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# Experimental Study Of Second Semester Student Knowledge About Vital Sign at AKBID Helvetia Medan

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# Article Info

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## **ABSTRACT**

Midwives have many ways to monitor client well-being. A group of skills that involves measuring physical characteristics as observations, one of which is measuring blood pressure, pulse, respiratory rate and measuring temperature. Can be used to monitor the response of the mother's body to pregnancy, labor, and delivery. The purpose of this study was to determine the difference in knowledge of second semester students about vital signs before and after being given learning media through audio-visual media. The design used in this study was a quasi-experimental study with a non-randomized pretestposttest control group design that conducted a pretest before treatment was given and posttest afterward, to determine whether there was a difference between the experimental group and the control group. This study used the total population method, where the entire population was sampled as many as 117 respondents. The data used in this study are primary data, secondary data, and tertiary data. The results of this study, the knowledge of students in the intervention group with the Chochran test analysis. Based on the test statistics, the results of the Chochran test showed a significance value of 0.000 from the results of the study (test statistics), the results of the McNemar test obtained a difference in the level of knowledge between the two measurements. Knowledge of students in the control group. Based on test statistics, the results of the Chochran test with a significance value of 0.607 from the results of the study (test statistics), the results of the McNemar test showed no difference in the level of knowledge between the two measurements. Suggestions are expected that audio visual media learning media can increase students' knowledge about vital signs and can be an effective learning media.

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#### 1. INTRODUCTION

United Nations Educational, Scientific, and Cultural Organization (UNESCO) 2016 education has a key role to play in addressing environmental challenges. Education, especially for girls and women, is the most effective way of curbing population growth, increasing women's autonomy in making decisions regarding fertility and timing of pregnancy. Education can provide better livelihoods by increasing incomes, and skilled people are critical to the transformation of economies and food systems. Education can influence personal and collective behavior towards the environment through contemporary, traditional and lifelong learning approaches (1).

Measurement of internal temperature is an important guide to determine the body's reaction to external conditions and also as an indicator of internal problems, such as infection. After delivery, body temperature can rise to 38?C for 24 hours and this can lead to dehydration. Babies experience chills after birth and various measures have been taken to bring their body temperature back to normal before being transferred. The care plan is related to the frequency that states that the infant's temperature should be checked to ensure that the body temperature is maintained. Babies can be put at risk if this is not done and this is an act of negligence if danger threatens the baby (10).

Most mothers have normal blood pressure during pregnancy, but hypertension in pregnancy is a major cause of maternal death. There is a pregnancy-specific disorder, called pre-eclampsia, which affects about 7% of all pregnancies. Pre-eclampsia can cause serious complications in the mother, including kidney and liver failure, clotting disorders, and bleeding and the baby can experience the effects of intrauterine growth restriction or premature birth. The impact of pre-eclampsia can be minimized through appropriate action. Therefore, maternal blood pressure should be carefully assessed during the antenatal period so that appropriate care and treatment can be initiated if hypertension is found (10).

Midwives emerged as trusted women in accompanying and helping mothers give birth. The role of midwives in the community is highly valued and respected because of their noble duties, encouraging, encouraging and accompanying, and helping mothers giving birth to take good care of their babies. The Clinical Basic Skills course aims to help midwifery students learn basic midwifery skills courses. It can be a good reference for students in midwifery academy. Students as future health workers are able to apply skills in providing the best and quality care services and are oriented to client satisfaction (11).

Midwives have many ways to monitor client well-being. A group of skills that involve measuring physical characteristics is referred to as observation, one of which is measuring blood pressure, pulse, respiratory rate and measuring temperature. Provides very valuable information about maternal health. Measurements of blood pressure, pulse, respiratory rate and temperature measurements can be used to monitor the mother's body's response to pregnancy, labor, and delivery. These are often recorded as baselines in each setting to facilitate care delivery to detect changes that may be caused by the disease or obstetric intervention. Therefore, midwives must understand what influences, accurately measure, and mean the observations made (10).

The contact stage with health services, where someone has entered into a relationship with health services by asking for advice from health professionals such as doctors, midwives or others, which is carried out on his own initiative. This information-seeking process is carried out to seek justification for the condition of his illness, as well as to find out the symptoms he does not understand and the belief that he will get better. If after the consultation no more symptoms are found, then the person considers himself/herself to have recovered (9).

Vital sign examinations carried out by health workers are used to monitor the patient's progress.

This action is a routine activity for the client, because it is an act of monitoring changes or disturbances in body systems. The implementation of vital sign examinations on all clients is different from one another. The level of the patient's emergency, such as in a critical patient's condition, will require stricter monitoring of vital signs than in a non-critical patient's condition and vice versa (8).

Examination of vital signs is the most common examination and must be carried out before examining body parts. Examination of vital signs in question is to check blood pressure, body temperature, pulse, and respiratory system. This examination is called vital because, this examination is an important aspect to assess the patient's overall physiological condition. The results of these examinations will later be entered into the patient's health care data to measure current or future physical conditions (6).

The measurements that are most often carried out are measurements of blood pressure, temperature, pulse, respiratory rate, and oxygen saturation. As indicators of health status, these measures indicate the effectiveness of the body's circulation, respiration, neural and endocrine functions. For this reason, this technique is called vital signs (7).

Education is a process of deliberate activity on student input to produce a desired result according to the goals set. As a deliberate process, education must evaluate the results to see whether the results achieved are in accordance with the desired goals and whether the processes carried out are effective in achieving the desired results (3).

Learning is an activity that involves a person in an effort to acquire knowledge, skills and positive values by utilizing various sources for learning. Learning can involve two parties, namely students as learners and teachers as facilitators. The most important thing in learning activities is the learning process. (4).

The development of science and technology increasingly encourages reform efforts in the use of technological results in the learning process. Educators are required to be able to use the tools that can be provided by the school, and it is possible that these tools are in accordance with the developments and demands of the times. Educators can at least use inexpensive and efficient tools which, although simple and unpretentious, are a must in an effort to achieve the expected teaching goals. In addition to being able to use the available tools, educators are also required to be able to develop skills in making learning media that will be used if the media is not yet available (5).

Experiments were conducted to test the hypothesis in order to find a causal relationship between the variables being studied. If an experiment finds a causal relationship that is different from the previous theory, the experimental results can improve the previous theory. Thus, an experiment does not always produce the same findings as previous theories, but the latest findings from an experiment will enrich the development of the science being studied (12).

The experimental plan using audio-visual media is expected that students have the ability to check blood pressure, pulse, respiratory rate (respiratory rate) and temperature properly, structured and correctly and be able to interpret the data obtained to make further diagnostic steps.

The initial survey conducted by researchers using interview techniques at AKBID Helvetia Medan from 10 second-level students showed that 5 students did not master the KDK I course on vital signs, 3 students still answered hesitantly, and 2 students mastered the vital sign course. From interviews conducted by researchers to 10 second-level students at Akbid Helvetia,

students in the teaching-learning process were more interested in using audio-visual learning media than using the lecture method in the classroom learning process.

#### 2. RESEARCH METHODE

This type of research is quantitative with a Quasi Experimental study design. The design of this research is a study of Non Randomized Pretest-Posttest Control Group Design. Non Randomized Pretest-Posttest Control Group Design is a form of Quasi Experimental by conducting a pretest before the treatment is given and posttest after it, to find out if there is a difference between the experimental group and the control group (12).

The research design is as follows:

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## 3. RESULT AND ANALYSIS

# Univariate Analysis

Table 1. Frequency Distribution of Respondents Based on Cognitive Aspects, Affective Aspects, Conative Aspects and Early Marriage at SMA PAB 5 Klumpang Deli Serdang in 2021

	1 9	9		
Variable	f	%		
Cognitive aspect				
Not really understand	13	41,9		
Understand	18	58,1		
Affective Aspect				
Does not support	12	38,7		
Support	19	61,3		
Conative aspects				
Not so good	16	51,6		
Good	15	48,4		
Early-age marriage				
Don't get married early	9	29,0		
Early marriage	22	71,0		
Total	31	100		

Based on Table 1. it is known that the cognitive aspects of respondents regarding early marriage show that from 31 respondents who already understand as many as 18 people (58.1%) and respondents who do not understand as many as 13 people (41.9%). Based on the results of research on the affective aspects of respondents about early marriage, it can be seen that from 31 respondents who supported as many as 19 people (61.3%) and respondents who did not support as many as 12 people (38.7%). Based on the research results in table 1 aspect conative of respondents about early marriage, it can be seen that from 31 good respondents, 15 people (48.4%) and respondents who are not good as many as 16 people (51.6%). Based on the results of research on early marriage, it can be seen that from 31 respondents who married early as many as 22 people (71.0%) and respondents who did not marry early as many as 9 people (29.0%).

#### **Bivariate Analysis**

Table 2. Cross Table Distribution of Relationships between Cognitive Aspects, Affective Aspects, Conative Aspects with Early Marriage at SMA PAB 5 Klumpang Deli Serdang in 2021

	Early-age marriage						Sig-p
Variable	Not Married Early		Early-age marriage		Total		
	f	%	f	%	f	%	
Cognitive Aspect							
Not really understand	0	0	13	41,9	13	41,9	0,002
Understand	9	29,0	9	29,0	18	58,1	
Affective Aspect							
Does not support	0	0	12	38,7	12	38,7	0,005
Support	9	29,0	10	32,3	19	61,3	
Conative Aspects							
Not so good	1	3,2	15	48,4	16	51,6	0,004
Good	8	25,8	7	22,6	15	48,4	
Total	9	29,0	22	71,0	31	100	

Based on the results of the cross tabulation in table 2, the results obtained from 31 respondents in the cognitive aspect who did not understand as many as 13 people (41.9%), respondents who did not marry early as many as 0 people (0%) and respondents who married early as many as 13 people (41.9%). Meanwhile, in the cognitive aspect, 18 people (58.1%) understand, 9 respondents (29.0%) who did not marry early and 9 (29.0%) early married respondents showed the chi square test results with 95% confidence level with = 0.05 obtained p value (0.002) which means it is smaller than 0.05 so that there is a significant relationship between cognitive aspects and perceptions of early marriage in SMA PAB 5 Klumpang Deli Serdang in 2021.

Based on the results of the cross tabulation, the results obtained from 31 respondents on the affective aspect that did not support as many as 12 people (38.7%), respondents who did not marry early (0%) and respondents who married early as many as 12 people (38,7%). While the affective aspect that supports as many as 19 people (61.3%), respondents who did not marry early as many as 9 people (29.0%) and respondents who married early as many as 10 people (32.3%) showed the results of the chi square test with 95% confidence level with = 0.05 obtained p value (0.005) which means it is smaller than 0.05 so that there is a significant relationship between affective aspects and perceptions about early marriage in SMA PAB 5 Klumpang Deli Serdang in 2021.

Based on the results of the cross tabulation, the research results obtained from 31 respondents on the conative aspect that was not good as many as 16 people (51.6%), respondents who did not marry early (3.2%) and respondents who married early as many as 15 people. (48.4%). While in the good conative aspect there were 15 people (48.4%), 8 respondents who did not marry early (25.8%) and respondents who married early as many as 7 people (22.6%) with the results showing the results of the chi test. square with 95% confidence level with = 0.05 obtained p value (0.004) which means it is smaller than 0.05 so that there is a significant relationship between cognitive aspects and perceptions about early marriage in SMA PAB 5 Klumpang Deli Serdang in 2021.

# The Relationship between Cognitive Aspects and Adolescent Perceptions About Early Marriage

Based on the results of the study showed that of the 31 respondents in the cognitive aspect who did not understand as many as 13 people (41.9%), respondents who did not marry early

were 0 people (0%) and respondents who married early were 13 people (41.9%). Meanwhile, in the cognitive aspect, 18 people (58.1%) understood, 9 people did not marry early (29.0%) and 9 people married early (29.0%). After the chi-square test was carried out, the results showed that there was a significant relationship between cognitive aspects and perceptions about early marriage with a p value (Sig) (0.002) < (0.05).

Cognitive Aspect is an individual's view of something based on the knowledge he gains in everyday life. Components related to knowledge, experience, interests, beliefs. This aspect is matters relating to how people perceive something that can be motivated by the existence of this cognitive aspect, namely the individual's view of something based on the knowledge he gains in everyday life. The importance of instilling understanding in adolescents about early marriage can have an impact on the future of these young people, considering that the younger generation is the future successor of the nation. In this study, in the cognitive aspect of respondents about early marriage, the majority of respondents already understand related to early marriage, namely respondents answered a questionnaire about general knowledge about early marriage and the results showed as many as 18 people (58.1%) already understood related to early marriage.

Sari's research in 2015 showed that the ideology of the people involved in her research had a very good understanding of early marriage by 16.8%. Understanding is not good as much as 34.96% and the rest is understanding is not good at 26.28%. According to him, public perception of young marriage in Tapau Village, Central Bunguran District, Natuna Regency, Riau Islands Province in terms of ideology is classified as good. Ideology is a desire to achieve or realize something desired, something special or more.

This research is in line with the research of Montazeri whose scientific publication is "Determinants of Early Marriage from Married Girls"; Perspectives in Iranian Setting: A Qualitative Study" suggests that early marriage is a worldwide problem associated with a range of health and social consequences for adolescent girls. Designing effective health interventions to manage early marriage needs to apply a community-based approach. However, it has received less attention from health decision makers and researchers in Iran. The results showed that three categories emerged from the qualitative data including family structure, low autonomy in decision making, and responding to needs. According to him, although the respondents are not ready to get married and intend to delay their marriage, several factors such as individual and contextual factors encourage them to marry early.

According to the researcher's assumptions from the research results obtained on the cognitive aspect with his understanding of early marriage, the researcher sees this phenomenon based on the role of the mass media which makes access to information and technology easier. Almost all teenagers in Ketapang Indah Village, North Singkil District, Aceh Singkil Regency have Smartphones that make it easy for them to access any information through internet and social media services that provide a lot of information about health education and other education. Recently, the frequency of pre-marital and out-of-wedlock pregnancies among teenagers has been increasing. This increasing frequency is influenced by very complex factors, including sex information and a lack of understanding of religious values and norms. Information about sex through very vulgar mass media, watching movies and reading books containing pornographic elements that are relatively frequent, including various shows on TV which are increasingly vulgar in recent times can form deviant sexual behavior and premarital sex.

Besides that, the surrounding environment where many friends provide information about sex is wrong and cannot be accounted for because they themselves actually do not understand about sex, which eventually led to a premarital pregnancy that led to underage marriage. The

low understanding of religious values and norms causes deviant behavior to occur. This can be seen from the current dating style of teenagers because of a lack of religious understanding, so when dating they often go to things that can stimulate sexual intercourse, so that in the end they have premarital sex, and premarital pregnancy occurs which leads to underage marriage. However, 41.9% of respondents indicated their lack of understanding related to early marriage. After being confirmed, the researcher found that the reason the respondents did not know information related to early marriage was because they had less access and were less exposed to this information and early marriage occurred due to low levels of education, bad influence of foreign culture from the mass media and low family economic burden so that parents quickly marry off their children in the hope that the family's economic burden will be reduced. So that triggers early marriages by several teenagers, not infrequently they even have premarital sexual relations which lead to early marriage, because to cover the disgrace in the family, the marriage is carried out by compulsion. One of the ways to prevent early marriage is by providing sex information from an early age, and due to the lack of socio-economic mental preparedness, the honor of households engaging in underage marriages is prone to problems.

# The Relationship between Affective Aspects and Adolescent Perceptions of Early Marriage

Based on the results of the study showed that of the 31 respondents in the affective aspect who did not support as many as 12 people (38.7%), respondents who did not marry early were 0 (0%) and respondents who married early were 12 people (38.7%). While the affective aspect that supports as many as 19 people (61.3%), respondents who do not marry early as many as 9 people (29.0%) and respondents who marry early as many as 10 people (32.3%). After the chi-square test was carried out, the results showed that there was a significant relationship between affective aspects and perceptions of early marriage with a p value (Sig)  $(0.005) \le (0.05)$ .

Aspects concerning the emotions of individuals, including affective aspects. Where the individual in perceiving something can be through the affective aspect based on the individual's emotions, this can arise because of the moral and ethical education obtained from childhood, this ethical and moral education is what ultimately becomes the basis for the individual in looking at something that is happening around him. Regarding affective aspects which are aspects of individuals in perceiving something based on individual emotions or reactions to positive and negative assessments of early marriage, the results of this study indicate that the majority of respondents support early marriage as many as 19 people (61.3%) while 12 others (38,7%) do not support early marriage.

This research is in line with Ekawati's research in 2017 Affective Aspects are feelings that involve emotional aspects. This emotional aspect is deeply rooted as a component of attitude because in general this aspect is equated with the feelings that a person has towards something. In its publication, it was stated that the attitude of young women towards early marriage based on the affective aspect, most of the young women had an unsupportive attitude towards early marriage, as many as 23 respondents (57.5%) which were found in adolescents aged 16-19 years as many as 17 respondents (42). ,5%). This is inversely proportional to the results of this study which showed that the majority of adolescents supported early marriage.

This research is also in line with research conducted by Winda Desi Arianti in 2018. In the affective aspect, it shows that mothers are very happy and happy with their child's marriage at an early age, although initially there were feelings of anxiety and worry but in the end they were happy. fulfill the sunnah of rossul and be saved from associations that are prohibited by religion, the same feeling is felt in mothers who do not approve, because they feel that their children are responsible and their children do their duties as wives well.

According to the researcher's assumptions from the results of the study, it shows that respondents support early marriage on the grounds of avoiding free sex before marriage, as well as a way of surviving from the crush of the economy. According to demographic data, the income of the majority of respondents' parents is still an average of 1 million. As we know it is very difficult to meet the needs of life today, so it is possible that this is the reason that encourages many respondents to support early marriage. On the other hand, those who do not support this can be influenced by the understanding factor about early marriage which, although basically supportive, is still more dominant because of the socio-economic influence of the family, so that the analytical response from respondents supports this.

# The Relationship between Cognitive Aspects and Adolescent Perceptions About Early Marriage

Based on the results of the study showed that of the 31 respondents on the conative aspect that was not good as many as 16 people (51.6%), respondents who did not marry early were 1 person (3.2%) and respondents who married early were 15 people (48.4%). While in the good conative aspect there were 15 people (48.4%), respondents who did not marry early were 8 people (25.8%) and respondents who married early were 7 people (22.6%). After the chi-square test was carried out, the results showed that there was a significant relationship between the conative aspect and the perception of early marriage with a p value (Sig) (0.004) < (0.05).

Components related to the tendency to act on the object of attitude include the conative aspect. This component shows the intensity of the attitude that shows the size of the tendency of a person's reaction or response to an object. The conative aspect is a reaction or response from the cognitive and affective aspects of respondents when asked about early marriage as many as 15 people (48.4%) have a good conative aspect which means they are not ready to face these conditions and 16 people with a conative aspect are not good (51, 6%) or resigned to the condition.

This study is in line with the results of Desiyanti's research (2014) which states that the role of parents also determines adolescents to undergo education at a young age. Parents also have a big role in delaying the marriage age of their children.

This study is in line with Rafidah (2015) in the results of her research on parents' perceptions of early marriage in Kertak Hanyar District that most parents' perceptions are lacking (70.6%) and there is a significant relationship between parents' perceptions of early marriage.

Based on this, according to the researcher's assumption that the conative aspect of the respondent already has good knowledge related to early marriage and the effect on future survival is in the form of unpreparedness in fostering a household, so that respondents have a response to reject early marriage. Respondents answered conatively well, while the responses of 16 other people on the questionnaire stated that the conative aspect was not good because they were resigned to family conditions that matched them with their own close relatives or because the economy was not enough to meet their living needs.

# 4. CONCLUSION

Based on the results of the research that has been carried out and the discussion described previously, the following conclusions can be drawn:

- 1. There is a correlation between cognitive aspects and early marriage at SMA PAB 5 Klumpang Deli Serdang in 2021 with a p value of  $0.002 \le \alpha = 0.05$ .
- 2. There is a Relationship between Affective Aspects and Early Marriage at SMA PAB 5 Klumpang Deli Serdang in 2021 with a p-value of  $0.005 \le \alpha = 0.05$
- 3. There is a relationship between conative aspects and early marriage at SMA PAB 5 Klumpang Deli Serdang in 2021 with a p value of  $0.004 \le \alpha = 0.05$ .

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