Analysis Pregnancy Exercise And Type of Childbirth In RSIA Mutiara Bunda Malang

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ABSTRACT

Childbirth is the extraordinary process of removing fetus and placenta through vagina or another way with a helping hand or with mother's own strength. Pregnancy exercise aims to prepare and train muscles and respiration so that it can be used to work optimally in normal Childbirth. The purpose of this research is to analysis the relationship between pregnancy exercise and type of childbirth in RSIA Mutiara Bunda Malang. This research method is non-experimental using a Prospective Cohort research design. The population of this study is pregnant women who did pregnancy exercise in RSIA Mutiara Bunda Malang, amounting to 23 people. This study uses simple random sampling technique with the independent variable is pregnancy exercise and the dependent variable is types of childbirth. Data collection by using notes of pregnancy exercise attendance and medical record of nursing respondents. The results of the research show that from 23 respondents, 12 (52%) respondents who participated in pregnancy exercise routinely experienced vaginal childbirth. Whereas, 11 (48%) respondents who did not routinely participate in pregnancy exercises experienced childbirth by sectio caesarea. Based on Chi square statistical test results are obtained p = 0,000 (p = < 0,05) so reject H0, which means that there is relationship between pregnancy exercise and the type of childbirth in RSIA RSIA Mutiara Bunda Malang. The results of this study indicate that doing pregnancy exercise routinely is strongly related to the type of Childbirth. A woman pregnant does pregnancy exercise has possibility faster childbirth process than a woman pregnant doesn't do pregnancy exercise and also it prevents the complication incident while she is childbirth. When doing pregnancy exercise, a woman pregnant trains her respiration. So, the supply oxigen from mother to fetus is fulfilled. It is caused the childbirth process is faster.

Keywords: Pregnancy Exercise, Type of Childbirth

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BACKGROUND

The process of pregnancy and childbirth is a very valuable experience for every woman. Every woman wants her childbirth to go smoothly and to be able to give birth to her baby perfectly. Childbirth, which is the culmination of the entire pregnancy process, is certainly an extraordinary thing because it is a series of processes of expulsion of the fetus and placenta through the birth canal or through other means, with the help or strength of the mother herself. (Nurotun, 2014).

Based on data from the Ministry of Health of the Republic of Indonesia in 2016, the number of mothers giving birth in 2016 was 5,111,269 people. Meanwhile, in East Java there were 609,279 with the number of alliances assisted by health workers at the Health Care Facilities as many as 573,824.

In 2016, the total deliveries at RSIA Mutiara Bunda Malang were 1058 with details of normal deliveries of 133 people and by sectio caesarean 925 people. From the results of a preliminary study conducted in November 2017 in the Inpatient Unit of the Obstetrics and Gynecology section at RSIA Mutiara Bunda Malang, there were 4 normal deliveries and 9 deliveries by sectio caesarea with a history of 3 mothers who did pregnancy exercises and 10 who did not do pregnant exercises.

Labor can go well if the 5P runs harmoniously, meaning that His power is in accordance with the course of labor, the passager or the state of the fetus itself, and the passage or state of the birth canal that has no obstacles, the psychological response of the mother, and birth attendants (Nurotun et al. 2016).

Abnormalities in the power factor can be caused by the occurrence of his incompatible phase (insertia), his irregularity, no coordination and synchronization between the contractions of its parts (incoordinate) and his too strong and too frequent so that there is no relaxation of the uterus (tetanik).). The foregoing can cause labor congestion, if not treated immediately it will cause distress to the fetus and the mother's uterus to rupture. (Achmad, 2008). So that one of the efforts taken to save the mother and the fetus is childbirth by sectio caesarean. This previous experience of giving birth to mothers can also influence a mother in choosing the next type of childbirth. Childbirth by cesarean section with an incision in the stomach and uterus makes pregnant women prone to tearing of the uterus when pushing during normal labor which can potentially cause bleeding. Therefore, to avoid morbidity and mortality in mothers with a history of childbirth by sectio caesarean, childbirth by sectio caesarean is an option (Fajrini, 2016)

During pregnancy, efforts to maintain and improve maternal health require extra attention so that the mother's health condition is maintained or at least the same as the prepregnancy health condition. Matters that require attention, among others nutrition, regular pregnancy examinations, improvement of personal and environmental hygiene, rest and sleep, stop habits that are detrimental to health and affect the fetus (such as smoking), carry out movement and pregnancy exercises. These efforts are aimed at maintaining the health of the mother and fetus, besides that it is also intended as preparation for childbirth and childbirth such as preparation for lactation and pregnancy exercise (Kusmiati, 2008).

Usually a pregnant woman continues to work throughout her pregnancy so it is very important that early in her pregnancy be given information about basic breathing and attitudes at work and free time. One of the activities carried out is pregnancy exercise. Daily relaxation and exercise measures are useful for a pregnant woman to prepare her body for labor and learn to breathe and rest at the right time during labor to help progress naturally and reduce the incidence of cesarean section. Pregnancy exercise aims to prepare and train the muscles so that they can be utilized to function optimally in normal labor. Doing

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pregnancy exercises, can be started in the second trimester of gestation. The recommendations for pregnancy exercise are mainly aimed at pregnant women with normal conditions, or in other words, there are no conditions that pose risks to both the mother and the fetus, for example bleeding, severe pre-eclampsia, heart disease, location abnormalities, narrow pelvis, etc. (Errol Norwitz & John O. Schorge, 2007).

The movements and exercises of pregnancy exercise not only benefit the mother, but also greatly affect the health of the baby she is carrying. When the baby begins to breathe on its own, oxygen will flow to it through the placenta, which is from the mother's bloodstream into the bloodstream of the carrying baby. Pregnancy exercise will increase the amount of oxygen in the blood throughout the mother's body and therefore the flow of oxygen to the baby through the placenta will also be smooth (Evariny, 2007).

Pregnant exercise exercises cannot be said to be perfect if the presentation is not arranged regularly, namely at least once a week starting at 24 weeks of gestation. By following regular and intensive pregnancy exercise, the woman will maintain the optimal health of her body and the fetus she is carrying (Evariny, 2007).

Based on the background of the problem and the preliminary studies that have been conducted, the researcher is interested in conducting research on " Analysis pregnancy exercise and type of childbirth in RSIA Mutiara Bunda Malang ".

METHODS

Researchers used a descriptive non-experimental research method with a prospective (cohord) approach. The independent variables of the study were pregnancy exercise routines and the dependent variable was the type of childbirth which was divided into 2 categories including sectio caesarean childbirth and vaginal childbirth. The sampling technique used in this study was simple random sampling. Meanwhile, the data analysis used the Chi square correlation test.

The type of data used is primary data from the attendance of pregnancy exercise and secondary data from maternal medical records at RSIA Mutiara Bunda Malang.In this research, to determine the relationship between pregnancy exercise and the type of childbirth by using this statistical test using the help of the SPSS for windows program.

Prior to conducting the study, researchers contracted a period of 2 - 3 months to maintain contact via telephone with the sample to determine the patient's type of childbirth. Then the researcher recorded the attendance of maternal exercise during pregnancy until childbirth. Researchers checked the patient's medical records to find out the diagnosis and history of childbirth by sectio caesarean

RESULT

From the research results obtained. From a total of 23 samples, there are 13 (57%) have a DIII / bachelor education. With a total of 14 samples (61%) as housewives, in the category of primiparous mothers as many as 15 people (65%).

Based on the characteristics of the research variables, 12 respondents (52%) did routine pregnancy exercise. There were 12 mothers who experienced vaginal childbirth (52%). Meanwhile, 11 mothers (48%) had a cesarean childbirth.

Type of Childbith		Type of Childbith						
Pregnancy Exercise		Normal	%	SC	%	Tot	%	р
Pregnancy Exercise	Routine	11	47,8	1	4,3	12	52,2	.000
	Doesn't routine	1	4,3	10	43,4	11	47,8	
Total		12		11		23	100	

Table 1. Cross Tabulation Pregnancy Exercise With Type of Childbirth

Based on the results of the table above, it can be seen that the respondents who participated in routine pregnancy exercise and the type of childbirth were normal were 11 people (47.8). Based on the results of data analysis using the chi square test, the value of p = 0,000 was obtained

Risk Estimate							
	Value	95% Confidence Interval					
	value	Lower	Upper				
For cohort Type of childbirth = Pervaginam	10.083	1.544	65.852				
For cohort Type of childbirth = SC	.092	.014	.604				
N of Valid Cases	23						

To determine the relationship between pregnancy exercise and the type of childbirth at RSIA Mutiara Bunda Malang, it was analyzed using the chi square statistical test with a cohort design using SPSS 21 for windows. By looking at the Asymp value. Sig <0.05, that is, with a value of 0.000, so there is a significant relationship between pregnancy exercise routines and the type of childbirth. Based on the cohort statistical test. If RR> 1 then it is a risk. With a value of 10,083, this means that people who do pregnancy exercise are at risk 10 times more likely to have vaginal childbirth than those who do not do pregnancy exercises.

DISCUSSION

Identification of pregnancy exercise performed by mothers at RSIA Mutiara Bunda Malang.

According to (Jannah, 2012) the implementation of pregnancy exercise at least once a week, a maximum of 3 times a week, in about 30-60 minutes. From the data from the results of this study, there were 12 respondents of pregnant women who participated in pregnancy exercise routinely. Meanwhile, 11 respondents did not regularly participate in pregnancy exercise. This pregnancy exercise is carried out 3 times a week for about 45 minutes in each meeting. With 15 respondents among them are mothers with primiparous.

Pregnancy exercise consists of 12 kinds of exercises performed at RSIA Mutiara Bunda Malang. Each exercise aims to master the breathing technique, it is hoped that the mother will get more oxygen, this exercise is done so that the mother is ready to face childbirth. Strengthen muscle elasticity, the goal is to prevent or to overcome complaints of pain in the lower abdomen and complaints of hemorrhoids. Reduce complaints, train pregnant posture so as to reduce complaints arising from changes in body shape Practicing relaxation, the relaxation process will be completed by doing the contractions and relaxation necessary to deal with tension or pain during labor. Avoiding difficulties, this pregnancy exercise aims to assist the childbirth process, so that the mother can give birth without difficulty and can keep the body fit and healthy. Strengthening the leg muscles, considering that the legs will support the mother's body weight which gets heavier over time with gestational age. Prevents varicose veins, which is to prevent segmental dilation of veins (veins), which is not uncommon in pregnant women. Push training, this exercise is specifically for dealing with the labor process by pushing properly the baby can come out smoothly and not be held out for a long time.

Identification of the type of childbirth for mothers who participate in pregnancy exercise at RSIA Mutiara Bunda Malang.

In this study, 11 respondents found 3 respondents who participated in pregnancy exercise and experienced childbirth by sectio caesarea with post date diagnosis. Meanwhile, 2 respondents experienced breech baby location, 1 person with oxytocin drip failure, 2 respondents with fetal fetal distress, 1 respondent with macrosomia, 1 latitude, 1 with CPD (Chepalo Pelvic Disoroportion).

Pregnant exercise that is pregnancy exercise is a form of exercise to strengthen and maintain elasticity of the muscles of the abdominal wall, ligaments, pelvic floor muscles that are associated with childbirth. In this case, pregnancy exercise is not an indicator that the patient can give birth normally. But basically it is to help smooth the labor process. Not infrequently there are unexpected indications that result in the mother giving birth by means of a Caesarean section.

The relationship between pregnancy exercise and the type of childbirth in pregnant women at RSIA Mutiara Bunda Malang

From the results of the study, as many as 12 respondents who participated in pregnancy exercise experienced vaginal deliveries. Based on the results of the chi square test, the value of p = 0.000 was obtained. Based on the results of data analysis using the chi square test, the value of p = 0.000 was obtained. Then the p value <0.05, which means that there is a relationship between pregnancy exercise and the incidence of the type of labor. Based on the results of the statistical risk estimate test with a value of 10.083, it means that pregnant exercise supports the occurrence of normal / vaginal childbirth. This means that there is a relationship between pregnancy exercise and the type of childbirth.

CONCLUSION

There is a relationship between pregnancy exercise and the incidence of the type of labor. Pregnancy exercise with the type of childbirth with a strong correlation. This means that people who do pregnancy exercise are at risk 10 times more likely to have vaginal deliveries than those who do not do pregnancy exercises. For further researchers, it is necessary to carry out further research by allocating a longer research time and a larger number of respondents with cluster random sampling. So that more accurate results can be obtained. For related institutions, considering that pregnancy exercise is quite beneficial, this pregnancy exercise program should be recommended to every pregnant woman with normal pregnancies, or to become part of ANC care. For pregnant women who cannot participate in pregnancy gymnastics during working hours, it is necessary to make a pregnancy exercise module. So they can do pregnancy exercises at home according to the desired time.

REFERENCES

Christian, M. dan Narulita Yusron. 2006. 1001 *Tentang Kehamilan : Perfect Edition*. TriExs Media, Bandung.

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Dewi Okta Kurniawati, Sugiarti dan Arimina Hartati Pontoh. 2014. http://www.jurnal.akbid grivahusada.ac.id. Jurnal Ibu Hamil Risiko Tinggi Berdasarkan Umur dan Paritas. (akses 20 Januari 2018). Iis Sumiyati. 2016. http:// iissumiyati.wordpress.com. Jurnal Perubahan Anatomi Fisiologi Trimester I II dan III. (akses 17 Januari 2018). Intan Yunaning Sayekti dan Sri Pirmaningroem. 2016. http://www.jurnal.akbid grivahusada.ac.id/files/vol2no1/Penelitian2.3.pdf. Jurnal Umur dan Paritas Ibu Hamil Terhadap Kunjungan Kehamilan Pertama. (akses 17 Januari 2018). Intan Yunaning Sayekti dan Sri Pirmaningroem. 2016. http://www.jurnal.akbid griyahusada.ac.id/files/vol2no1/Penelitian2.3.pdf. Jurnal Umur dan Paritas Ibu Hamil Terhadap Kunjungan Kehamilan Pertama. (akses 17 Januari 2018). Kissanti, Annia.2007. 9 Bulan yang penuh Keajaiban, Araska, Depok. Luluk Susiloningtyas. 2013. http:// google scholer. Jurnal Hubungan Senam Hamil Dengan Kelancaran Proses Persalinan Kala II Pada Primigravida (akses 11 November 2017). Manuaba, Ida Bagus Gede. Pengantar Kuliah Obstetri. 2007. Jakarta : Buku Kedokteran EGC. Manuaba. 2009. Memahami Kesehatan Reproduksi Wanita. Jakarta : EGC. Maryunani. 2014. Senam Hamil, Senam Nifas dan Terapi Musik. Jakarta : CV Trans Info Media Maulana, Mirza. 2009. Tanya Jawab Lengkap dan praktis Seputar Reproduksi, Kehamilan, dan Merawat Anak Secara Medis dan Psikologis. Tunas Publishing, Jogjakarta. Nirwana. 2011. Kapita Selekta Kehamilan. Yogyakarta : Nuha Medika Notoatmojo, Soekidjo. 2010. Metodologi Penelitian Kesehatan. Ed. Rev. Jakarta : Rineka Cipta. Nurlaila Ramadhan. 2012. http://simtakp.uui.ac.id/docjurnal/JULIA ANDAYANIjurnal julia.pdf. Jurnal Gambaran Pelatihan Asuhan Persalinan Normal Terhadap Penerapan Langkah – Langkah Pertolongan Persalinan Oleh Bidan Puskesmas Kembang Tanjong Kabupaten Pidie. (akses 17 Januari 2018). Nurotun Eniyah, Machmudah, Pawestri. 2014. Jurnal Keperawatan Maternitas, http:// Senam Hamil Mempercepat Proses persalinan Kala II. Pdf (akses 9 November 2017). Nursalam. 2008 Konsep Dan Penerapan Metodologi Ilmu Penelitian Ilmu Keperawatan, Pedoman Skripsi, Tesis Dan Instrumen Keperawatan. PT. Salemba Medika. Jakarta Poedji Rochyati, Dr, dr, SpOG(K), Skrining Antenatal Pada Ibu Hamil, Pengenalan Faktor Risiko Deteksi Dini Ibu Hamil Risiko Tinggi, Cetakan-1, Airlangga University Press, Surabaya, 2003, hal 27-128. Prasetyono, Dwi Sunar. 2008. Bimbingan Persiapan dan Perawatan Kehamilan. Diva press, Jogjakarta. Rose Nurhudhariani, Siti Nur Umariyah Febriyanti, Vita Triani Adi Putri. 2015. http:// google scholer. Pengaruh Pelatihan Senam Hamil di Wilayah Kerja Puskesmas Kedungmundu Semarang. Varney, H. (2008). Buku Ajar Asuhan Kebidanan. Ed.4. Jakarta :EGC. Varney. 2007. Buku Ajar Asuhan Kebidanan. Edisi 4. Jakarta : EGC Widianti. 2013. Senam Kesehatan Dilengkapi dengan Contoh Gambar. Yogyakarta : Nuha Medika Yuliarti. 2010. Panduan Lengkap Olahraga Bagi Wanita Hamil dan Menyusui. Yogyakarta : CV Andi Offset