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## DETERMINANTS OF PREGNANT WOMEN'S COMPLIANCE IN FOLLOWING THE PREGNANT WOMEN CLASS PROGRAM IN ACEH BESAR DISTRICT

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### ABSTRACT

The implementation of the pregnant women class in Aceh Besar Regency has been carried out since 2020 with a target of 11,492 pregnant women. From observations, it is known that most pregnant women are less obedient in attending maternity classes. So, the purpose of this study is to analyze the compliance of pregnant women in participating in the class program for pregnant women in Aceh Besar district. This type of research uses observational cross-sectional design. The population of this study included classes of pregnant women at Indrapuri Health Center, Kuta Baro Health Center, and Darul Imarah Health Center, the sample in this study amounted to 180 pregnant women. The study found that the R-square value for service satisfaction was 0.694 and that internal and external factors could affect the compliance variables of pregnant women by 69.4%, with the remaining 30.6% influenced by other factors. Additionally, the implementation of the pregnant women class program was found to have an R-square value of 0.667, indicating that internal and external factors could affect it by 66.7%, with the remaining 33.3% influenced by other factors. The study also identified external factors, specifically knowledge, as the primary influencing factor on the implementation of the pregnant women class program, with a calculated value of 35,768 > table 1,624. Internal factors (age, income, motivation, and parity) and external factors (knowledge, attitudes, family support, and mileage) influence the compliance of pregnant women and the implementation of classes for pregnant women in Aceh Besar District.

**Keywords:** adherence of pregnant women, internal factors, external factors, pregnant women's classes.

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### INTRODUCTION

Maternal and Child Health (MCH) is a target in the Sustainable Development Goals (SDGs), namely reducing child mortality and improving maternal health. The MCH program strives for conditions for mothers and children to be mentally and physically healthy. This effort is to form strong human resources for the next generation as a development capital (WHO, 2019). The World Health Organization (WHO) stated in 2019 that around 830 women worldwide die every day due to complications of pregnancy and childbirth; overall, the Maternal Mortality Rate (MMR) is 303,000/100,000 live births. Almost all maternal deaths occur in developing countries, 550 people in Sub-Saharan Africa and 180 people in South Asia. This is still in the high category because it has not yet reached the target of the Sustainable Development Goals (SDGs), which is <70 per 100,000 live births (Werdiyanti, 2017).

AKI is still a serious health problem in developing countries. Indonesia is a developing country with a high maternal mortality rate. Based on Maternal Mortality Rate (MMR), and Infant Mortality Rate (IMR). The success of maternal health efforts, among others, can be seen from the Maternal Mortality Rate (MMR) indicator. Based on data from the Indonesian Ministry of Health (Kemenkes),

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the maternal mortality rate increased by 300 cases from 2019 to around 4,400 deaths in 2020, while infant mortality in 2019 was around 26,000 cases, an increase of nearly 40 percent to 44,000 cases in 2020 live birth. The five biggest direct causes of maternal death are bleeding at 30%, preeclampsia at 27.1%, infection at 7.3%, prolonged labor at 1.8%, abortion at 1.6%, and others at 40.8%. Infant deaths are 22.23 per 1000 live births (Anggraini et al., 2020).

Target of reducing MMR in Indonesia to 131 in 2030 with an average target of 5.5% reduction (Kemenkes, 2017). In 2019 the maternal mortality rate in Aceh again increased by 172/100,000 LH and the same condition occurred again in 2020, namely 172/100,000 LH, when compared to last year (Dinkes, 2021). Based on the data and information center, it is known that Indonesia has 9,966 Puskesmas units and 9,239 Puskesmas that have carried out classes for pregnant women (92.71%), while in Aceh Province there are 340 Puskesmas and 298 puskesmas of which (87.65%) have carried out classes for pregnant women. Meanwhile, Aceh Besar Regency from 28 Puskesmas and 28 Puskesmas has implemented classes for pregnant women (100%).

Implementing classes for pregnant women in Aceh Besar District have been implemented since 2020 with a target number of pregnant women 11.492 Soul. From the observations made by the author on several pregnant women who visited the Community Health Center in Aceh Besar District, it was found that most pregnant women were less obedient in attending classes for pregnant women. They think attending classes for pregnant women can take time to rest and work. They also thought that the material provided would be the same as that delivered by the midwife during the prenatal check-up. There were 6.0 % of pregnant women who said they still did not understand managing pregnancy and the danger signs of pregnancy. However, they still did not want to attend classes for pregnant women. Meanwhile, 40 % of pregnant women attended classes for pregnant women twice, even though they were already in two third trimester of pregnancy.

Based on this description, this study aimed to analyze the determinants of compliance of pregnant women in attending the pregnant women's class program in Aceh Besar District. Research that analyzes the determinants of pregnant women's compliance in participating in pregnant women class programs in Aceh Besar District has several benefits as providing useful information for relevant parties, such as the government, health institutions, and health organizations, to design more effective and efficient pregnant women class programs. By knowing the factors that affect the compliance of pregnant women in participating in the pregnant women class program, related parties can adjust the program so that it is easier to follow and more effective in improving the knowledge and skills of pregnant women.

## **METHODS**

This study uses a quantitative approach using a cross-sectional design where the involvement of researchers is observational. A quantitative approach was carried out to determine the determinants of pregnant women's compliance in attending the pregnant women's class program in Aceh Besar District. The population in this study included all classes of pregnant women in 3 (three) Aceh Besar Community Health Centers, namely the Indrapuri Health Center, Kuta Baro Health Center, and Darul Imarah Health Center, a sample of 180 people was selected using accidental sampling. Data was collected using a questionnaire through Google Forms to test its validity and reliability. Data analysis was carried out using the smarts application to describe the determinants

of pregnant women's compliance in attending the pregnant women's class program in Aceh Besar District.

An Equation may either appear in-text or as a separate item; in such a case, it should be indicated by a number in parentheses on the right column margin. Such equations are referred to in-text as Eq. (1), and so on.

## RESULTS AND DISCUSSION

### Characteristic Respondents

Data on the respondents' characteristics include age, education, employment, and income. The complete data processing results can be seen in the following table:

**Table 1. Frequency Distribution of Respondent Characteristics at the Aceh Province Psychiatric Hospital**

Characteristics	Category	Amount	
		f	%
Age	Non-Risti (21-35 Years)	102	56,7
	Risti (<20 years and >35 years)	78	43,3
Education	Basic (elementary/junior high school/equivalent)	1	0.6
	Intermediate (high school/equivalent)	144	80.0
Height (Diploma/college)		35	19,4
Work	Does not work	135	75.0
	Work	45	25.0
Income	Under UMR	167	92.8
	≥UMR	13	7,2

From Table 1 above, it is known that the majority of respondents are non-risk mothers, as much as 56.7%, with secondary education (80.0%), not working (75.0% and income below the minimum wage (92.8%).

### Research Result

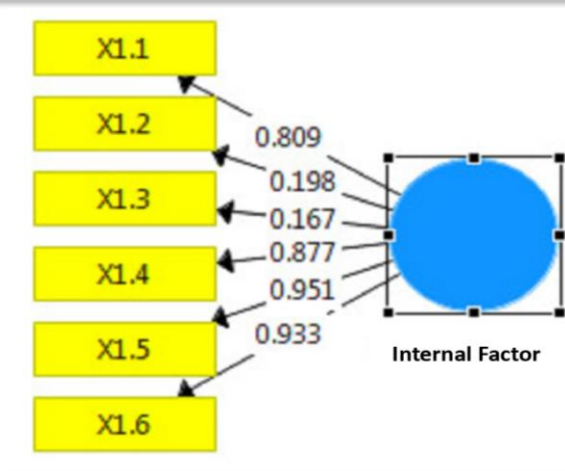
Data analysis with Partial Least Square (PLS) requires two stages to assess the Fit Model of a research model. In the measurement model ( outer model ), the relationship between the indicators and the variables is evaluated by assessing the validity and reliability. Variable validity was analyzed in two components (1) convergent and (2) discriminant validity. Meanwhile, composite reliability and Cronbach's alpha were assessed to measure the reliability of variables.

### Convergent Validity

Assessment of convergent validity is based on the correlation between item scores/components score estimated with PLS Software. Assessment of convergent validity is based on the correlation between the item score/component score estimated by the PLS software. The test was carried out twice. The initial research stage of developing a measurement scale of a loading value of 0.5 to 0.6 was considered sufficient. In this study, a loading factor limit of 0.60 will be used. The results of the first convergent validity test can be seen as follows.

### Internal factors

Factors include age, education, employment, income, motivation, and parity.



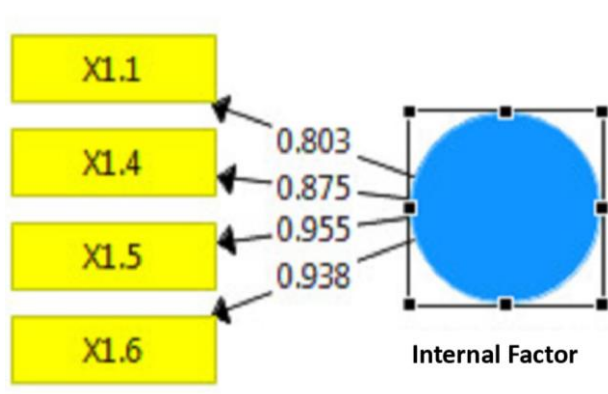
**Figure 1. Outer Internal Factor Model**

Figure 1 shows that some indicators are less than 0.6, so these variables must be excluded from the model; more details can be seen in the following table:

**Table 2. Internal Run Factor Loading Test Results 1**

Variable	Loading Factor	Information
X1.1	0.809	Continue testing the model
X 1 .2	0.198	Removed from the model
X1.3	0.167	Removed from the model
X1.4	0.877	Continue testing the model
X1.5	0.951	Continue testing the model
X1.6	0.933	Continue testing the model

Table 2 shows that indicator X1.2 and indicator X1.3 are excluded from the model because their values are less than 0.6. For further testing, the second test was carried out, and the following results were obtained:



**Figure 1. Outer Internal Factor Model**

Figure 2 shows that all indicators have a value of more than 0.6, so the model test can continue. More details can be seen in the following table:

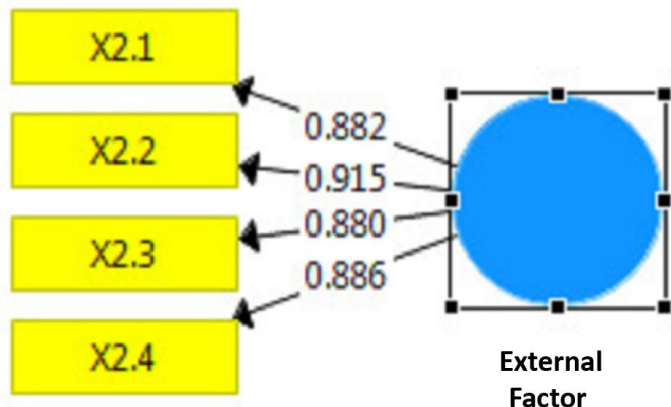
**Table 1 Internal Factor Loading Test Results Run 2**

Variable	Loading Factor	Information
X1.1	0.803	Continue testing the model
X1.4	0.875	Continue testing the model
X1.5	0.955	Continue testing the model
X1.6	0.938	Continue testing the model

Table 3 shows that the value of the loading factor for the indicator X1.1 is 0.803, X1.2 is 0.875; X1.5 is 0.955, and X1.6 is 0.938.

**External Factors**

External factors consist of knowledge, attitudes, family support, and mileage. The results of the loading factor test are as follows:



**Picture 2 Outer External Factor Model I**

Figure 3 shows that all indicators have a value of more than 0.6, so it is feasible to be included in the model; more details can be seen in the following table:

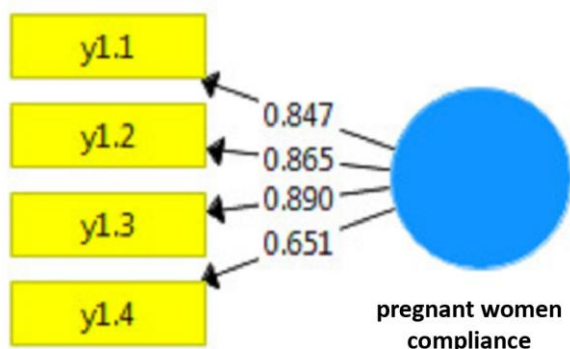
**Table 4. External Factor Loading Test Results**

Variable	Loading Factor	Information
X2.1	0.882	Continue testing the model
X2.2	0.915	Continue testing the model
X2.3	0.880	Continue testing the model
X2.4	0.886	Continue testing the model

Table 4 shows that the value of the loading factor for the indicator X2.1 is 0.882, X2.2 is 0.915; X2.3 is 0.880, and X2.4 is 0.886.

**Obedience**

The compliance factor for pregnant women consists of participation, continuity/consistency, benefits, and impacts. The results of the loading factor test are as follows:



**Figure 3** Outer Model of Compliance with Pregnant Women

Figure 4 shows that all indicators have a value of more than 0.6, so it is feasible to be included in the model; more details can be seen in the following table:

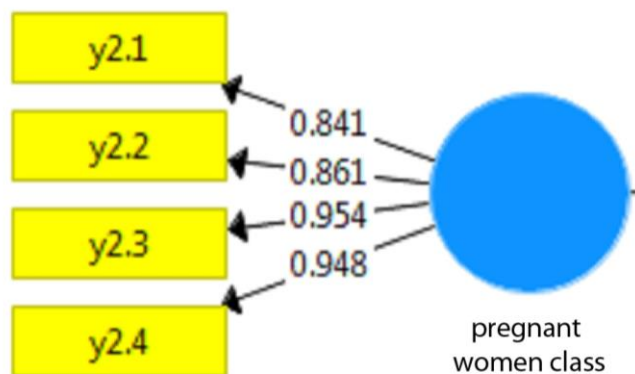
**Table 2. Loading Test Results for Compliance Factors for Pregnant Women**

Variable	Loading Factor	Information
Y1.1	0.847	Continue testing the model
Y1.2	0.865	Continue testing the model
Y1.3	0.890	Continue testing the model
Y1.4	0.651	Continue testing the model

Table 5 shows that the loading factor value for the Y1.1 indicator is 0.847; Y1.2 of 0.865; Y1.3 is 0.890, and Y1.4 is 0.651, so all of them are feasible to continue for model testing.

**Pregnant Women Class**

The maternal class factor consisted of the percentage of pregnant women, the percentage of officers, the percentage of families, and the percentage of cadres. The results of the loading factor test are as follows:



**Picture 4. Outer Model Class for Pregnant Women**

Figure 5 shows that all indicators have a value of more than 0.6; more details can be seen in the following table:

**Table 3. Results of the Class Factor Loading Test for Pregnant Women**

Variable	Loading Factor	Information
Y2.1	0.841	Continue testing the model
Y2.2	0.861	Continue testing the model
Y2.3	0.954	Continue testing the model
Y2.4	0.948	Continue testing the model

Table 6 shows that the loading factor value for the Y2.1 indicator is 0.841; Y2.2 of 0.861; Y1.3 is 0.954, and Y2.4 is 0.948, so all of them are feasible to continue for model testing.

**Reliability Test ( Average Variance Extracted (AVE)**

Validity and reliability criteria can also be seen from the reliability value of a construct and the Average Variance Extracted (AVE) value of each construct. The construct is highly reliable if the value is 0.70 and the AVE is above 0.50. Table 7 will present the Composite Reliability and AVE values for all variables.

**Table 4. Composite Reliability, Crpmbach Alpha, and Average Variance Extracted**

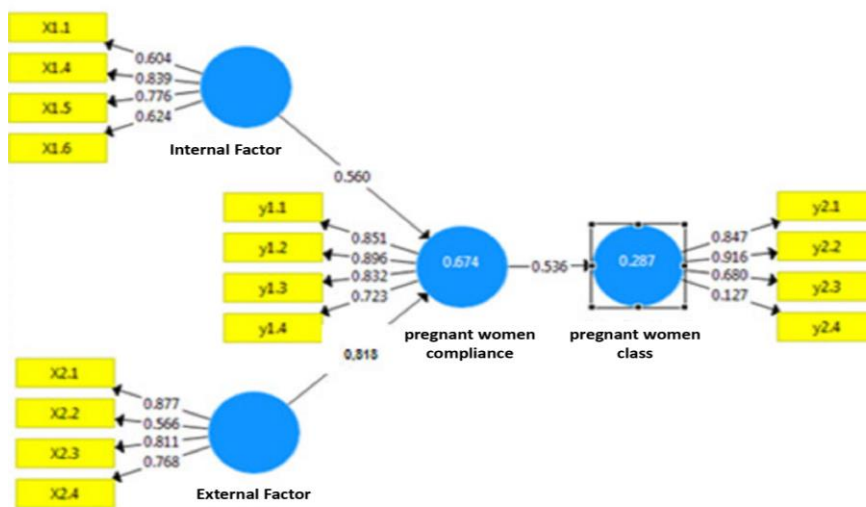
Variable	Composite Reliability	Cronbach Alpha	Average Variance Extracted
Internal factors	0.791	0.652	0.596
External factors	0.806	0.678	0.515
Compliance with Pregnant Women	0.770	0.668	0.686
Pregnant Women Class	0.897	0.846	0.508

Source: Data processing with SmartPLS, 2023

Based on Table 7, it can be concluded that all constructs meet the reliability criteria. The value of composite reliability indicates this > 0.70; Cronbach alpha > 0.6, and AVE > 0.50 as the criteria recommended by Fornell and Lacker (Ghozali, 2016).

**Test Models**

The model test is used to see the relationship between the research model's constructs by including indicators with a loading factor value greater than 0.6. So the shape of the model is as follows:



**Figure 5. Outer Model Class for Pregnant Women**

Figure 6 shows that internal factors affect compliance with pregnant women with a value of  $0.560 > 0.5$ ; external factors influence the compliance of pregnant women with a value of  $0.818 > 0.5$ ; and compliance of pregnant women affects the implementation of pregnant women classes with a value of  $0.536 > 0.5$ . The test results show that internal and external factors affect the compliance of pregnant women, then the compliance of pregnant women affects the implementation of pregnant women's classes

**Structural Model Testing (Inner Model)**

The structural or inner model is evaluated by looking at the percentage of the variance explained, namely by looking at  $R^2$  for the dependent latent construct using the Stone-Geisser Q Square test and looking at the structural path coefficient. Estimation stability was tested with t-statistics through the bootstrapping procedure. The results of the PLS R-Squares represent the total variance of the construct described by the model. The following presents the results of calculating the value of R-Squares:

**Table 5. R-Square value**

Variable	R-Squares
Compliance with Pregnant Women	0.694
Pregnant Women Class	0.667

Source: Data processing with SmartPLS, 2023

This study uses several variables that affect the compliance of pregnant women and their impact on the class of pregnant women. Table 4.8 shows that the R-square value for the service satisfaction variable is 0.694. These results indicate that internal and external factors can influence pregnant women's compliance variable by 69.4 %, and the remaining 30.6% is influenced by other factors. While the R-square value for the implementation of the class for pregnant women is 0.667 or 66.7%, which means that internal factors and external factors can influence the implementation of the class for pregnant women by 66.7%, and the remaining 33.3% is influenced by other factors.

**Hypothesis test**

The basis for testing the hypothesis in this study is the value contained in the output result for inner weight. The estimation output results for testing the structural model can be seen in the following table:

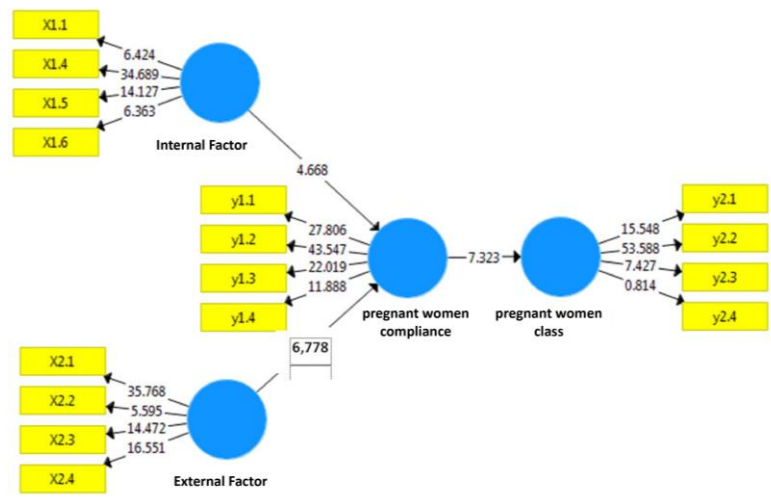
**Table 6. Inner Model Results**

	Original Sample	Sample Means	Standard Deviation	T - Statistics	P Value
External Factors -> Compliance with Pregnant Women	0.300	0.304	0.065	6,778	0.016
Internal Factors -> Compliance with Pregnant Women	0.159	0.165	0.078	4,668	0.043
External Factors -> Class of Pregnant Women	0.297	0.296	0.122	3,426	0.049
Internal Factors -> Class of Pregnant Women	0.560	0.562	0.120	3,679	0.045
Compliance -> Pregnant Women Class	0.536	0.545	0.073	7,323	0.000

Source: Data processing with SmartPLS, 2023



The table above shows that internal factors affect the compliance of pregnant women ( $p=0.043<0.05$ ), external factors affect the compliance of pregnant women ( $p=0.016<0.05$ ), and compliance of pregnant women affects the implementation of pregnant women classes ( $p=0.000<0, 05$ ). In summary, the results of testing the internal variables and external variables on the compliance of pregnant women in attending classes for pregnant women are as follows:



**Figure 7. Internal Variables and External Variables on Compliance of Pregnant Women in Taking Pregnant Women Classes**

Figure 7 shows that internal and external factors affect pregnant women's compliance. The results showed that the factors that influenced the implementation of classes for pregnant women were external factors, with a  $t_{count}$  of  $6.778 > 1.624$ .

**The Influence of Internal Factors on the Compliance of Pregnant Women in Participating in the Class Program for Pregnant Women in Aceh Besar District**

The results of testing the research model show that internal factors influence pregnant women's adherence with a value of 0.560. In contrast, hypothesis testing results show a positive and significant influence of internal factors on pregnant women's compliance in attending pregnant women's classes in Aceh Besar District ( $p=0.043$ ). The internal factors in this study's analysis are age, income, motivation, and parity.

**Age**

The results showed that the age of pregnant women affected the compliance of pregnant women in participating in the class program for pregnant women in Aceh Besar District ( $t_{count} = 6.424 > t_{table} 1.624$ ). Age is the length of a person's life in years from birth until now. The old enough will affect the level of maturity and one's ability to think and work (Muti'ah et al., 2021).

The results of this study are not in line with research conducted by not finding an age tendency towards adherence. This means that certain age groups do not affect the actions of pregnant women to obey/not participate in health programs, one of which is the class of pregnant women (Kamidah, 2015).

This study's results align with a study conducted by (Sarah et al., 2021) which stated that the more mature the level of maturity and strength of a person will be more mature in thinking and working. Certain matters, such as the mother's decision to act obediently or disobediently in

participating in a health program, it does not require the level of maturity of one's thinking; other factors influence the mother's actions more, such as the results in this study that family support/involvement will be very influential (Renyoet et al., 2016). In another study conducted by (Wulan et al., 2020) there was a relationship between the age of pregnant women and ANC compliance at the Suruh Health Center, Semarang Regency. Respondents who were less than 20 years old did not comply with ANC. In terms of trust, more mature people will be trusted than people who need to be more mature. This is a result of the experience and maturity of his soul. The more mature a person is, the more mature and regular the way of thinking is to do antenatal care (Wulan et al., 2020).

### **Income**

The results of testing the hypothesis show that income affects pregnant women's compliance in participating in the class program for pregnant women in Aceh Besar District ( $t_{count} = 34.689 > t_{table} 1.624$ ).

The results of this study are in line with Berg's theory cited by Sarah et al., income is the factor that most determines the quantity and quality of obtaining health services. The size of one's income will affect the individual's attitude toward doing something. Increasing household income, especially for poor households, can increase access to health services to a level considered better because this increase in income allows them to pay all existing costs to obtain more optimal health services (Lestari, 2018).

However, getting basic health services is no longer related to income. Because everything is provided free of charge by the government, several studies have found that there is no significant correlation between income and compliance with pregnant women. One of them is the research by (Ramawati & Mursiyam, 2018) which concluded that income does not affect the compliance of pregnant women in consuming Fe tablets; this means that high and low income does not affect the compliance of pregnant women (Ramawati & Mursiyam, 2018).

### **Motivation**

The results of testing the hypothesis show that income affects pregnant women's compliance in participating in the class program for pregnant women in Aceh Besar District ( $t_{count} = 14.127 > t_{table} 1.624$ ). Motivation is the basis that moves a person to behave. This urge is in a person who moves to do something according to his inner urge. Someone's actions based on certain motivations contain a theme according to the underlying motivation (Samosir, 2020).

The motivation of pregnant women to attend classes for pregnant women needs to be increased, considering the importance of this to add insight about health during pregnancy, among others, to prevent or reduce things that are not desirable both during pregnancy and during childbirth by carrying out efforts to anticipate these things. Negative and meet the needs of pregnant women as well as possible and as early as possible through promotion and prevention; for example, pregnancy checks should be carried out at least four times during pregnancy.

According to research conducted by Samosir, the results showed that most pregnant women had high motivation to attend classes for pregnant women, 53% of respondents, and a small proportion of pregnant women had low motivation to attend classes for pregnant women, namely 47% of respondents. Mothers with high motivation tend to attend classes for pregnant women more regularly than those with low motivation (Samosir, 2020).

### **Parity**

The results of testing the hypothesis show that parity affects pregnant women's adherence to participating in the class program for pregnant women in Aceh Besar District ( $t_{\text{count}} = 6.363 > t_{\text{table}} 1.624$ ). Parity is the number of living children or pregnancies that produce fetuses that can live outside the uterus. Parity is best if  $\leq 3$  times, and bad if  $\geq 3$  times. Parity is a level that shows the number of times a mother gives birth. Parity consists of 4 levels, namely nullipara, which means that the mother has never given birth at all, primipara which means the mother has given birth once; multipara means that the mother has given birth  $> 1$  time and the last is grande multipara, where the mother has given birth  $> 5$  times (Risneni & Yenie, 2017).

The results of this study are different from those of Mariyana et al., which stated that between parity and compliance in participation in classes for pregnant women, a p-value of 0.714 was obtained, meaning that parity, especially primiparas, did not directly affect compliance with pregnant women in participating in classes for pregnant women in the Pematang sub-district. Malang Regency (Mariyana et al., 2017). According to Kertiasih & Ani, maternal gestational age and parity are important in pregnant women's compliance with consuming Fe tablets increase (Kertiasih & Ani, 2021).

### **The Influence of External Factors on the Compliance of Pregnant Women in Participating in the Class Program for Pregnant Women in Aceh Besar District**

The results of testing the research model show that external factors affect compliance with pregnant women with a value of 0.818. In contrast, the results of hypothesis testing show that there is a positive and significant influence of external factors on compliance with pregnant women in attending classes for pregnant women in Aceh Besar District ( $p=0, 016$ ). External factors which are the unit of analysis in this study are knowledge, attitude, family support, and distance of the residence. The proximity of their residence and the availability of adequate facilities will make it easier for pregnant women to check their pregnancy and be able to carry out ANC regularly. In testing the relationship between the distance between residence and the place of antenatal care with adherence to carrying out ANC in the working area of the Waihaong Health Center, it was found that there was no statistically significant relationship ( $p=0.456$ ).

### **Knowledge**

The results of testing the hypothesis show that knowledge affects pregnant women's compliance in participating in the class program for pregnant women in Aceh Besar District ( $t_{\text{count}} = 35.768 > t_{\text{table}} 1.624$ ). Knowledge is one of the important factors to form a complete attitude. The better one's knowledge, the better the attitude that will be formed to create a good action. Pregnant women with good knowledge about maintaining health during pregnancy tend to form a positive attitude towards compliance so that obedient actions will arise (Hastanti, 2021).

Most mothers with good health knowledge during pregnancy tend to attend classes for pregnant women. Wulan et al. stated that the proportion of good knowledge would increase pregnant women's compliance. Compliance in attending classes for pregnant women is a form of behavior that can be realized due to knowledge obtained from outside and beliefs and encouragement from other people (health workers, neighbors, close friends). Knowledge plays an important role in determining the attitudes and behavior of respondents to attend classes during pregnancy and comply. This shows that knowledge is very important in determining compliance in

attending classes for pregnant women. With the knowledge about classes for pregnant women, mothers tend to participate in the class program for pregnant women regularly (Wulan et al., 2020).

Knowledge is one of the factors that influence the compliance of pregnant women. According to research the disobedience of pregnant women in attending classes for pregnant women as recommended by health workers is an impact of their ignorance about the importance of the benefits of classes for pregnant women to improve health during pregnancy (Erwin et al., 2017). Based on the results of this study, it was found that the high level of knowledge of pregnant women and their compliance in attending classes for pregnant women cannot be separated from the role of officers in socializing classes for pregnant women in Aceh Besar District. Thus, it can be concluded that the higher the knowledge of pregnant women about health care and a healthy way of life during pregnancy, the higher the consideration for compliance in the class program for pregnant women.

#### **Attitude**

The results of testing the hypothesis show that attitudes influence pregnant women's compliance in attending the pregnant women's class program in Aceh Besar District ( $t_{\text{count}} = 5.595 > t_{\text{table}} 1.624$ ). Attitude shows the connotation of the suitability of reactions to certain stimuli, which in everyday life are emotional reactions to social stimuli. Attitude is also a form of evaluation or feeling reaction towards an object in favor or impartiality which is a certain regularity in terms of feeling (affection), thought (cognition), and predisposition to action (conation) towards an object in the surrounding environment. That attitude is a readiness or willingness to act and not the implementation of certain motives. Attitude is an action or activity, but it is a predisposition to the action of behavior. Attitude is still a closed reaction, not an open reaction or open behavior.

According to the theory explained by Mar'at in Erwin et al., attitude consists of 3 important interconnected components. The components forming the attitude structure are the cognitive (perceptual) component which contains beliefs, knowledge, and personal experiences of a person, the affective (emotional) component, which relates to a person's ability to judge an object; and the conative component (the behavioral component) which relates to a tendency to act. Attitude is a predisposition for the formation of an action. Pregnant women with a positive attitude tend to act obediently in taking iron tablets. Conversely, pregnant women with a negative attitude tend to act disobediently to attending classes for pregnant women. The results of this study align with the research of (Ramawati & Mursiyam, 2018) who found that another factor that plays a very important role in adherence is the attitude of pregnant women. Pregnant women with a good attitude will understand the importance of health during pregnancy and tend to be more obedient.

#### **Family support**

The results of hypothesis testing showed that family support affects the compliance of pregnant women in participating in the pregnant women's class program in Aceh Besar Regency ( $t_{\text{count}} = 14,472 > t_{\text{table}} 1,624$ ). The family acts as feedback to guide the mother in dealing with pregnancy problems and as a source and validator of family identity. The family gives praise for encouraging pregnant women in pregnancy checkups, exchanging opinions about pregnancy, and resolving problems by way of deliberation (Worang et al., 2014). The relationship between family support and pregnant women's compliance in participating in pregnant women's classes was put forward by Sinurat & Sipayung, which found a significant association between family support and pregnant women's adherence to attending classes for pregnant women. This is shown from pregnant

women who are obedient and routine in attending classes for pregnant women more often in pregnant women with good family support (Sinurat & Sipayung, 2021).

The higher the family support, the higher the level of compliance of pregnant women in participating in health programs. Family support is support provided by family members (husbands, wives, and relatives) so that the individual who is given support feels that he is cared for, valued, gets help from meaningful people and has strong family ties with other family members. Individuals who obtain high family support will become individuals who are more optimistic in the face of health and life problems and more skilled in meeting psychological needs (Sari et al., 2017).

#### **Residential Distance**

The results of testing the hypothesis show that the distance of residence affects the compliance of pregnant women in attending the class program for pregnant women in Aceh Besar District ( $t_{\text{count}} = 16.551 > t_{\text{table}} 1.624$ ). The distance from the place of residence to the health facility where the class for pregnant women occurs is directly related to the mother's obedience to attending the class. Pregnant women who live closer to health facilities can attend classes for pregnant women 2.66 times compared to those who live farther away (Nurfitriyani & Puspitasari, 2022).

The distance where the mother lives is far away can reduce the mother's motivation to come to the health facility and take classes for pregnant women due to fatigue while on the road and other factors such as no transportation or incurring costs for transportation. Pregnant women who live far from the place where pregnant women classes are held but want to take regular pregnant women classes because these pregnant women already know the good benefits of their participation in routine pregnant women classes.

#### **The Variables That Most Influence Internal Factors and External Factors on the compliance of pregnant women in attending pregnant women classes in Aceh Besar District**

The results showed that the most dominant internal factor influencing pregnant women's compliance in attending classes for pregnant women was income ( $t_{\text{count}} = 34.689 > t_{\text{table}} 1.624$ ). Income or family income is the total real income of all household members, which is used to meet both collective and individual needs in the household. Thus, income is an illustration of the economic position of the family in society. Income can influence a family's consumption pattern (Ode Salma et al., 2022).

While the external factor that most dominantly influences pregnant women's compliance in attending classes for pregnant women is knowledge ( $t_{\text{count}} = 35.768 > t_{\text{table}} 1.624$ ). Knowledge is the basic drive to be curious, to seek reasoning, and to organize experience. The existence of elements of experience that were originally inconsistent with what is known by the individual will be rearranged, rearranged, or changed in such a way as to achieve consistency. Knowledge results from knowing, which occurs after people sense a certain object. Sensing occurs through the human senses: sight, hearing, smell, taste, and touch. Most human knowledge is obtained through the eyes and ears (Soekidjo Notoatmodjo, 2014). The higher the level of knowledge, the better the level of compliance.

The significant relationship exists between knowledge and attendance, distance to where they lived and worked, husband's support, ownership of the MCH Handbook, and parity towards adherence to attending classes for pregnant women (Risneni & Yenie, 2017) (Tanberika & Susanti,

2021). The factors that influence pregnant women's adherence in attending pregnant women's classes are knowledge, a distance of residence, family support (husband/parents/in-laws), and parity. Going along with it, (Ismail et al.2020) concluded that five dominant variables influence a person's adherence to health services: knowledge, cultural beliefs, family support, friend support, and health facilities (Ismainar et al., 2020).

**The factors that most influence pregnant women's compliance in participating in the class program for pregnant women in Aceh Besar District.**

The results showed that external factors most influenced the adherence of pregnant women in attending pregnant women's classes ( $p=0.016$ ). External factors or factors that come from outside that can affect the compliance of pregnant women in taking classes for pregnant women are knowledge, attitudes, family support, and distance of residence; these four factors can explain the compliance of pregnant women in attending classes for pregnant women by 69.7% and the rest is influenced by other factors.

Good knowledge about the benefits of classes for pregnant women, supported by a positive attitude and the existence of maximum family support and proximity to residence, will significantly increase the compliance of pregnant women in attending classes for pregnant women. It is also known that good knowledge will strengthen individuals or pregnant women in making decisions about behavior. In this case, what is meant by knowledge is information about the benefits of pregnancy and participating in classes for pregnant women. This happens because, apart from knowledge, many other factors influence health utilization. Several reasons include perceived needs, attitudes, and beliefs regarding health services (Prameswari & Ali, 2019).

The same thing also happens in the correlation between attitude and adherence, where a positive attitude from pregnant women towards the class of pregnant women can significantly increase their compliance in attending classes for pregnant women, and vice versa, because according to Green's theory attitude is one of the determining factors in health behavior. (Desmariyente & Hartati, 2019). Another external factor is family support. Encouragement from the closest family can increase pregnant women's compliance in attending classes for pregnant women. The existence of support from the family will increase the motivation of mothers to attend regularly in carrying out classes for pregnant women, but low family support causes lower obedience among pregnant women in attending classes for pregnant women (Risneni & Yenie, 2018). In addition to the three factors above, the distance to where you live also contributes to the compliance of pregnant women in attending classes for pregnant women. Distance of residence that is too far from being pregnant will cause the desire of mothers to attend classes for pregnant women to decrease, and vice versa, so that distance to the residence is a priority factor that must be considered in increasing adherence of pregnant women to their participation in classes for pregnant women.

**CONCLUSION**

Based on the research and discussion results, it can be concluded as follows: 1) There is an influence of internal factors on pregnant women's compliance in attending the pregnant women's class program ( $p=0.043$ ). 2) There is an influence of external factors on the compliance of pregnant women in participating in the class program for pregnant women ( $p=0.016$ ). 3) The internal factor that most influences the compliance of pregnant women in attending the class program for pregnant

women is income, with a tcount of 34.689 > table of 1.624, and the external factor that most influences compliance of pregnant women in attending the class program for pregnant women is knowledge with a tcount of 35.768 > ttable of 1.624. 4) The factors that most influence the compliance of pregnant women in attending classes for pregnant women are external factors (tcount 6.778 > ttable 1.624).

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