

# COMPARISON OF HEALTH EDUCATIONAL THROUGH LECTURER AND AUDIO VISUAL METHOD ABOUT PHYSICAL ACTIVITY IN PREGNANT WOMAN DURING 3<sup>RD</sup> SEMESTER PREGNANCY BENGKULU IN CITY

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## Abstract

Physical activity during pregnancy can improve the physical fitness and muscle conditioning needed to Facilitate labor. Health education and audiovisual using conventional methods is expected pregnant women know the importance of physical activity during pregnancy. The purpose of this research is to know the difference of health education and audiovisual conventional method using about physical activity during pregnancy in pregnant mother of 3rd semester in Bengkulu City. Cross-sectional design using a quasi-experimental method, using two group pretest posttest design. The sample was 48 pregnant women. The sampling technique in this research is done in a sequential way. The research instrument used questionnaire. Data analysis using paired sample test and independent sample test. The result of paired sample test of both groups of media at the level of knowledge Obtained p value of <0.05. The result of paired sample test of both groups of media on attitude is Obtained p value <0.05. The test results of independent sample Obtained test p value of <0.05. Conclusion, there is influence of the media and audiovisual conventional health education to the knowledge of pregnant mother. There is a difference between the conventional method and the audiovisual method.

**Keywords:** Health education, conventional, audio visual, physical activity.

## 1. INTRODUCTION

Pregnancy is a stage that is almost always passed by every woman in life. Many of changes that occur when pregnant. Pregnancy can cause the psychic and psychological changes that can cause "sedentary life" or lack of physical activity during that period, reduced physical activity during pregnancy may-related with gestational diabetes, hypertension in pregnancy, increase of weight and risk of overweight (obesity ) (Downs, et al, 2013).

Physical activity during pregnancy can improve physical fitness and cardiovascular endurance, prevention of weight gain and excessive gestational glucose intolerance, muscle conditioning required to facilitate childbirth, as well as repair and psychological adjustment to the changes of pregnancy. Furthermore, physical activity in pregnancy correlated with a decrease in common pregnancy problems. (Mbada et al, 2014).

Many pregnant women who lack an understanding of what physical activity activities that can be done during pregnancy. The obstacles encountered by doing physical activity during pregnancy are internal factors such as anxiety about the

emergency of problems in pregnancy and external factors such as the environment and lack of time to do activities during pregnancy. (Srvya, 2016).

Knowledge and attitude of pregnant women toward physical activity during pregnancy can be affected the delivery. Health education must give information about the importance of physical activity during pregnancy. According Notoadmojo (2010) the health educational efforts are planned to influence others, whether individuals, groups or communities, so that they do what educator said about education or health promotion. According Mardhiah (2015) that health education are significant to increase knowledge and skills. The methods most commonly used in delivering health education is lecture and audio-visual equipment.

The lecture method is a traditional method that is often used in teaching and learning, in this case together with health education. This method of orally delivered material. Although this method must be memorable one way, but this method can not be abandoned. This method has advantages such as cheap, easy, and can cover a lot of mass at one time. Instead of this method also has some disadvantages such as boring, lack of mass participation, varying degrees of knowledge of the masses.

Audio Visual conveying method learning message through live images projected with a certain speed and absorbed through the hearing and sight. The process of hearing and this view can foster interest in learners and it is also a learning process can take place whenever and wherever necessary so as to accelerate the process of understanding and strengthen memory. Only this method requires a supporting device such as a projector or LCD, as well as costs.

Research of Lubis (2016), say that the use of audio-visual methods indirectly increase the recall of respondents than the lecture method. This is evidenced by the increase in value of 18.26 in the knowledge post audio-visual group compared with 15.03 in the lecture group. Audio visual memory retention increased for more interesting and memorable. Another study conducted by Santi et al (2014) showed that the health education using the audio visual effectively to the improvement of knowledge, attitudes and actions of the people in Sungai Apit, Mengkapan village, Teluk Batil and Village of Hope regarding prevention behaviors filariasis with p value  $(0.00) < \alpha (0.05)$ .

Based on preliminary studies that the author did in the city of Bengkulu, be obtained the highest number of pregnant women were in four health centers that Puskesmas Sentiong, Puskesmas Pasar Melintang, Padang Serai and Coop. Results of interviews with the officers found that the pregnancy exercise is a compulsory program for pregnant women. However, the number of pregnant women who want to follow the pregnancy exercise is not in accordance with the number of pregnant women who had ANC. In addition it has never been given counseling about physical activity that can be done during pregnancy.

Various studies on educational methods that can be applied to improve the knowledge, have been made. However, research on health education related to physical activity during pregnancy is rare. It is necessary doing further research to compare the effect of health education through lecture and audio-visual methods of physical activity during pregnancy in pregnant women 3rd semester in Bengkulu. This research is expected to help increase knowledge about physical activity during pregnancy with a more effective manner, thus increasing health quality of pregnant women and their babies.

## 2. METHODOLOGY

This study uses a quantitative research with cross sectional design using a quasi-experimental method, using two-group pretest posttest design independent .Variabel in this research is to use health education lectures and audio-visual methods of physical activity during pregnancy and the dependent variable in this study is the knowledge 3rd semester pregnant women physically. The study population was all pregnant women in the 3rd semester of four health centers in Bengkulu with sample of 48 pregnant women. The sampling technique used is non-consecutive probably sampling. The research was conducted in four health centers in Bengkulu on December 2017. Techniq collection using research instrument questionnaire to obtain data on physical activity knowledge of 3rd semester pregnant women. Data were analyzed using paired samples t-test for differences in pretest and posttest mengetahui and independent sample t-test to determine differences in methods of lectures and audio visual equipment.

## 3. RESULTS AND DISCUSSION

Description of the overall results of the study describes research data collected is dependent variable, independent variables and characteristics to classify the study subjects into a table. This research data obtained by researchers from questionnaires and other data collection. Of the 48 subjects who had collected the data obtained the following results:

### 3.1 Characteristics of research subjects

TABLE 1, CHARACTERISTICS OF PREGNANT WOMEN IN THE 3RD SEMESTER OF BENGKULU

characteristics	Frequency (n = 48)	Percentage (%)
<b>Age</b>		
> 30 years	15	31.25
≤ 30 years	33	68.75
<b>parity</b>		
1	26	54.17
2	14	29.17
3	8	16.6
<b>Educational status</b>		
SD	4	8.33
SMP	4	8.33
SMA / SMK	38	79.17
D1	0	0
D2	0	0
D3	1	2.08
D4	1	2.08
S1	1	2.08

Based on the table that can be seen that mothers aged  $\leq 30$  years more than other age groups as many as 33 people (68.75%) the age of the youngest mother was 15 years old and the oldest was 39 years old. Most educational status are at a high school graduation 38 people (79.17%) and predominantly mothers who have a history of parity to 1 as many as 26 people (54.17%).

### 3.2 Bivariate Analysis

#### Comparison of the 3rd semester pregnant women knowledge before and after the lecture method

Comparison of the 3rd semester pregnant women knowledge before and after the lecture method to determine whether an increase in knowledge before and sesuda lecture method in pregnant women do 3rd semester with paired t-test (paired sample t-test). Statistical test results are shown in Table 2.

TABLE 2 COMPARISON OF KNOWLEDGE OF PREGNANT WOMEN ABOUT PHYSICAL ACTIVITY DURING PREGNANCY IN THE 3RD SEMESTER PREGNANT WOMEN WERE GIVEN HEALTH EDUCATION WITH LECTURE

Lecture method	n	$\bar{x} \pm SD$	p-value
Knowledge pretest	24	11.17 $\pm$ 1.551	0,000
Knowledge posttest	24	14.71 $\pm$ 2.881	

Based on the results of statistical test with paired t-test (paired samples t-test) obtained by value  $p = 0,000$  ( $p \leq 0,05$ ), so that concluded there are significant differentiation between health education lecture method to the knowledge of pregnant women about physical activity during pregnancy in pregnant women 3rd semester in Bengkulu. In accordance with the results of research Yunita (2016) showed that the lecture method has a great effect in improving health knowledge. The same thing was stated by Barry, et al (2014) in his research suggests that the lecture method is more effective than a demonstration method in improving the oral health knowledge.

#### Comparison of the 3rd semester pregnant women knowledge before and after method Audiovisual

Comparison of the 3rd semester pregnant women knowledge before and after the audiovisual method to determine whether an increase in knowledge before and after the audiovisual method in pregnant women do 3rd semester paired t-test (paired samples t-test). Statistical test results are shown in Table 3.

TABLE 3 COMPARISON OF KNOWLEDGE OF PREGNANT WOMEN ABOUT PHYSICAL ACTIVITY DURING PREGNANCY IN THE 3RD SEMESTER PREGNANT WOMEN WERE GIVEN HEALTH EDUCATION WITH AUDIOVISUAL METHOD

Audiovisual methods	n	$\bar{x} \pm SD$	p-value
Knowledge pretest	24	11.58 $\pm$ 2.501	0,000

<b>Knowledge posttest</b>	24	18.29 ± 0,829	
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Statistical test results paired t-test (paired samples t-test) pretest posttest obtained  $P = 0.000$  ( $p < 0.05$ ) and the decision taken was no effect of health education with audiovisual methods to knowledge about physical activity during pregnancy in pregnant women 3rd semester in the city of Bengkulu.

Based on the results of statistical test with paired t-test (paired samples t-test) obtained by value  $p = 0,000$  ( $p \leq 0,05$ ), so that there are significant inferred audiovisual methods of health education to pregnant mother's knowledge about physical activity during pregnancy in pregnant women 3rd semester in the city of Bengkulu. Research conducted by Wae, et al (2015) in saying that health education proved to increase the mother's knowledge. Something similar is delivered Kapti, et al (2013) which recommends the use of audiovisual media in outreach activities in order to increase knowledge.

**Analysis of the effect difference between methods of health education lecture with audio-visual method to knowledge about physical activity during pregnancy**

Comparison of the 3rd semester pregnant women knowledge lecture and audiovisual method to determine whether there is a significant difference between a lecture and audiovisual method in pregnant women do 3rd semester with unpaired t-test (independent sample t-test). Statistical test results are shown in Table 4.

TABLE 4 TEST RESULTS THE DIFFERENCE BETWEEN THE INFLUENCE OF HEALTH EDUCATION LECTURE WITH AUDIOVISUAL METHODS TO KNOWLEDGE ABOUT PHYSICAL ACTIVITY DURING PREGNANCY

<b>Method</b>	<b>N</b>	<b><math>\bar{x} \pm SD</math></b>	<b>p-value</b>
<b>Lecture method</b>	24	14.71 ± 2.881	0,000
<b>Audiovisual methods</b>	24	18.29 ± 0.859	

Statistical test results unpaired t-test (independent sample t-test) obtained by value  $p = 0.000$  ( $p < 0.05$ ) and the decision taken is ho rejected and concluded that there is difference between the effect of health education and audiovisual lecture on knowledge of pregnant women about physical activity during pregnancy in the 3rd semester pregnant women in the city of Bengkulu. The average value of audiovisual methods posttest higher than the average difference between lectures, so that more effective audiovisual methods to increase knowledge about the knowledge of physical activity during pregnancy.

Research Purnama (2014) says that the audiovisual media is more effective in improving students' knowledge about the dangers of drug in SMP Negeri 3 Mojosongo Boyolali. Research conducted Lubis (2016) states that the use of audio-visual methods indirectly increase the recall of respondents than the lecture method. This is evidenced by the increase in value of 18.26 in the knowledge post audio-visual group compared with 15.03 in the lecture group. Audio visual memory retention meningkatkan for more interesting and memorable.

#### 4. CONCLUSION

There is a significant difference in health education lecture and audiovisual methods of physical activity during pregnancy in the 3rd semester pregnant women in the city of Bengkulu with a p-value = 0.000. Thus concluded that the audiovisual media are more effective in influencing the knowledge of pregnant women about physical activity during pregnancy in the 3rd semester pregnant women in the city of Bengkulu

#### REFERENCES

- Bany, UZ, sunnati, and Darman, W. (2014). Comparative Effectiveness of Extension Methods Lecture and Demonstration Against Dental and Oral Health Knowledge Elementary Students. *Cakrandonya Dent J.* (Vol 6 No 1): 661-666
- Downs, USA, DKK (2012). Physical Activity and Pregnancy: Past and Present Evidence and
- Lubis, FS (2016). Differences in Health Education and the Teaching Method Using Visual Auidio On The Level of Knowledge and Attitude Kids Care Dental Caries in Regional Health Center Wonosegoro II. Essay. Surakarta: FIK UMS
- Mardhiah, A. Abdullah, A & Hermansyah. (2015). Improved Health Education In Knowledge, Attitudes and Skills Family With Hypertension. *JIK UNSYIA.* Vol 3. (2): 111-121
- Mbada, CE, Adebayo, OE, Arije, OO, Dada, OO, Akinwande, OA, Awotidebe, TO, and Along, IA (2014). Knowledge and Attitude of Nigerian towards Antenatal Exercise Pregnant Women: A Cross-Sectional Survey. *ISRN Obstetrics and Gynecologi.* (Vol 2014 No. 260 539): 1-8
- Santi, BC, Sabrian, F., & Karim, D. (2014). Effectiveness of Health Education Using Behavior Prevention Against Audiovisual Media Filiaris. *Jom PSIK.* (Vol 1 No. 2): 1-8.
- Sravya, I (2016). Importance of Physical Awareness in Pregnant Women. *Research and Reviews: Journal of Medichal and Health Sciences.* (Vol 5 No 3): 1-6
- Wea, KB Kristiawati, Laili, H. (2014) Health Education Improves With Audio Visual Media Behaviors Mothers in Treatment of Acute Respiratory Infections In Toddlers in Sub Lebijaga Ngada. <http://journal.unair.ac.id/download-fullpapers-cmsnj413197a0dd2full.pdf>, Retrieved on January 15, 2018
- Yunita, Lulu. (2016). Effectiveness of Health Education Teaching Methods Knowledge Level Mothers Against Diarrhea In Toddler Around Handling Unit TPA Cipayung, Depok. Essay. Jakarta: FK Syarif Hidayatullah