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FACTORS RELATED TO THE INCIDENCE OF HEPATITIS DR. SOBIRIN HOSPITAL IN MUSI RAWAS REGENCY IN 2020

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ABSTRAK

Hepatitis B is one of the infectious diseases caused by a virus that attacks the liver. It is estimated that about two billion people worldwide have been exposed to Hepatitis B Virus (VHB). VHB currently infects more than 350 million people in the world or approximately 5% of the world's population. In Indonesia, the proportion is 21.8% of all hepatitis types in Indonesia. In 2019, the number of hepatitis B cases in South Sumatra Province was 2,130 cases, in Musi Rawas Regency was 335 cases and in Hospital dr. Sobirin Musi Rawas Regency was 73 cases. The purpose of this study is to find out the factors related to the incidence of Hepatitis B in hospital dr. Sobirin Musi Rawas Regency Year 2020. This research is quantitative research with case-control design. The sampling technique is total-sampling where all populations that meet inclusion criteria are used as samples namely as many as 45 case sample respondents and 45 control sample respondents. The data analysis method used is univariate analysis and bivariate analysis with chi-square test using SPSS Program version 26. The results of the univariate analysis found that out of 90 respondents, the results of the bivariate analysis showed that there was a significant relationship between smoking history (p=0.014; OR=3,500; 95% CI=1,372-8,926), mating status (p=0.036; OR=3,083; 95% CI=1,170-8,129), gender (p=0.027; OR=3,063; 95% CI=1,227-7,645) with hepatitis B incidence. It is recommended to dr. Sobirin Hospital musi rawas regency to be able to further improve the promotion of health and health services optimally for the deoucination of hepatitis B incidence.

Keywords : Hepatitis B, smoking history, marital status, gender

INTRODUCTION

Infectious diseases are one of the leading causes of death in the world. The cause is the emergence of new diseases and the re-emergence of old infectious diseases. One of the causes of infectious diseases is an unhealthy lifestyle (Kemenkes RI, 2014).

Hepatitis B is a viral infection that attacks the liver and can cause acute and chronic diseases. Transmission is common vertically (in the perinatal period) and horizontally (in childhood) Other transmissions through infected blood transfusions, contaminated injections, sharing of syringes among drug users, unsafe sexual practices and family transmission involving non-sexual intrapersonal contact over a long period of time (Stefos, 2017).

WHO in in 2017, as many as 2.85 million people became infected with the new Hepatitis B virus and 80% of people had no prevention, testing and treatment (Verry, 2018). Indonesia is an endemic country of VHB infection. The virus infects 2-10 people out of every 100 people. The disease is widely found in the eastern provinces of Indonesia, such as in West Nusa Tenggara Province (Suharjo, 2017).

The risk factors associated with the incidence of Hepatitis B are the history of smoking. People with a history of smoking and still being active smokers are more at risk of exposure to Hepatitis B virus than people who do not have a history of smoking. According to research conducted by Rani in 2015, it was suggested that smoking history is a factor related to the incidence of Hepatitis B (Rani, 2015).

The next factor also associated with the incidence of Hepatitis B is Gender. Males are more at risk of exposure to Hepatitis B than women. In line with sidjabat research results in 2019, it was stated that gender is a factor related to the incidence of Hepatitis B (Sidjabat, 2019).

Another factor also associated with the incidence of Hepatitis B is mating status. People who have or have been married are more at risk of exposure to Hepatitis B virus that comes from their partner. This is in line with the results of research conducted by Kartika in 2017, stated that mating status is a factor related to the incidence of Hepatitis B (Kartika, 2017).

Based on preliminary survey results in the reporting section of the medical recording room of Dr. Sobirin Musi Rawas Regency, there was data on the number of Hepatitis B cases in 2018 as many as 66 cases and 2019 as many as 73 cases. Hepatitis B cases were more common among men, with 109 cases and 45 cases in women and data obtained by Hepatitis B patients who died in the last 3 years, 6 people. From the description of the problem, the authors are interested in conducting research on the factors that influence the incidence of Hepatitis B in hospital dr. Sobirin Musi Rawas Regency Year 2020.

RESEARCH DESIGN AND METHODOLOGY

This research uses quantitative research methods with case control design. The study was conducted from June 12 to July 12, 2020, with a case population of 45 respondents and a control poll of 45 respondents. The sampling technique in this study is total sampling. where all populations that meet the inclusion criteria are used as a sample of 45 case sample respondents and 45 control sample respondents. The data analysis method used is univariate analysis and bivariate analysis with chi-square test with SPSS program version 26. Insrumen used is a questionnaire consisting of dependent variables (incidence of hepatitis) and independent variables (gender, age, smoking history). Two data enis are primary and secondary.

FINDINGS AND DISCUSSION

A. RESULT

Bivariate Analysis

Tabel 1.4 The Relationship of Smoking History With Hepatitis B With The Incidence of Hepatitis B

Smoking History	Incidence Of Hepatitis B								
	Case Group		Control Group		Total	x²	P	OR	95% CI
	f	%	F	%	N				
Yes (at risk)	36	80	24	53,3	60	6,050	0,014	3,500	1,372 – 8,926
No (at risk)	9	20	21	46,7	30				
Total	45	100	45	100	90				

From table 1.4, continuity correction test results are obtained at 6,050 with a value of asymp.sig (p) = 0.014. Because of the value of p < 0.05 then there is a significant relationship between the history of smoking and the incidence of Hepatitis B. Risk Estimate value of smoking history with hepatitis B incidence judging by odds ratio (OR). The OR score of 3,500 (95% CI = 1,372 – 8,926) means patients with a history of smoking are 3,500 times more at risk of hepatitis B than patients who do not have a history of smoking.

Tabel 1.5 Relationship of Marital Status With the Incident Hepatitis B Incidence

Marital status	Incidence Of Hepatitis B								
	Case Group		Contorl Group		Total	x²	P	OR	95% CI
	f	%	f	%	n				
Yes (at risk)	37	82,2	27	60	64	4,381	0,036	3,083	1,170 – 8,129
No (at risk)	8	17,8	18	40	26				
Total	45	100	45	100	90				

Based on Table 1.5, continuity correction test results are obtained at 4,381 with a value of asymp.sig (p)=0.036. Because of the value of p < 0.05 then there is a significant relationship between mating status and the incidence of Hepatitis B. Risk Estimate value of mating status relationship with hepatitis B incidence is seen from odds ratio (OR). The OR value was obtained at 3,083 (95% CI = 1,170 – 8,129) meaning patients with mating status were 3,083 times more at risk of hepatitis B than patients with un mating status.

Tabel 1.6 Sex Relationship With Hepatitis B Incident at Dr. Sobirin Hospital Musi Rawas Regency

Gender	Kejadian Hepatitis B								
	Case Group		Control Group		Total	x^2	P	OR	95% CI
	F	%	F	%	n				
Female	10	22,2	21	46,7	31	4,921	0,027	3,063	1,227 – 7,645
Male	35	77,8	24	53,3	59				
Total	45	100	45	100	90				

From Table 1.6, continuity correction test results are obtained at 4,921 with a value of asymp.sig (p) = 0.027. Because of the value of p < 0.05 then there is a significant relationship between the sexes and the incidence of Hepatitis B. Risk Estimate value of gender relationship with hepatitis B incidence is seen from odds ratio (OR). The OR score of 3,063 (95% CI = 1,227 – 7,645) means that patients with a male gender are 3,063 times more at risk of hepatitis B than patients with female gender.

B. Discussion

Relationship of Smoking History with Hepatitis B Incidence

That is, the more respondents who have a history of smoking, the higher the risk of hepatitis B incidence in respondents and conversely the more respondents who do not have a history of smoking eat the lower the risk of hepatitis B incidence in respondents. The OR score of 3,500 (95% CI = 1,372 – 8,926) means patients with a history of smoking are 3,500 times more at risk of hepatitis B than patients who do not have a history of smoking.

This research was supported by Rani (2015), with the title thesis of smoking relationship with the incidence of Hepatitis B in Harapan Kita Hospital in 2015 with the results of the study of the relationship of smoking history with the incidence of Hepatitis B with a value of p = 0.002. People with a history of smoking are at risk of exposure to Hepatitis B Virus while people who do not have a history of smoking are not at risk of exposure to Hepatitis B Virus..

Relationship of Mating Status with Hepatitis B Incidence

This means that respondents who are married are at risk for hepatitis B incidence and in contrast those with non-mating status are less at risk of hepatitis B. Or scores are 3,500 (95% CI = 1,372 – 8,926) meaning patients with a history of smoking are 3,500 times more at risk of hepatitis B than patients who have no smoking history.

One way of transmission of hepatitis B virus is through sexual intercourse. Therefore mating status is closely related to the incidence of Hepatitis B especially when indeed having a partner with Hepatitis B and making intercessual contact (vaginal, anal or oral) without using a condom. VHB is called 50 to 100 times more sexually transmitted than HIV (Amitha, 2015).

This research was supported by Kartika (2017), with the title thesis of the relationship of marital status to the incidence of Hepatitis B at Pandan Arang Boyolali Hospital in 2017, with the results of the study of the relationship between mating status and the incidence of Hepatitis B with a value of p = 0.003.

Sex relationship with hepatitis B incidence

This means that male respondents are at risk of exposure to Hepatitis B and in contrast female respondents are not at risk of exposure to Hepatitis B. OR scores are 3,063 (95% CI = 1,227 – 7,645) meaning patients with male sex are 3,063 times more at risk of hepatitis B than patients with female gender.

The male gender is at risk for the incidence of Hepatitis B and conversely the female gender is less at risk for the incidence of Hepatitis B. Very fundamental differences are shown in the male and female bodies against the risk of developing liver cancer and the cause lies in the genetic element based on gender. (Rogers, 2018).

The results of this study were also supported by Sidjabat (2019), with the title of the thesis on the sex relationship with the incidence of Hepatitits B in Pesantren Ar-Rahman Sentul, with the results of the study of the relationship between the sexes and the incidence of Hepatitis B with a value of p = 0.002

CONCLUSION

There is a significant relationship between smoking history, mating status and the sex the incidence of Hepatitis B.

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