respondent. Data collection was carried out directly by the researcher. The questionnaire used is a closed questionnaire that has been equipped with a choice of answers, where each item consists of several alternative answers, addressed to the respondents in this study. The number of questions for each variable is made in the positive form.

a. Knowledge Questionnaire

This questionnaire contains statements to determine the knowledge of pregnant women about hepatitis B. The knowledge variable is measured through a questionnaire sheet that has been prepared consisting of 15 statement items consisting of 2 (two) correct (1) and incorrect (0) answer choices (Guttman scale) so that the highest score is 15 and the lowest is 0. Based on the indicators in the book (Budiman & Riyanto, 2016) that the knowledge category is measured in the following way:

- 1) Good, if the respondent answers >75% or gets a score of 11-15
- 2) Enough, if the respondent answers 56-75% or gets a score of 8-10
- 3) Less, if the respondent answers <56% or gets a score of 0-7

b. HBsAG Screening Action Questionnaire

For the HBsAG examination action variable, it is measured through a questionnaire sheet that has been compiled consisting of 1 statement item consisting of 2 (two) answer choices Yes (1), No (0) using the Guttman scale so that the highest score is 1 and the lowest is 0, so the action category HBsAG tests are:

- 1) Yes, when performing HBsAG examination
- 2) No, if you don't do HBsAG examination

Validity and Reliability Test

In research, if the questionnaire is a measuring tool or data collection tool, then the questionnaire must be proven valid and reliable. The questionnaire used as a research measuring instrument needs to be tested for validity and reliability, because the requirements for a good research instrument to measure variables must meet the elements of accuracy, precision and sensitivity.

a. Validity

Validity is a product of validation, which is a process carried out by researchers to collect data empirically to support the conclusions generated by the instrument score. Validity is the ability of a measuring instrument to measure its measuring target. Testing the validity of the instrument is needed to get the instrument as a measuring tool for what research is desired or can reveal data from the variables studied appropriately. In the validity test with a total variable score using the Pearson moment correlation coefficient (r) formula, with the following conditions:

- a) If rcount > rtable, it is declared valid.
- b) If rount < rtable, it is declared invalid.
- b. Reliability

Reliability means the extent to which the results of a measurement have reliability, reliability, constancy, consistency, and stability that can be trusted. The measurement results can be trusted if in several measurements of the same subject group, relatively the same results are obtained. So reliability is an index that shows the extent to which a measuring instrument can be trusted or reliable. Reliability is calculated using Croncbach's Alpha formula. If r arithmetic > and r table are obtained, then the questionnaire is declared reliable (Endra, 2017). The implementation of the validity test will be carried out at the Bintang Bayu Health Center, Serdang Bedagai Regency. This is because the Bintang Bayu Health Center is also one of the Puskesmas in Serdang Bedagai Regency. The working area of the Bintang Bayu Health Center is also quite wide, like the work area of the Dolok Masihul Health Center.

After testing the validity of the knowledge variable, it was found that only 15 instruments were valid because they had rcount > rtable. Meanwhile, the other 5 instruments (statements number 2, 5, 10, 15 and 16) are invalid because rcount < rtable. The reliability results using the Cronbach's Alpha formula were also obtained that the Cronbach's Alpha value = 0.821, it can be concluded that 15 knowledge questionnaires were declared reliable and reliable.

Data analysis method

Data processing is a process in obtaining summary data or summary figures by using certain methods or formulas. The ways of processing data in this study are as follows:

- a. Editing
- b.Coding
- c.Scoring
- d.Tabulating

Data analysis technique

In conducting the analysis, especially on research data, applied statistics will be used which is adapted to the purpose to be analyzed. This research is a descriptive study so that it will use descriptive statistics, namely statistics that discuss ways to summarize, present, and describe data with

the aim of making it easy to understand and have more meaning. The steps for data analysis are as follows:

Univariate analysis was carried out to obtain a description of each variable studied, both the independent variable (level of knowledge) and the dependent variable (HBsAG examination action). By looking at the frequency distribution, it can be seen the description of each variable in the study.

After knowing the characteristics of each variable in this study, the analysis was continued at the bivariate level which serves to determine the relationship (correlation) between the independent variable and the dependent variable. To prove that there is a significant relationship between the independent variable and the dependent variable, Chi-Square analysis is used, with a 95% confidence level. If the calculation results show the p-value < then it is said (Ho) is rejected and Ha is accepted, meaning that the two variables have a statistically significant relationship. Then to explain the relationship between the dependent variable and the independent variable, cross tabulation analysis was used.

RESULTS AND DISCUSSION

After collecting data through distributing questionnaires to respondents who became the research sample, then the data was then processed and analyzed. The results of the research on "The Relationship of Knowledge Levels about Hepatitis B with HBsAG Examination Actions for Pregnant Women at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in 2020" are as follows:

Univariate analysis is an analysis carried out to analyze each variable from the research results. The characteristics of respondents, independent variables and dependent variables can be seen in the following table:

Based on table 1. above, it can be seen that the characteristics of the respondents are seen from the age of the respondents, the majority are aged 20-35 years as many as 41 people (87.2%), having high school education as many as 40 people (85.1%), and not working (housewives).) as many as 32 people (68,1%).

Table 1. Frequency Distribution of Respondents' Characteristics

Karakteristik	Frekuensi	%
Mother's Age		
<20 years	6	12,8
20-35 years old	41	87,2
Total	47	100
Mother's Education		
junior high school	5	10,6
senior High School	40	85,1
College	2	4,3
Total	47	100
Work		
Housewife	32	68,1
Employee	1	2,1
entrepreneur	5	10,6
Private employees	2	4,3
Laborer	1	2,1
Farmer	1	2,1
Trader	5	10,6
Total	47	100

Table2.
Frequency Distribution of Pregnant Women's Knowledge about Hepatitis Bat the Dolok Masihul Public Health Center, Serdang Bedagai Regency 2020

No	Knowledge	Frekuensi	%
1	Good	8	17
2	Enough	17	36,2
3	Not enough	22	46,8
	Total	47	100

Based on table 2 above, it can be seen that the majority of respondents have knowledge of the poor category as many as 22 people (46.8%), sufficient category as many as 17

people (36.2%) and the minority has good category knowledge as many as 8 people (17.0%).

c. Actions for HBsAg Examination in Pregnant Women

Table3.

Distribution of the Frequency of HBsAg Examination in Pregnant Women at the Dolok Masihul Public Health Center, Serdang Bedagai Regency 2020

No	HBsAg Testing Measures	Fre	kuensi %	
1	Yes	13	27,7	
2	No	34	72,3	
	Total	47	100	

Based on table 3 above, it can be seen that the majority of respondents did not test for HBsAg as many as 34 people

(72.3%) and only 13 people (27.7%) did HBsAg examination on pregnant women.

Table 4.
Cross-Distribution of Knowledge of Hepatitis B Level with HBsAG Examination in Pregnant Womenat the Dolok Masihul Public Health Center, Serdang Bedagai Regency 2020

	HBsAg Pemeriksaan Check Measures			<u>-</u>	<u> </u>			
No	Knowledge		Yes		No	Total	%	P-Value
		f	%	f	%			
1	Good	7	14,9	1	2,1	8	17	
2	Enough	4	8,5	13	27,7	17	36,2	0
3	Not enough	2	4,3	20	42,6	22	46,8	
	Total	13	27,7	34	72,3	47	100	

Based on table 4, it can be seen that there are 22 respondents who have poor category knowledge (46.8%), of which 2 people (4.3%) did HBsAg examination and 20 people (42.6%) did not test HBsAg. Meanwhile, respondents who had good knowledge were 8 people (17.0%), of which 7 people (14.9%) did HBsAg examination and 1 person (2.1%) did not do HBsAg examination.

The results of this statistical test using the chi-square test results obtained p-value 0.000 <0.05. So it can be concluded that there is a relationship between the level of knowledge about hepatitis B disease and the action of HBsAG examination in pregnant women at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in 2020.

DISCUSSION

The level of knowledge of pregnant women about hepatitis B at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in 2020

The results showed that the majority of respondents had knowledge of the poor category as many as 22 people (46.8%), sufficient category as many as 17 people (36.2%) and the minority had knowledge of the good category as many as 8 people (17.0%). This shows that the knowledge of respondents in this study is still dominated by lack of

knowledge. Respondents' knowledge can also be influenced by the characteristics of the respondents themselves, which in this study are associated with age, education and occupation. In terms of age, most of the respondents were 20-35 years old, but there were also respondents who were <20 years old.

According to Budiman & Riyanto, 2016 that with increasing age a person will experience changes in physical and psychological (mental) aspects. Broadly speaking, physical growth consists of four categories of changes, namely changes in size, changes in proportions, loss of old characteristics, and the emergence of new characteristics. These changes occur due to the maturation of organ function. In the psychological or mental aspect, a person's level of thinking becomes more mature and mature.

In terms of education, the majority of respondents are senior high school graduates, but not a few have junior high school education. This shows that there are still many respondents who fall into the category of low education (SMP). This will affect their knowledge of healthy living behavior, especially regarding the issue of HBsAg examination.

According to Budiman & Riyanto, 2016 it is undeniable that the higher a person's education, the easier it is for them to receive information, and in the end the knowledge they have will increase. On the other hand, if a person has a low level of education, it will hinder the development of that

person's attitude towards the acceptance of newly introduced information and values.

With higher education, a person will tend to get information, both from other people and from the mass media. The more information that comes in, the more knowledge you get about health. Knowledge is very closely related to education where it is expected that someone with higher education will have more extensive knowledge. However, it should be emphasized that someone with low education does not mean absolutely low knowledge. Increased knowledge is not absolutely obtained in formal education, but can also be obtained in non-formal education. These two aspects will ultimately determine a person's attitude towards a particular object. The more positive aspects of the object are known, the more positive attitude will be towards the object.

Meanwhile, in terms of mother's occupation, the majority of respondents are housewives. According to (Budiman & Riyanto, 2016), that the work environment can make a person gain experience and knowledge, either directly or indirectly. However, because the majority of respondents are housewives, most of which are done at home, they do not have a work environment that can increase their experience and knowledge. So it is very natural that their level of knowledge about health is minimal. Moreover, if they lack information, then it is certain that their understanding will be very limited.

According to (Zulfian et al., 2019), the level of knowledge is very important to prevent the occurrence of Hepatitis B for the mother and the baby itself. Because it is known that Hepatitis B is a dangerous disease that can cause extraordinary events (KLB) and death. Therefore, mothers must increase knowledge about hepatitis B disease as early as possible to prevent hepatitis B and for the survival of mothers and babies themselves, therefore a high level of knowledge is needed to prevent hepatitis B and vertical transmission.

Acute hepatitis B virus (HBV) infection in pregnant women was not associated with increased mortality or tratogenicity. Infection can be prevented by vaccination. HBsAg exists in three forms, namely HBsAg which is present in intact virions (Dane particles) and in the form of spherical particles with a cross section of 22 nm and tubular particles. Therefore, a positive HBsAg is not always an indication of the presence of intact HBV particles. A positive HBsAg in an individual's blood indicates that the individual is suffering from HBV infection. One way to screen for hepatitis B is to do an HBsAg test. Pregnant women who have been screened by taking the HBsAg examination, this is because the level of knowledge of the mother is quite good and is supported by the puskesmas with socialization to pregnant women to screen for HBsAg (Surmiasih et al., 2020).

HBsAG examination in pregnant women at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in 2020

The results showed that the majority of respondents did not test for HBsAg as many as 34 people (72.3%) and only 13 people (27.7%) did HBsAg examination on pregnant women. The few respondents who did not do the HBsAg examination due to their low knowledge about the importance of HBsAg examination in pregnant women. This lack of knowledge will, of course, form a negative attitude and will eventually form an action not to carry out an HBsAg examination.

The risks for pregnant women who are infected with HBV include abortion, premature delivery and bleeding. Pregnant

women who are infected with HBV can also transmit the infection vertically to their fetuses during delivery or immediately after delivery. Infants who are infected with HBV have a 90% chance of developing chronic hepatitis B during their life and have a high chance of suffering from liver cirrhosis and liver cancer (Surmiasih et al., 2020).

The relationship between the level of knowledge about hepatitis B and the action of HBsAG examination in pregnant women at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in 2020

The results showed that the respondents who had knowledge in the poor category were 22 people (46.8%), of which 2 people (4.3%) did the HBsAg examination and 20 people (42.6%) did not do the HBsAg examination. Meanwhile, respondents who had good knowledge were 8 people (17.0%), of which 7 people (14.9%) did HBsAg examination and 1 person (2.1%) did not do HBsAg examination.

The results of this statistical test using the chi-square test results obtained p-value 0.000 <0.05. So it can be concluded that there is a relationship between the level of knowledge about hepatitis B disease and the action of HBsAG examination in pregnant women at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in 2020.

The results of this study are in accordance with research (Zulfian et al., 2019), that from data analysis that has been carried out using the chi square test, the results show that there is a significant relationship between the mother's level of knowledge on the incidence of hepatitis B in pregnant women (p-value = 0.021). The existence of a relationship between maternal knowledge about hepatitis B disease and the incidence of hepatitis B in pregnant women is influenced by several factors, including predisposing factors, namely the knowledge of mothers who are in the poor category have not done proper prevention and knowledge about hepatitis B disease is still minimal. In addition, driving factors such as the role of local health workers have not been optimal in providing health education to residents or the surrounding community. So that people's behavior is still not good.

This study is also in line with research journals (Putri et al., 2019), that based on the results of the Binary Logistic statistical test, it was found that knowledge had a significant value of 0.017, where p value <0.05, which means there is a relationship between knowledge and hepatitis examination in the Work Area. Martoba Health Center. Knowledge has an Exp (B) value of 9,032, this shows that respondents who have good knowledge have 9,032 times greater chance of doing hepatitis tests compared to respondents who have less knowledge.

Hepatitis is an infectious disease caused by the hepatitis virus which can cause inflammation and even damage liver cells. Hepatitis virus is present in blood and body fluids such as semen, saliva, and breast milk. To diagnose hepatitis virus infection, it is also useful to determine that the acute hepatitis suffered is caused by the hepatitis B virus or superinfection with another virus. Like HBsAg positive IgM anti HBC and positive HBeAg indicating acute hepatitis B virus and other purposes to determine hemoglobin or red blood cell levels and the health of pregnant women, because normal levels of hemoglobin in pregnant women are different from non-pregnant women.

Knowledge or cognitive is a very important domain for the formation of one's actions (overt behavior). In fact, behavior based on knowledge will be better than behavior that is not based on knowledge. There are still many pregnant women who have less knowledge about hepatitis testing due to the attitude of mothers who do not want to ask health workers about the importance of hepatitis testing, low maternal education also affects because pregnant women did not gain knowledge during school about hepatitis tests (Putri et al., 2019).

According to researchers from the results of research conducted, there are still many pregnant women who have less knowledge about hepatitis screening due to the attitude of mothers who do not want to ask health workers about the importance of hepatitis screening, low maternal education also has an effect because pregnant women do not gain knowledge during school about screening, hepatitis.

CONCLUSION

Based on the results of the research that has been carried out and according to the discussion that has been described previously regarding the Relationship between Knowledge Levels about Hepatitis B Disease and HBsAG Examination Actions for Pregnant Women at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in 2020, the following conclusions were obtained:

- 1. The level of knowledge of pregnant women about hepatitis B at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in 2020 was mostly less (46.8%).
- 2. The majority of HBsAG examinations for pregnant women at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in 2020 were not carrying out HBsAg examination (72.3%).

There is a relationship between the level of knowledge about hepatitis B and the action of HBsAG examination in pregnant women at the Dolok Masihul Public Health Center, Serdang Bedagai Regency in 2020 with p-value = 0.000.

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