

Conference Paper

The Impact of Mixed Methods on Fetal Position Changes in Breech Pregnancy in Tegal Regency Independent Midwifery Practitioner

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Abstract

Breech births occur in 1 out of 25 full-term births. Although this figure is not considered high, breech births are very risky. Generally, the variation given to change the position of a fetus in a breech position is by doing a knee chest position. In addition, there is also hypnobirthing, one of the techniques of autohypnosis (self-hypnosis), which can help turn the position of the fetus in a breech position. The purpose of this study is to find out the impact of mixed methods and knee chest position on the position of the fetus in breech pregnancy. This study uses quasi experiment method with an approach of control group time series design. The sampling technique uses a quota sampling of 30 pregnant women with breech pregnancy in Independent Midwifery Practitioner of Tegal Regency as the subject research. In this study, the number of samples is set to 30, which is divided into 2 groups; 15 subjects as a treatment group with Hypnobirthing and Knee chest methods, and 15 subjects as a control group with Knee chest position. The measuring instruments are the checklist of Hypnobirthing method performed by R midwife and the observation sheet of Leopold's maneuver. Variables in this study are the mixed methods as the independent variable and the changes of the fetal position in breech pregnancies as the dependent variable. Based on the results of this study, 15 women with breech pregnancy (100%) from the treatment group experienced a change in fetal position; from breech to vertex position, and 6 women with breech pregnancy (40%) from the control group did not experience any changes. The result of Fisher's Exact Test analysis shows that the value of p value = 0.017 ($p < 0.05$). This illustrates the significant impacts of the mixed methods on the fetal position changes in breech pregnancy in Tegal Regency Independent Midwifery Practitioner.

Keywords: Mixed Methods, Hypnobirthing, Knee chest, Breech

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1. INTRODUCTION

According to Basic Health Research “(Riskesdas)” conducted in 2007 by the Ministry of Health of the Republic of Indonesia, there are various causes of death for infants in Indonesia. The causes of early neonatal mortality (0-6 days) are asphyxia (3%), prematurity (34%), and sepsis (12%). Meanwhile, the causes of late neonatal mortality (7-28 days) are sepsis (20.5%), congenital abnormalities (19%), pneumonia (17%), respiratory distress syndrome/RDS (14%), and prematurity (14%) (IDAI, 2014).

Breech pregnancies can cause impaired growth and development of infants. Complications caused by breech births in children include mild to severe asphyxia. The Health Department of Tegal Regency recorded that there were 91 women with breech pregnancy from January to October 2014. In addition, breech presentation happens in 3-4% of full-term births. In premature labor, however, the chances for the baby to be in a breech position are higher. At the gestational age of 28 weeks, the chance of a baby to be in a breech position is 25%. Approaching 40 weeks’ gestation, that chances will go down along with the age of the pregnancy [3].

A wide variety of positions to change the layout of a baby among others making the position of prostration (knee chest position). When this position is carried out by both regular and most likely a breech baby can return to its normal position (Adriana, 2009).

Breech births occur in 1 out of 25 full-term births. This figure is not high, because in general, the fetus will rotate and put its head on the birth canal several weeks before birth. If not, the fetus can still be born normally, and this is called breech births. However, breech births are very risky [3].

Hypnobirthing is one of the techniques of autohypnosis (self-hypnosis), namely a natural effort in instilling positive intentions/suggestion to the soul or the subconscious mind during pregnancy and childbirth preparation. The base of Hypnobirthing is relaxation. Relaxation is a condition where both body and soul are at ease (mind, will, and emotions). One of the benefits of Hypnobirthing method during pregnancy is for the baby to be untangled from a nuchal cord, and it can even change the position of a fetus from breech to normal (the back of the head location) [11].

Therefore, the writer want to discover how the mixed methods and knee chest position can change the position of the fetus in breech pregnancy.

2. METHODS

This research uses quasi experimental design research with the approach of Control Group Time Series design to know the impact of mixed methods, namely Hypnobirthing and the knee chest position, on changes of the fetus position in breech pregnancies. The research was conducted at the Independent Midwifery Practitioner of Tegal Regency from December 2014 until June 2015.

The population of this research is every expectant mother with breech pregnancy and gestational age between 28 to 36 weeks who applied Hypnobirthing and knee chest methods from 15 March to 24 June 2015. As many as 30 pregnant women were selected by using the sampling technique called quota sampling. The data collected is primary data. Mixed methods are a joint of two methods; Hypnobirthing and knee chest. Hypnobirthing is based on relaxation without using too much power in moving the body and by concentrating the mind to positive things with a normal measurement scale (do Hypnobirthing and do not do Hypnobirthing), whereas the Knee Chest position is a prone position in which the individual rests on the knees and upper part of the chest, with normal measurement scale (do a Knee Chest position and do not do Knee Chest position). Changes in fetal position is the longitudinal lie of the breech fetus, where the head of the fetus is located up top or on the fundus uteri while the bottom is located above symphysis, with the normal measurement scale (breech position and location of the head position).

The data was collected after the procedure was completed, which permitted the researchers to come to the place of the research to explain the meaning and purpose of the research. The researchers classified the data from the medical records and obtained the total number of women with breech pregnancy who applied the mixed methods and the knee chest position. Then, women with breech pregnancy who fit the inclusion and exclusion criteria were chosen to be the respondents of this research.

The research consisted of three stages; namely pretest, treatment, and posttest. Pretest phase was conducted on the treatment group whose respondents have experienced pregnancy and breech prior to the appliance of mixed methods. The same was conducted on the control group, where the respondents have also experienced pregnancy and breech prior to the appliance of knee chest position. At the treatment phase, the respondents of the treatment group were guided to apply the mixed methods, while the respondents of the control group were guided to do a knee chest position. Posttest phase was when the researchers observed the changes in fetal position by

doing leopold maneuver. The time of granting from pretest to treatment phase was 3 to 7 days, and the time from treatment to posttest phase was 1-7 weeks.

Hypnobirthing was carried out by experts. The method of Hypnobirthing to alter the fetal position in breech pregnancies is in accordance with the theory of Kuswandi (2013); a five-stage Hypnobirthing. Before applying the treatment, the respondents first were given material about the introduction of pregnancy, childbirth and Hypnobirthing. Stages of Hypnobirthing are relaxing, showing ideomotor responses, cultivating positive suggestions in the subconscious, communicating with the fetus, and establishing the importance of the husband's support during the pregnancy. This therapy is limited to the maximum of 3 times to find out if the fetal position was back to its normal position or not.

Instruments used to measure the implementation of the Hypnobirthing in accordance with the theory of Lani (2013) were performed by midwife R who has been certified to perform Hypnobirthing. Moreover, the measuring instrument of the changes in fetal position before and after Hypnobirthing therapy is the observation sheet which contains the Leopold's maneuver guide from the Central Java Health Department. This was carried out by the accompanying midwives in Tegal Regency Independent Midwifery Practitioner from December 2014 to June 2015.

The analysis was conducted using SPSS 16.0 application. Univariate analysis is used to find out the proportion of each variable, frequency distribution of various variables examined, both the dependent or independent variables, so that the description of each variable can be known, whereas the bivariat analysis is used to know whether there is any impact between independent and dependent variables and is conducted by using the Fisher method with the level of significance ($\alpha = \text{alpha}$) of 0.05.

3. RESULTS

TABLE 1: Frequency Distribution of Gravida Rosponden Status.

The Amount Of Pregnancy	Total	Percentage
Primigravida	16	53.3 %
Multigravida	13	46.7 %
Total	30	100 %

Source: Primary data 2015

4. DISCUSSIONS

TABLE 2: Cross Tabulation: The Impact of the Mix Methods on Fetal Position Changes in Breech Pregnancies.

		Changes of Fetal Position After Treatment		Total
		Breech	Vertex	
Treatment	Mix Methods	15	0	15
	Knee Chest	9	6	15
	Total	24	6	30

Source: Processed Data

TABLE 3: Hypothesis Test Results: The Impact of Mix Methods on Fetal Position Changes in Breech Pregnancies.

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.500 ^a	1	.006		
Continuity Correction ^b	5.208	1	.022		
Likelihood Ratio	9.834	1	.002		
Fisher's Exact Test				.017	.008
Linear-by-Linear Association	7.250	1	.007		
N of Valid Cases ^b	30				

Source: Processed Data
 a. 2 cells (50,0%) have expected count less than 5. The minimum expected count is 3,00.
 b. Computed only for a 2x2 table

4.1. Frequency Distribution of Gravida Rosponden Status

The respondents in this research are women with breech pregnancies, and out of 30 pregnant women with breech pregnancy, the amount of expectant mothers with a Primigravida and a Multigravida is as many as 16 respondents (53.3%) and 13 respondents (46.7%) respectively in their second, third, or fourth pregnancy.

According to Karno, there are two factors of breech position during the gestational period; the fetus and the mother herself (Andriana, 2008). The result of a research conducted by Palupi (2014) with the title "The Differences Between Primigravida and Multigravida Mothers' Anxiety Level in Facing Phase I Labor at Ngudi Saras Jaten Karanganyar Maternity Hospital" shows that based on the criteria of anxiety level, the average value of anxiety of the Primigravida group is 250.50; categorized as experiencing moderate anxiety, whereas the average value of anxiety of the Multigravida group is 176.25; categorized as experiencing mild anxiety. The result of the research is in accordance with the opinion of Kaplan and Sadock (1998) who state that anxiety can occur due to new experiences, such as pregnancy, child birth or giving birth. This means that a group of mothers who experience pregnancy for the first time (primigravida) and have a higher anxiety level is natural and normal, while

mothers who undergo pregnancy more than once (multigravida) and still experience mild anxiety are also reasonable or normal.

4.2. The Impact of the Mix Methods on Fetal Position Changes in Breech Pregnancies

Table 4.2 shows that 15 respondents (62.5%) experienced changes in fetal position after applying mix methods. Hypnobirthing helps mothers relax. Under the influence of hypnosis, the mothers are led through a directed imagination in order to enter a phase of deep relaxation. They are given a suggestion by imagining their babies rotating easily until the rotation is complete, and the baby is in a good vertex position prior to labor. The mothers are assisted to imagine that their wombs become flexible and supple so that the baby gets enough room to rotate [13].

The result of table 4.2 shows that 6 of the respondents did not experience any changes in fetal position after doing knee chest method.

This is likely to occur due to maternal anxiety. Generally, the mothers are unaware of the fetuses rotation, especially if it takes place while the mother asleep. However, this rotation can be stalled if the mother experiences fear or tense, or if there are stressful situations in her life. Due to a number of reasons, most mothers experience fear or tense, so the uterus remains taut, and the baby cannot complete its rotation. Sometimes, the baby's rotation is not perfect so that the shoulder, arm, or one or two feet are at the bottom of the cervix [13].

Knee chest position is the at position where the stomach seems like hanging down. This method should be applied routinely, starting from 32 to 35 weeks of pregnancy. This method should be done 3 times a day for 10-15 minutes with an empty stomach and when the baby is active. Moreover, this method can also be done by using a leaning board. When this position is done properly and regularly, most likely a breech baby can return to its normal position (Aprillia, 2013).

The results of statistical tests in this research show that there are impacts of mix methods on the fetal position changes in breech pregnancies with the value of significance (p value) of 0.017 ($p < 0.05$). The majority of the respondents experienced changes from the breech position to a normal position after performing mix methods (100%).

This is in accordance with the statement of Kuswandi (2014) and Mongan (2007) who say that hypnobirthing method can change the position of a breech fetus. Rotation of the fetal head will be stalled if the mother experienced fear or strained which can

result in the uterus remains tense and the baby gets less space for turning. Positive suggestion by imagining and communicating with the baby in order to rotate the fetal body to its normal position can help the baby turn into the vertex position.

5. SUMMARY AND ADVICE

Based on the research that has been conducted, it can be concluded that as many as 15 pregnant women with breech pregnancies in Tegal Regency Independent Midwifery Practitioner (100%) who applied Hypnobirthing method and the knee chest method experienced changes in the position of the fetal head. In addition, as many as 9 pregnant women with breech pregnancies in Tegal Regency Independent Midwifery Practitioner who applied the Knee chest method experienced changes in the position of the fetal head, while 6 pregnant women with breech pregnancy in Tegal Regency Independent Midwifery Practitioner did not experience changes in the position of the fetal head. Based on statistical tests, the method of Hypnobirthing has significant impacts on fetal position of breech pregnancies in Tegal Regency Independent Midwifery Practitioner. This is evidenced by the results of the test value of the significance of Fisher (p) $p = 0.017$ ($p < 0.05$).

The summary of this research is provided as an advice for pregnant women, especially who experience breech pregnancy. Hypnobirthing is an alternative method of handling breech pregnancies. Moreover, health workers, especially midwives, should be facilitated to study Hypnobirthing in handling breech pregnancy. As well as for further research, the authors hope to examine further research on other variables as the control group, such as water birth as the sample, and data collection method that is different from this research.

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