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Original Research Report

Relationship between the Pregnant Women's Knowledge about Pregnancy Exercise and Back Pain Events at Mahdalena Pane Clinic

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Abstract: Back pain during pregnancy experiences pain in the back joints and ligaments to relax and is accompanied by an increase in weight The uterus changes the center of balance so that the expectant mother has to stand with her shoulders slightly pulled back. Factors that influence the occurrence of back pain are: posture, sleeping position, increased hormones, bending over, multiple pregnancies, history of pain in past pregnancies and obesity. The research methodology in this study used analytical observation with a cross sectional approach, 30 samples were purposive sampling, in Mahdalena Pane Clinic in 2021 Based on the results of research from 30 respondents with Chi-square statistical test obtained P = 0.02 < and thus Ho is rejected and Ha is accepted, namely there is a relationship between knowledge of pregnant women about pregnancy exercise with back pain (Back Pain) at the Clinic Mahdalena Pane In 2021 from the results of the research, it was found that there was no gap between theory and research (practice).

Keywords: Back Pain, Pregnancies, Pregnancy Exercise.

1. Introduction

Mothers as one of the important factors in the education process of children should not be underestimated. From the mental, spiritual and behavioral side of the mother, it will determine the quality of the generation that will be born. A mother is an unbroken link in an effort to create a more pious generation [1].

A woman (mother) has become nature in her life will undergo the process of pregnancy and childbirth. For a woman, this period is a happy time, especially for women who are experiencing pregnancy for the first time [2]. Pregnancy is a natural event experienced by a mother, for pregnant women everything that is around her life will have a direct effect on her. Many pregnant women will reduce their work by reducing work that requires strength from the muscle [3]. During pregnancy also brings physical changes that occur sometimes even do not provide discomfort for the mother such as pain or pain in the back, aches in the leg area and so on. One of the most suitable types of exercise for pregnant women is pregnancy exercise [4].

Based on the results of research Yosefa [5], on pregnant women in the Medan Belawan District, Belawan II Village, data were obtained as many as 95 people from 102 respondents experienced back pain. Based on the results of the 2014 Population Census (SP), the Maternal Mortality Rate in North Sumatra is 328/100 thousand KH. The number of Maternal Mortality Rates (MMR) is very high in the world, it is recorded that 800 women die every day due to complications or complications during pregnancy (spasms in the legs, back pain, blood circulation disorders and others) [6] [7]. In 2015 more than 289,000 women died during pregnancy and after childbirth [8]. From the results of the initial survey at the Mahdalena Pane Clinic on March 15, 2021, it was found that out of 10 respondents who

Questions have been asked, there are 2 people who say they understand the effectiveness of implementing pregnancy exercise, 8 people who have less knowledge about the effectiveness of implementing pregnancy exercise. And of the 10 people, 6 people experienced back pain during pregnancy.

2. Literature Review

Pain is the reason most often complained and causes a person to experience pain that affects discomfort and tries to eliminate the cause of the pain or restore his comfort level [9] [10]. Back pain is an uncomfortable condition or chronic pain for at least 3 months accompanied by activity limitations caused by pain when moving or mobilizing [10] [11]. Back pain during pregnancy experiences pain in the joints of the back and ligaments relax and is accompanied by an increase in weight. The uterus changes the center of balance so that the mother-to-be has to stand with her shoulders slightly pulled back. The relaxed attitude of the back and ligaments causes back pain, especially more felt by multigravida women /women who are more than 1 or 2 times pregnant [12] [13].

Several factors influence the occurrence of back pain, namely: posture, sleeping position, increased hormones, bending over, multiple pregnancies, history of pain in previous pregnancies and obesity. Pregnancy exercise (Pilates) is a therapeutic motion exercise to prepare pregnant women physically or mentally, for fast, safe and spontaneous labor. Where this pregnancy exercise is carried out, one of them is to train posture in order to avoid or relieve complaints such as back pain and back pain during pregnancy [14] [15]. Based on the latest data from the World Health Organization (WHO) in 2015, it was estimated that there were 216 maternal deaths per 100,000 live births due to complications during pregnancy.

The prevalence of back pain in pregnant women varies, namely 50% in the UK and Scandinavia, and 70% in Australia. In the 2015 Indonesian Health Data Profile, there are 5,298,285 pregnant women in Indonesia, in Central Java Province there are 314,492 people, while in Semarang there are 53,734 pregnant women who experience back pain. In North Sumatra, there are 68% of pregnant women who experience back pain of moderate intensity, and 32% of pregnant women who experience back pain of mild intensity.

3. Methodology

The type of research used in this research is analytic observational with a cross sectional approach [16] [17]. The population in this study were all pregnant women who took part in pregnancy exercise with the incidence of back pain (Back Pain) in K as many as 50 people. Sampling in this study was using the purposive sampling technique, namely 30 pregnant women who took part in pregnancy

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exercise in the second and third trimesters of pregnancy, which will be carried out from February 2021 to June 2021.

4. Finding and Discussion

Table 1 shows the characteristics of the respondents, the results showed that the majority of respondents were in healthy reproductive age (20-35 years) as many as 18 people(60%), the majority had secondary education (Highschool) as many as 15 people (50%), the majority did not have a job (IRT) as many as 17 people (56.7%), the majority of pregnant women who have multipara parity as many as 15 people (50%), the majority of pregnant women who get information from health workers as many as 12 people (40%) and pregnant women with a trimester of pregnancy, II and III are comparable to each of 15 people (50%).

Tabel 1. Characterics Distribution of Pregnant Women in Mahdalena Pane Clinic 2021

Category Charecteristic	f	%
Age		
Unhelathy Reproduction (<20 dan >35 Years)	12	40
Healthy Reproduction (20-35 Years)	18	60
Total	**30**	**100**
Education		
Low (Elementary -Middle School)	12	40
Middle (High School)	15	50
High (Undergraduate)	3	10
Total	**30**	**100**
Work		
Working	13	43,3
Not Working	17	56,7
Total	**30**	**100**
Paritas		
Skundi (2)	14	46,7
Multipara (3)	15	50
Grandemultipara (>3)	1	3,3
Total	**30**	**100**
Pregnancy Period		
Trimester II (4-6 bulan)	15	50
Trimester III (7-9 bulan)	15	50
Total	**30**	**100**
Source of Information		
Mass Information	8	26,7
Family	10	33,3
Health Worker	12	40
Total	**30**	**100**

Based on Table 2, 30 respondents the majority who had sufficient knowledge about Pregnancy Gymnastics were 17 people (56.7%), who had less knowledge about pregnancy exercise as many as 10 people (33.3%) and who had good knowledge were 3 people (10%).

Tabel 2. Frequency Distribution of Respondents Based on Knowledge of Pregnant Women about Pregnancy Exercises at Mahdalena Pane Clinic in 2021

Knowledge	f	(%)
Good	3	10
Adequate	17	56.7
Low	10	33.3
Total	**30**	**100**

Tabel 3. Average Frequency of Respondent based on the Back Pain in Mahdalena Pane Clinic Year 2021

No	Teenage Pregnancy	f	(%)
1	Yes	2	6.7
2	No	28	93.3
	Total	**30**	**100**

Tabel 4 show the tabulation cross relationship of knowledge of pregnant women about pregnancy exercises with back pain incidence at mahdalena pane clinic in 2021. From the results, the Chi-square statistical test obtained P = 0.02 <, meaning Ho is rejected and Ha is accepted which means there is a relationship between knowledge of pregnant women about pregnancy exercise with back pain (Back Pain).

Tabel 4. Tabulation Cross Relationship of Knowledge of Pregnant Women about Pregnancy Exercises with Back Pain Incidence at Mahdalena Pane Clinic in 2021

Knowledge	Backpain Occurrence				Total		Chi-Square Test
	Experiecend		Not Experienced				
	N	%	N	%	N	%	
Good	0	0	3	10	3	10	*p =0,02*
Adequate	8	26,7	9	30	17	56,7	
Low	10	33,3	0	0	10	33,3	
Total	**18**	**60**	**12**	**40**	**30**	**100**	

The results of the analysis show that of the 30 respondents the majority who have sufficient knowledge about Pregnancy Gymnastics are 17 people (56.7%), who have less knowledge about pregnancy exercise as many as 10 people (33.3%) and 3 people who have good knowledge (10%). It is known that of the 30 respondents the majority who have less knowledge experience back pain as many as 10 people (33.3%), who have sufficient knowledge experience back pain as many as 8 people (26.7%), who have sufficient knowledge do not experience back pain as many as 9 people. people (30%) and who have good knowledge do not experience back pain as many as 3 people (10%).

From the characteristics of the respondents, it was found that the majority of respondents were of healthy reproductive age (20-35 years) as many as 18 people (60%), the majority who had secondary education (SMA/SMK) as many as 15 people (50%), the majority who did not have jobs (IRT) as many as 17 people (56.7%), the majority of pregnant women who have multipara parity as many as 15 people (50%), the majority of pregnant women who get information from health workers as many as 12 people (40%) and pregnant women with gestational age The second and third trimesters were comparable to 15 people (50%) each.

According to the author's assumption, every pregnant woman who has been studied at the SimpangEmpat Health Center, SimpangEmpat District, Karo Regency, it was found that the knowledge of pregnant women about pregnancy exercise is still lacking, influenced by the level of education. Where the higher the leveleducation will affect the mother's level of knowledge in preventing back pain during pregnancy and the lack of interest of pregnant women in knowing and preventing back pain, one of which is by using the pregnancy exercise method. The lack of activity of pregnant women also affects pregnant women themselves in preventing back pain that can arise during pregnancy. This is also influenced by the level of awareness of pregnant women in avoiding the incidence of back pain, one of which is using the pregnancy exercise method, age (<20 and >35 years) where age affects a person in receiving information and applying the information provided by health workers in preventing the occurrence of pain. Back pain during pregnancy, parity also affects the incidence of back pain during pregnancy because the higher the parity of pregnant women, the higher the knowledge and experience of pregnant women in undergoing their pregnancy, work (IRT) of pregnant women also affects the incidence of back pain, namely regarding the activity patterns of

pregnant women that are too heavy and supported by the intake of a balanced nutritional pattern in order to minimize the incidence of back pain during pregnancy.

This is in line with Notoatmodjo's [16] theory that the level of education is one ofthe external factors that can affect a person's knowledge. If a person's level of education is high, then that person tends to be more receptive to information. And conversely, if a person's education is lower, then that person will tend to be more difficult to receive new information. In addition to knowledge obtained from the learning process, there is also obtained from the use of the senses which have their own value. Knowledge can be obtained from experience, from various sourcesmass media, electronic media, health manuals, poster media, and close people and so on. In North Sumatra, it was found that 68% of pregnant women experienced moderate-intensity back pain, and 32% of pregnant women experienced low-intensity back pain. Meanwhile, the value of = 0.021, which means that <0.05, thus the analysis has the conclusion that Ha is accepted, which means that there is a relationship between the mother's level of knowledge about the effectiveness of pregnancy exercise and the incidence of back pain in North Sumatra, Medan Belawan II District, with $\rho < 0.05$.From the results of the Chi-square statistical test obtained P = 0.02 < meaning Ho is rejected and Ha is accepted which means there is a relationship between knowledge of pregnant women about pregnancy exercise with back pain (Back Pain).

From this study, it can be concluded that there is a relationship between the knowledge of pregnant women about pregnancy exercise and the incidence of back pain at the SimpangEmpat Health Center, Simpang Empat District, Karo Regency.

5. Conclusion

Based on the results of research regarding the relationship between knowledge of pregnant women about pregnancy exercise and back pain, the following conclusions can be drawn: Knowledge of pregnant women about pregnancy exercise at the Mahdalena Pane Clinic has sufficient knowledge of 17 people (56.7%). The incidence of back pain (back pain) in pregnant women at the Mahdalena Pane Clinic showed that the majority experienced back pain (back pain) as many as 18 people (60%) during pregnancy. There is a relationship between knowledge of pregnant women about pregnancy exercise and back pain, where the better knowledge of pregnant women about pregnancy exercise, the less incidence of back pain that can occur during pregnancy at Mahdalena Pane Clinic in 2021 with a value of P=0.02.

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