## HEALTH BELIEF MODEL (HBM) PREVENTIVE BEHAVIOR OF PREGNANT WOMEN DURING THE COVID-19 PANDEMIC

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### ABSTRAK : HEALTH BELIEF MODEL (HBM) PERILAKU PREVENTIF IBU HAMIL PADA MASA PANDEMI COVID 19

Latar Belakang: Coronavirus merupakan virus RNA strain tunggal positif, berkapsul dan tidak bersegmen dengan nama severe acute respirtorysyndrome coronavirus-2 (SARS-CoV-2) dengan nama penyakitnya adalah Coronavirus Disease 2019. Data sebaran kasus covid di provinsi NTT adalah 15.217 jiwa terkonfirmasi positif dengan sebaran kabupaten/kota teratas tanggal 6 Mei 2021, adalah Kota Kupang, Kabupaten Sumba Timur dan Kabupaten Ende. Pada kelompok ibu hamil, terdapat 4.9% ibu hamil terkonfirmasi positif covid 19. Data ini menunjukkan bahwa ibu hamil, bersalin, nifas dan bayi baru lahir juga merupakan sasaran yang rentan terhadap infeksi Covid 19 dan kondisi ini dikhawatirkan akan meningkatkan morbiditas dan mortalitas ibu dan bayi baru lahir. Ibu hamil, lebih rentan terhadap morbiditas Covid 19 dikarenakan perubahan fisiologis dan imunologis selama masa kehamilan. Health Belief Model (HBM) merupakan sebuah model untuk memahami kesulitan individu dalam mengikuti program pencegahan dalam konteks kesehatan.

Tujuan: untuk mengetahui health belief model (HBM) perilaku preventif ibu hamil pada masa pandemi covid 19 di kota Ende.

Metode penelitian: Penelitian ini menggunakan studi deskriptif dengan teknik studi korelasional. Penelitian akan dilaksanakan pada 5 puskesmas di kota Ende pada bulan Januari – Desember 2022. Proyeksi populasi ibu hamil pada 5 puskesmas adalah 500 ibu hamil. Teknik pengambilan sampel adalah double sampling yaitu metode quota sampling dan purposie sampling. Jumlah sampel dengan menggunakan rumus Slovin yang berjumlah 221 ibu hamil. Teknik pengumpulan data kuantitatif dengan memberikan kuisioner tentang health belief model (HBM) perilaku preventif ibu hamil pada masa pandemi covid 19 di kota Ende, kuisioner berjumlah 40 pertanyaan tertutup yang telah diuji validitas dan realibilitas. Analisis data kuantitatif dengan Pearson Product Moment dan Uji Regresi linear.

Hasil penelitian: Koefisien korelasi sebesar 0,295 dengan signifikansi 0,000. Ha diterima karena signifikansi >0,05. Jadi terdapat hubungan positif yang signifikan antara health belief model (HBM) dengan perilaku preventif pada ibu hamil di masa pandemi covid 19 di Kota Ende. Berdasarkan nilai signifikansi sig (2-tailed) sebesar 0,000 menunjukkan bahwa terdapat korelasi yang signifikan antara variabel HBM dengan perilaku preventif pada ibu hamil di masa pandemi covid 19 di Kota Ende. Hasil uji regresi linear didapatkan hasil bahwa nilai signifikan value F test < 0,05 yaitu nilai Sig 0,000, yang berarti bahwa variabel independent mempunyai hubungan linier dengan variabel dependen. Secara bersama sama persepsi perceived susceptibility (kerentanan yang dirasakan), perceived severity (Bahaya/kesakitan yang dirasakan), perceived benefit (Keyakinan akan manfaat yang dirasakan) dan perceived barrier (Hambatan yang dirasakan) berpengaruh pada perilaku preventif pada ibu hamil pada masacovid 19 di Kota Ende Tahun 2022.

Kesimpulan: Terdapat hubungan antara HBM dengan perilaku preventif pada ibu hamil pada masa covid 19 di Kota Ende

Saran: Ibu hamil agar meningkatkan perilaku preventif untuk mencegah covid 19 selama masa kehamilan

Kata Kunci : Health Belief Model (HBM); Preventif; Ibu hamil; Covid 19

### ABSTRACT

Background:. Coronavirus is a positive single strain RNA virus, encapsulated and not segmented with the name severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) with the name The disease is Coronavirus Disease 2019. Data on the distribution of covid cases in the province of NTT is 15,217 people who are positively confirmed with the distribution of the top regencies/cities on May 6, 2021, namely Kupang City, East Sumba Regency and Ende Regency. In the group of pregnant women, there were 4.9% of pregnant women were confirmed positive

for Covid 19. This data shows that pregnant women, childbirth, postpartum and newborns are also vulnerable targets for Covid 19 infection and this condition is feared to increase maternal and infant morbidity and mortality. Newborn. Pregnant women are more susceptible to Covid-19 morbidity due to physiological and immunological changes during pregnancy. The Health Belief Model (HBM) is a model to understand individual difficulties in participating in prevention programs in the context of health.

Purpose: to find out the health belief model (HBM) for the preventive behaviour of pregnant women during the COVID-19 pandemic in the city of Ende.

Research method: This study uses a descriptive study with a correlational study technique. The research will be carried out at 5 puskesmas in the city of Ende from January – December 2022. The projected population of pregnant women in 5 puskesmas is 500 pregnant women. The sampling technique was double sampling, namely quota sampling and purposive sampling methods. The number of samples using the Slovin formula amounted to 221 pregnant women. Quantitative data collection techniques by providing a questionnaire about the health belief model (HBM) preventive behaviour of pregnant women during the covid 19 pandemic in the city of Ende, a questionnaire consisting of 40 closed questions that have been tested for validity and reliability. Quantitative data analysis with Pearson Product Moment and Linear Regression Test.

Results: The correlation coefficient is 0.295 with a significance of 0.000. Ha is accepted because the significance is > 0.05. So there is a significant positive relationship between the health belief model (HBM) and preventive behaviour in pregnant women during the COVID-19 pandemic in Ende City. Based on the significance value of sig (2-tailed) of 0.000, it shows that there is a significant correlation between the HBM variable and preventive behaviour in pregnant women during the covid 19 pandemic in Ende City. The results of the linear regression test showed that the significant value of the F test value <0.05, namely the Sig value of 0.000, which means that the independent variable has a linear relationship with the dependent variable. Together the perceptions of perceived susceptibility (perceived vulnerability), perceived severity (perceived danger/pain), perceived benefit (belief in perceived benefits) and perceived barriers (perceived barriers) affect preventive behavior in pregnant women during the COVID-19 period. in Ende City in 2022.

Conclusion: There is a relationship between HBM and preventive behavior in pregnant women during the covid 19 period in Ende City.

Suggestion: Pregnant women should increase preventive behaviour to prevent covid 19 during pregnancy

Keywords: Health Belief Model (HBM); Preventive; Pregnant mother; Covid 19

### INTRODUCTION

Coronavirus is a positive single strain RNA virus, encapsulated and not segmented with the name of the disease is Coronavirus Disease 2019 (Covid 19) (WHO, 2020). Covid 19 is a respiratory infection that was first identified in China (Rasmussen et al., 2020). Based on WHO data, on May 5, 2021, 153 million people were confirmed positive (WHO, 2021). Data on the distribution of covid cases in NTT province is 15,217 people who have been confirmed positive with the distribution of the top regencies/cities on May 6, 2021, namely Kupang City, East Sumba Regency and Ende Regency (Gugus Tugas Percepatan Penanganan Covid 19 NTT, 2021). 4.9% of pregnant women were confirmed positive for Covid 19 from 1,483 confirmed cases. This data shows that pregnant women, childbirth, postpartum and newborns are also vulnerable targets for Covid 19 infection (Kementerian Kesehatan RI, 2020).

Pregnant women are vulnerable to Covid-19 morbidity due to physiological and immunological changes during pregnancy. The results of the haematological examination of pregnant women with Covid 19 showed a decrease in monocytes and lymphocytes, total leukocytes, an increase in platelets and haemoglobin (Hb), an increase in lactate dehydrogenase (LDH), and a decrease in creatinine, fibrinogen and D-Dimer (Martinelli et al., 2020). There is a shift in the body's immunity from Th1 to Th2 in pregnant women, while Th2 is a producer of IL-4, IL-10, IL-13, and TGF<sup>β</sup> cytokines that act as anti-inflammatory (Nurdianto et al., 2020). The shift in the T helper population makes pregnant women more susceptible to infection with SARS-CoV-2. SARS-CoV-2 infection in pregnancy stimulates an increase in the expression of proinflammatory cytokines, namely IL-6, IL-12, IL-1β, and IFNy which can damage lung organs. The more dominant Th2 shift makes anti-inflammatory cvtokines can offset the expression of proinflammatory cytokines (Nurdianto et al., 2020).IL-6 causes severity and death in Covid-19 patients. This causes the severity of Covid 19 in pregnant women to be lower (Dashraath et al., 2020).

One of the problems faced by the MCH program during the COVID-19 period was the knowledge of mothers and families regarding COVID-19 and health services for mothers and newborns in the pandemic era (Pritasari, 2020). The government's efforts to overcome this problem are setting a schedule for ANC examinations, using the MCH handbook as an IEC medium, utilizing communication media for consultations, pregnant women, families and cadres play an active role in monitoring pregnancy danger signs, making appointments if some complaints/conditions require examination. Filling out the P4K sticker is guided through communication tools and delaying the class for pregnant women or being replaced by an online class for mothers (Kementerian Kesehatan Republik Indonesia, 2020).Another effort offered by researchers is the Health Belief Model (HBM). HBM is a model created in 1950 which aims to understand individual difficulties in participating in prevention programs in a health context (Rosenstock, 1974). HBM began to develop and be adapted for various studies related to individual preventive actions related to health behaviour. HBM is a concept that is commonly used to research and understand healthy behaviour by the community (Wahyusantoso & Chusairi, 2021). HBM predicts why people will take action to prevent, screen for, or control disease conditions; including vulnerability, seriousness, benefits and barriers to a behavior (Nurdianto et al., 2020).

**The purpose of the study** to determine the health belief model (HBM) of preventive behaviour for pregnant women during the COVID-19 pandemic in the city of Ende

### **RESEARCH METHODOLOGY**

This study uses a descriptive study with a correlational study technique. The correlation technique aims to determine whether there is a relationship between the independent and dependent variables, how close and how meaningful the relationship is. The study was conducted in January - December 2022 at 5 public health centres in Ende City. The population projection at 5 puskesmas in the city of Ende is 500 pregnant women. The sampling technique was *double sampling* methods *quota sampling* and *purposive sampling* In *quota sampling*, the sample size is determined as an estimate to obtain the data needed to reflect the population. While *purposive sampling* is sampling based on the consideration of the

researcher (Setiawan & Saryono, 2011). The research location consists of 5 public health centres in the city of Ende. The size of the determination of the number of samples for each public health centres is divided according to the quota public health centres. The sample size in this study is calculated using the Slovin formula as follows:

$$n = \frac{N}{\frac{1+(N(d)2)}{500}} = 221$$

The description of the number of samples is as follows:

Tabel 1
Determination of the Number of Samples Based on
auota samplina

Name of Public Health Center	Sample
Onekore	45
Rukun Lima	44
Kotaratu	42
Rewarangga	44
Kota Ende	44

Data collection techniques by giving a questionnaire about the health belief model (HBM) of preventive behaviour of pregnant women during the covid 19 pandemic in the city of Ende. The questionnaire consists of 40 closed questions. Data collection techniques were carried out by enumerators (midwives) who worked at the puskesmas. The method of data collection is following the respondent's ANC visit schedule (pregnant women) and by conducting home visits to respondents. The validity of the questionnaire has been tested with a calculated r value between 0.245 -1 > r table 0.1809. The results of the reliability test with = 0.860. Cronbach's Alpha value > 0.60 then the questionnaire is declared reliable or consistent. Quantitative data analysis with Pearson Product Moment and Linear Regression Test. Pearson's product-moment is used to see the correlation between the independent and dependent variables which is then followed by a regression test. The independent variable is the *health belief model* which consists of perceived susceptibility, perceived severity, perceived benefit and perceived barrier. The dependent variable consists of the Preventive Behavior of Pregnant Women.

### RESEARCH RESULT Descriptive Analysis Characteristics of Respondents

	Karakteristik	F	%
Age	< 20 year	8	3.6
-	20 - 35 year	190	86.0
	> 35 year	23	10.4
Gravida	Primigravida	96	43.4
	Multigravida	99	44.8
	Grandemulti gravida	26	11.8
Education	undecated	1	.0.05
	Elementary school	18	8.1
	Junior high school	19	8.6
	Senior high school	96	43.4
	Associate degree	87	39.4
Occupation	Household/Not working	155	70.1
	civil servant	15	6.8
	Private employee	51	23.1

Data of Respondents' Characteristics of Pregnant Women During the Covid-19 Period in Ende City in 2022

Based on table 1 shows that most of the respondents aged 20-35 years are 190 pregnant women (86.0%). Most of the pregnant women with gravida status are primigravida and multigravida, namely 43.4% and 44.8%, respectively. Most of the respondents' education was high school, namely 96 respondents (43.4%). 155 respondents do not work (70.1%).

Analisis Deskriptif *Health Belief Model* Perilaku Preventif Pada Ibu Hamil

Based on table 2 shows the highest average preventive behaviour in pregnant women is Perceived susceptibility and the lowest average is perceived barrier.

Table 2.
Health Belief Model Perilaku Preventif Pada Ibu Hamil Masa Covid 19 di Kota Ende Tahun 2022

Characteristics	Mean	SD	Ν
Perceived susceptibility	4.2344	.59726	221
Perceived severity	3.5100	.98188	221
Perceived Benefit	4.0913	.69035	221
Perceived Barrier	3.1650	1.15374	221

### **Bivariate Analysis**

Bivariate Analysis of the Correlation of HBM with Preventive Behaviour in Pregnant Women

#### Tabel 3

### HBM Correlation with Preventive Behaviour For Pregnant Women in Ende City in 2022

		HBM	Perilaku Preventif
НВМ	Pearson Correlation	1	.295**
	Sig. (2-tailed)		.000
	N	221	221
Behaviour_Preventif	Pearson Correlation	.295**	1
	Sig. (2-tailed)	.000	
	N	221	221

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Table *Correlation*, the correlation coefficient value is 0.295 with a significance of 0.000. Ha is

accepted because the significance is > 0.05. So there is a significant positive relationship between the

*health belief model* (HBM) and preventive behaviour in pregnant women during the COVID-19 pandemic in Ende City. Based on the significant value of sig (2tailed) of 0.000, it shows that there is a significant correlation between the HBM variable and preventive behaviour in pregnant women during the covid 19 pandemic in Ende City.

# Tabel 4Results of the Linear Health Belief Regression Model with Preventive Behavior in Pregnant WomenDuring the Covid-19 Period in Ende City in 2022

	ANOVAª					
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.196	1	2.196	20.913	.000b
	Residual	22.998	219	.105	·	
	Total	25.195	220			

a. Dependent Variable: Perilaku Preventif Ibu Hamil

b. Predictors: (Constant), HBM

From Table 4 the results of the linear regression test show that the significant value of the F test value <0.05 is the Sig value of 0.000, which means that the independent variable has a linear relationship with the dependent variable. Together the perceptions of *perceived susceptibility, perceived severity, perceived benefit* and *perceived barriers* affect preventive behaviour in pregnant women during the covid-19 period. in Ende City in 2022.

### DISCUSSION

Based on table 1 shows that most of the respondents are aged 20-35 years, namely 190 respondents (86.0%). A person's knowledge is influenced by a person's age, the older he gets, the more his level of knowledge increases (Nirwan & Sari, 2022).Reproductive age (20-35 years old) is the age that plays the most role and has solid activity and good cognitive abilities. This age influences the level of knowledge (Pangesti, 2012). The results of the study indicate that the majority of pregnant women respondents who apply Covid 19 prevention behaviour through the application of health protocols are aged 20-35 years (Indrasuari, 2021). This is in line with research conducted by previous studies, namely there is a relationship between age and covid 19 prevention behaviour with p = 0.001 < 0.005(Nirwan & Sari, 2022). The results of different studies indicate that there is no significant relationship between the variables characteristic of the age of pregnant women and the behaviour of preventing covid 19 (Atmojo et al., 2022).

Gravida is the status of the number of pregnancies experienced by a woman. The level of gravida can affect the health status of the mother and child (Notoatmodjo, 2012). Most of the respondents in this study were 96 primigravida (43.4%) and 99

multigravida (44.8%). The results showed that there was a significant relationship between gravida status and covid-19 prevention behaviour (p < 0.05). The majority of primigravida and multigravida mothers have high behaviour. Women who have given birth for the first time tend to have better health than those who give birth more often (Atmojo et al., 2022). There is a significant relationship between the experience of pregnancy and childbirth with the incidence of complications during pregnancy and birth (Notoatmodjo, 2012).

Most of the respondents in this study were high school educated, namely 96 people (43.4%) and college graduates (D3/S1), namely 87 people (39.4%). The level of education can affect a person's level of knowledge. For someone with good education and knowledge, then the behaviour shown is also good. This is in line with research conducted in China as the origin of the emergence of the coronavirus. The results of the study found that the Chinese people had good and positive knowledge and behaviour to prevent contracting the coronavirus, this was also connected with the experience of the community in dealing with the severe acute respiratory syndrome (SARS) outbreak in the 2000s (Zhong et al., 2020). In line with the results of research conducted on people in North Sulawesi with data analysis using the Pearson chisquare test, the value of p = 0.000 < 0.05, which means that there is a relationship between the level of education and the behaviour of preventing covid 19. The higher a person's education level, the more good behaviour to prevent covid-19 (Gannika & Sembiring, 2020).

The health belief model (HBM), was first introduced by Rosenstock and developed in the early 1950s. HBM is used in health education and health

promotion (Glanz et al., 2002). The HBM theory is derived from psychological and behavioural theory on the basis that the two components of healthrelated behaviour are: 1) the desire to avoid illness, or otherwise recover if already ill, and, 2) the belief that certain health actions will prevent, or healing, sick. Ultimately, of course, individual actions often depend on people's perceptions of the benefits and barriers associated with health behaviours. The HBM theory has six elements. The first four elements are the basic elements of HBM theory. Meanwhile, the last two elements are additional elements based on the results of research and theory modification by experts.

### *Perceived susceptibility* with preventive behaviour in pregnant women during the Covid 19 pandemic

Based on table 2 shows that the highest average preventive behaviour of pregnant women during the covid-19 period in the city of Ende is perceived susceptibility (perceived vulnerability) which is 4.2344 with a value range of 1-5 and SD 0.59726. Perceived susceptibility refers to a person's perception of the risk of acquiring a disease. The greater the perceived risk, the more likely it is to engage in risk-reducing behaviour. This component measures the individual's perception of risk about how likely it is to suffer from the disease or the risk that may occur as a result of the disease. This variable measures the individual's subjective perception of risk about how likely it is to get a disease or the risk that may occur as a result of the disease (Kılıncel et al., 2021; Winarti & Saadah, 2021). For example, in medical treatment, someone is willing to accept a diagnostic examination, because subjectively the individual predicts the danger of disease that must be faced. For example, for respondents who have been exposed to a type of COVID-19 virus in the form of the SARS and Mers viruses, the results of the perceived susceptibility show that the client is aware that he or she is at risk of getting covid-19.

The results of other studies show that almost half of them have *perceived susceptibility* in the low category in the high-risk category, almost half of them carry out good covid 19 prevention behaviour, and only a small part does not carry out covid 19 prevention behaviour (Winarti & Saadah, 2021).*Perceived susceptibility* in the no risk, less risk category, and at high risk, only a small proportion of them do not carry out covid-19 prevention behaviour. On the other hand, respondents continue to carry out preventive behaviour properly. This is of course influenced by their feelings of vulnerability related to covid-19. Not everyone feels vulnerable to covid-19 which is a virus that infects many people in the world. The assessment of *perceived susceptibility* in terms of several factors from the respondents of this study. The assumption is that all ages or ages can be affected by covid-19, all family members can be infected with covid-19 at any time, not always prevention and hygiene behaviour protected from the covid- 19 outbreak and the assumption that not taking preventive measures at all times makes it possible to get covid 19. Perceived Susceptibility or The perception of vulnerability refers more to subjective opinions or assessments of the risk of health problems, in this case, the risk of developing covid-19. Based on research data, individuals who are not at risk for covid-19 are less likely to take preventive measures.

The results of different studies conducted indicate that the perception of vulnerability has no significant effect on the behaviour of pregnant women in preventing covid-19 (Fransiska et al., 2022). This is different from the results of previous studies which showed the perception of vulnerability to the health behaviour of pregnant women (Aghababaei et al., 2020). The perception of vulnerability has a significant influence on efforts to prevent covid-19 in pregnant women (Ferrer & Klein, 2015). Other studies have stated that the perception of vulnerability is an important determinant of health behaviour, but it can still change depending on the characteristics of each type of vulnerability perception and the level of accuracy of the perception. The perception of vulnerability is often said to have a positive relationship with prevention behaviour. However, in some cases, negative interactions with preventive behaviour are often found. The negative interaction in question, for example, when the perception of risk is high, but the chances of success are very small, the possibility of implementing preventive behaviour is reduced (Aghababaei et al., 2020).

## *Perceived severity* with preventive behaviour in pregnant women during the Covid-19 pandemic

Average *perceived severity* in table 1 is 3.5100 with a value range of 1-5 and SD is 0.98188. This variable relates to an understanding of the perceived seriousness of the disease. This relates to the seriousness of a disease or when a person tolerates the disease. The component in this variable is the evaluation a person makes of medical care and its clinical and social consequences. Individual actions to seek treatment and prevention of disease will be driven by the seriousness of the disease to the individual or society (Winarti & Saadah,

2021).Perception of seriousness is mentioned as one of the variables that significantly influence the behaviour of pregnant women in dealing with covid-19. People with a high level of perception of seriousness are more likely to take preventive measures against infectious diseases. Perception of seriousness is influenced by demographic characteristics, age, level of knowledge, and other factors (Khazaeian et al., 2020). The perception of seriousness and the perception of vulnerability have an important influence on the behaviour of preventing covid-19 in pregnant women, but they also have the potential to increase the risk of depression and anxiety. That is, the higher a person's perceived vulnerability and perceived seriousness, the more likely that person is to take preventive action. However, these people are also more at risk for depression and anxiety.

# *Perceived benefits* with preventive behaviour in pregnant women during the Covid-19 pandemic

Average *perceived benefit* (belief in perceived benefits) in table 1 is 4,0913 with a value range of 1-5 and SD 0.69035. *Perceived benefit* is a belief or understanding of the perceived benefits of the actions taken. This variable contains a person's belief or opinion about the efficacy of reducing the risk and seriousness of a health problem. This variable emphasizes the benefits that will be obtained if the client takes an action (Brontosaputro, 2002).

# *Perceived barrier* to preventive behaviour in pregnant women during the Covid 19 pandemic

The lowest average score is the *perceived* barrier (perceived barriers) in table 2, which is 3.1650 with a value range of 1-5 and SD 1.15374. This component describes the negative aspects of certain health. This can be seen when individuals carry out the effectiveness of a health action with the number of costs incurred or the side effects of treatment. This variable relates to the obstacles experienced by the client to take an action (Rosenstock et al., 1994; Winarti & Saadah, 2021). Most of the respondents do not work or are housewives, namely 155 people (70.1%). The results showed significant results between attitudes and housewives' compliance in implementing covid 19 prevention behaviour (OR = 3.392 and confidence interval (CI) = 1.599 - 7.199). This shows a risky attitude towards compliance in the prevention of covid 19 (Ekadipta et al., 2021).

In general, it is believed that a person will act to prevent, mitigate and regulate lifestyle related to health conditions, referring to the *health beliefs* they have (Rosenstock, 1974; Rosenstock et al., 1994). HBM is used to explain the concept of understanding individual behaviour. The behaviour in question is health behaviour, both in the realm of preventive and curative (Janz & Becker, 1984). HBM influences compliance with the recommended health behaviour policy. measured during the 2009 swine flu (H1N1) pandemic in Taiwan's *health*. 70% of the study population reported that they improved hand hygiene practices during the H1N1 pandemic (Miao & Huang, 2012).

The results of multivariate logistic regression analysis showed that increased hand hygiene practices were associated with an individual's HBM of handwashing health practices during the pandemic. The dimensions of HBM that become significant predictors are perceived susceptibility, perceived severity, perceived benefit/effectiveness, and perceived barriers. These four dimensions are key dimensions in predicting individual healthy behaviour in a pandemic situation, where the healthy behaviour in question is behaviour to prevent contracting the virus during a pandemic (Miao & Huang, 2012). The Health Belief Model has a relationship and influence and can be a predictor of health behaviour suggested to individuals (Aradista, 2020).

## CONCLUSION

There is a relationship between HBM and preventive behavior in pregnant women during the covid 19 period in Ende City.

## SUGGESTION

Pregnant women should increase preventive behaviour to prevent covid 19 during pregnancy

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