The Effect Of Yoga Towards Birth Delivery Output

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Abstract: Breast Pregnancy is a stage of human life that is very influential on labor. Comfortable childbirth and the results of a good labor process are the goals of the mother and childbirth helper. Therefore the mother must be prepared during pregnancy so that complications during pregnancy and childbirth can be prevented. The purpose of this study was to analyze the effect of yoga in pregnancy on labor output, including: time of delivery, comfort in labor, fetal well-being including: infant fitness, and weight of newborns and milk production. Research uses a pre-experimental design with a static group comparison design. The sample of this study was 32 of the mothers who gave birth to TM III in the BPM area of Patrang Jember Indonesia. The sampling technique in this study uses simple random sampling. The results of the study showed that there were significant differences in birthweigth, length of delivery and pain scale between mothers who do yoga and do not. P value < 0.05.

Index Terms: yoga, birth, delivery

1 INTRODUCTION

Normal childbirth is a process that is always awaited by pregnant women. Successful childbirth is the goal of all parts related to labor both mothers, families and health workers. The main thing that affects the type of labor is the physical, psychological, psychosocial and spiritual conditions of the mother. The labor process does not always take place normally, namely vaginal discharge. Besides that vaginal delivery does not always produce adequate labor output, this can be seen from the mother's condition and the baby's condition which is reflected in the incidence of labor complications including: bleeding (28%), preeclampsia (24%), infection (11%), parturition long time (5%), puerperium compilation (8%) post blues partum, failure in breastfeeding. (MOH RI, 2008). The results of labor from the point of view of the infant can be seen from AKB (32 per 1000 live births) and morbidity of newborns. Based on the profile of the Jember District Health Office 10% of babies born in poor condition due to asphyxia 40%, prematus 30% and LBW 20% (Ka.Sie.KIA 2015). The condition of the mother and the readiness of the mother with her pregnancy greatly affect the outcome of labor. In general, mothers must be prepared physically, psychologically, psychosocially and spiritually. Problems in one human aspect can affect other aspects. Maternal psychological conditions such as stress in pregnant women is one of the psychological conditions that can affect the mother's physical and influence the birth process and the baby born (Dounstal 2010). Stress on the mother has an impact on the physical, because under stress conditions the body secretes more cortisol. Cortisol causes vasoconstriction of the blood vessels so that it affects the utero placental circulation. Besides that it also affects hormonal balance. Pregnancy TM III is a waiting and alert. In this period waiting for labor and wsapada to the conditions and the possibility of the baby so that makes the mother afraid of anxiety. These conditions can affect the mother's physical and emotional condition during pregnancy as well as to the fetus or continue with maternity. Stress can affect the adrenal pituitary hypothalamus, which can lead to increased blood pressure, increased blood sugar, and infectious diseases.

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These conditions also have an impact on childbirth such as adaptation to labor pain so as to affect the occurrence of prolonged labor, postpartum hemorrhage, low birth weight, and emotional disturbances such as postpartum blouse, postpartum depression. Complications during pregnancy, childbirth and childbirth can be prevented by imposition of pregnancy during pregnancy. Many treatments can be carried out during pregnancy but most are only fragmented in one human aspect, while the human body is a system. The problem of one human aspect influences another aspect, so it needs an holistic impact approach. Yoga is a holistic approach with a focus on approaches to physical (asanas), breathing (pranayama), meditation and relaxation (Yadav and Kumar 2015). Yoga in pregnancy is a formulation in preparing labor by physically preparing the mother and maximizing the maximum potential of the mother (P OSN er, 2010). Mind / Mind that is dimenage to always think positively does not only have an impact on pregnancy but also has an impact on labor and the post partum period. Meditation and relaxation make the mind comfortable, calm and peaceful, in this condition the brain waves in alpha conditions so that the body is very suggestive of the affirmations given. Research (Beddoe, at all, 2009) found that yoga can reduce physical pain, stress and anxiety. Yoga also has an impact on improving circulation. Yoga in pregnancy is not much done by health workers or hospitals that apply due to lack of related research. While mothers and babies have the right to receive safe and comfortable treatment based on updated research (Neumann 2011).

METHODS

The instruments used in this study include: yoga facilities and measurement tools for labor delivery. Yoga facilities include: mattresses, aroma therapies, audio visual / relaxation music and yoga vcd). Instrument for assessing labor output is: watches, measuring cups, scales, numerical pain scales, and observation sheets that are used to record the results of data collection about labor, length of labor, second degree of pain, infant BBL, colostrum production.

Location and Time of Research

This research was conducted by BPM in Bintoro Urban Village, Patrang Sub- district, Jember Regency. The research was conducted in April- October 2016

Research Procedure

Research procedures include: Procedure for treatment and data collection procedures. Procedures include:

1. Conduct ANC examination before yoga.

2. Providing yoga treatment for 1 hour (1 x a week).
3. After yoga, check the vital signs of the mother (Tensi, Pulse, RR) and fetal heart rate.

Delivery Data / Output Collection Procedure:
Collecting labor output data is carried out starting with a definite sign of labor until the baby is born, including: Labor process, Old Time I, Pain II, Birthweight, Colostrum production

Data Analysis
In this study, after the data is collected, analyzed the data emudian univariable and diana k l is is the two-sample t test, is used to test the hypothesis significant comparative data in the form of two samples for interval (Arikunto 2002). While for data with ordinal scale, do the Mann Whitney statistical test. The "t" test / average two difference test is done to test the hypothesis. The hypothesis to be tested is as follows:

Null hypothesis ($H_{0)}$: there is no significant effect yoga pregnancy against labor output.

Working Hypothesis (H_1): there is a significant influence between pregnancy yoga and labor output.

In this study, the calculation will use a computer program that is SPSS version 16, so that the criteria for the decision to test the difference between two average is to look at the significant value, if the significance value> 0.05 then $_{H0}$ is received and H $_1$ rejected, otherwise if the significance value < 0.05 then H $_{0 \text{ is}}$ rejected and H $_{1 \text{ is}}$ accepted.

Table 4.1 *Table of mean mean times I*

GIVING YOGA IN PREGNANT MOTHER		N	Mean	Std. Deviation	Std. Mean error
OLD KALA I	GIVEN YOGA	11	11.27	2,284	.689
	NOT GIVEN YOGA	11	13.82	2,359	.711

Results
The Old Difference of Kala I between mothers who do yoga by not doing yoga. After the t test statistic test with a significant level of 5% (0.05 obtained sig. (2-sided) value of 0.018. It turns out that α = 0.05 is greater than the sig. (2-sided) then Ha is accepted and H0 is rejected. This means that there is a long time difference between mothers who do yoga and those who do not do yoga, the conclusion is that yoga shortens the first time of labor. Weight loss comes from babies of mothers who don't do yoga After the t test statistical test with a significant level of 5% (0.05 obtained sig. (2-sided) value of 0.00. It turns out that α = 0.05 is greater than the sig. (2-sided) then Ha is accepted and H0 is rejected. This means that there is a long time difference between mothers who do yoga and those who do not do yoga. In conclusion, yoga shortens the first time of delivery, n. Body weight is born to babies from mothers who do yoga After the t test statistic test with a significant level of 5% (0.05 obtained sig. (2-sided) value of 0.025. It turns out that α = 0.05 is greater than the sig. (2-sided) then Ha is accepted and H0 is rejected., meaning that there is a difference babies birthweight from mothers who do yoga with those who do not do yoga.In conclusion, yoga increases Birthweight of babies.

Table 4.2 *Table of mean mean times II*

GIVING YOGA IN PREGNANT MOTHER		N	Mean	Std. Deviation	Std. Mean error
OLD KALA II	GIVEN YOGA	11	69.55	14,045	4,235
	NOT GIVEN YOGA	11	94.55	9,606	2,896

1.1.4 Labor pain scale in mothers who do not do yoga
After the t test statistic test with a significant level of 5% (0.05 obtained sig. (2-sided) value of 0.001, it turns out that α = 0.05 is greater than the sig. (2-sided) then Ha is accepted and H0 is rejected This means that there is a difference in Pain Scale II between mothers who do yoga and those who do not do yoga. In conclusion, yoga decreases the scale of labor pain.

Table 4.4 *Table of mean Pain Scale between mothers who Do Yoga and those who do not do yoga*

GIVING YOGA IN PREGNANT MOTHER		N	Mean	Std. Deviation	Std. Mean error
KALA II PAIN SCALE	GIVEN YOGA	1 1	6.82	1,537	.464
	NOT GIVEN YOGA	11	8.91	.944	.285

DISCUSSION

1.1.5 The long time difference in labor in mothers who do not do yoga with mothers who do yoga.
The first stage is one of the delivery periods which is marked by the start of the opening of the cervix and the blood slem until the complete opening (10 cm). Based on the results of the study found the results of mothers who did yoga on average at the time of I was 11.27 hours. While the average time period I for mothers who do not do yoga is 13.82 hours. Mothers who do yoga first time are shorter in time than those who don't do yoga. This can happen because pregnancy yoga consists of stages of pranayama, asanas and relaxation and meditation techniques. Of all these stages, it provides enormous benefits for the condition of the mother and fetus. Factors that influence the length of labor are physical factors, psychological factors. Physically mothers who do yoga during pregnancy the blood circulation system, respiratory system, muscles and joints that play a role in elastic labor. This condition is very supportive of physiological labor and labor and progress

quickly without any inhibiting factors such as cortisol secretion. according to research results and feelings of fear or tension in the mother. The Pranayama technique when yoga is repeated by the mother is carried out during labor so the mother relaxes. Relaxing the conditions experienced by the mother affect the intake of sufficient oxygen and secretion of ATP for the process of uterine contractions so that the opening takes place quickly. Adequate energy in the body is needed for uterine contractions. Adequate contraction or power factor in labor is a very important factor in the process of opening and thinning of the cervix. Yoga is not done just at the beginning of yoga, but is maintained throughout the yoga process until the time of delivery and labor. Asanas with movements focused on the pelvic and abdominal areas play a role in increasing circulation and elasticity of these organs. Smooth circulation, elastic and elastic joints allow simultaneous stretching and smoothing so that it does not cause pain and there is no resistance to contraction and the lowest part of the fetus falls. Yoga can shorten the first time of delivery according to Chuntharapat, Petpichetchian, & Hatthakit (2008). The same study also found that yoga has an impact on improving the duration of labor (Curtis, Weinrib, and Katz 2012)

1.1.6 Differences per copy Lama's second stage between mothers who do yoga with those who do not do yoga. The results showed that there are differences in llamas when mothers who do yoga with mothers who do not do yoga according to the results of the t test with sig. (2-sided) value of 0,000 (0,000 <0, 05). Time II in mothers who do yoga is shorter than those who do not do yoga. This can be seen from the average second time period for mothers who do yoga is 69.55 minutes according to the results of the study (Schiessl 2004), while for mothers who do not do yoga is 94.55 minutes. Second stage is the period from opening to complete until the baby is born. During this period the process of birth of the baby is affected by uterine contractions and the urge to receive the mother. The success of the mother in facing the period is influenced by the mother's ability to manage pain and discomfort due to the suppression of the lowest part of the fetus. Mothers who have been doing yoga regularly, especially in relaxation techniques and have been taught to suggest themselves and have been suggesting independently from their pregnancy until the birth process. Mother's preparation to face affects the success of the mother in labor. Inu, who is physically and psychologically prepared, must be prepared since pregnancy. Yoga pregnancy is one way to prepare the mother's physical and mental. Mothers who do pregnancy yoga have prepared themselves and accepted the labor process as a period that must be followed with all the consequences, one of which is facing pain. Since pregnancy by practicing yoga, the mother has applied a positive coping mechanism with relaxation and imagination techniques. At the time the opening is complete and there is an urge to give a mother imagining things that cheer together with the baby as one of the mothers does so the pain decreases and the labor process progresses quickly. Mothers who do not do yoga acceptance of the inconvenience of the second stage are considered as something that is disturbing so that they are negatively respected by the body. These negative responses increase the secretion of hormones inhibiting the secretion of oxytocin and endorphins. This condition causes less adequate uterine contractions so that the time needed to give birth to a baby or second stage is longer.

1.1.7 Differences in baby weight between mothers who do yoga with those who do not do yoga

The results of the study showed that there was a significant difference between birth weight of babies born to mothers who did pregnancy yoga with those who did not do yoga, the results of the t-test found p <0.05 or 0025 <, 0.05. The conclusion of these results was the birth weight of the baby from the mother those who do yoga are heavier than BB babies born born to mothers who do not do yoga. These results are consistent with research (Narendran 2005) which found that pregnancy yoga can increase the birth weight of newborns. Pregnancy yoga improves the physical and psychological condition of the baby (Buffart et al. 2012). Healthy physical conditions with yoga can be found in increasing the work of the heart and circulation of the body with its asanas movement. Asanas in yoga improves the circulation of the mother's body including utero placental circulation. A good utero pasenta circulation affects the availability of oxygen and nutrients. Oxygen and nutrients that can adequately support intra uterine growth. The baby's birth weight is determined by the condition of the mother and the availability of maternal nutrition and utero placental circulation. Yoga in pregnancy can facilitate this. Pregnant women who do yoga automatically the physical condition of the mother becomes excellent. Research (Abbas Rakhshani 2015) found that there was an improvement in utero placental circulation and fetal growth in mothers who did yoga. The results of this study found the average birth weight of babies born to mothers who did yoga was 3327 grams while in mothers who did not do yoga BB was 2999 grams. Psychological conditions of the mother also affect the growth of the fetus in the uterus. Stress conditions affect the secretion of hormones that play a role in the growth of the baby. Hormones secreted during stressful bodies are cortisol and ephineprin. Cortisol has vasoconstrictive vascular effects so that the utero placental circulation is inadequate. Relaxation techniques and meditation on pregnancy yoga reduce the incidence of stress. Whereas mothers who do not do yoga have the opportunity to experience stress during pregnancy so that it affects the growth of the fetus. (Abbasi, Moazami, and Bijeh 2014) found that in TM III mothers embraced stress. Intra uterine growth is also affected by the secretion of growth hormone. Growth hormone is a growth hormone that can affect growth including intra uterine growth. Yoga pregnancy makes the body relaxed and comfortable so that it stimulates the growth of growth hormones, like the results of research (Chatterjee and Mondal 2014) Differences in Pain Scale when 2 between mothers who do yoga with those who do not do yoga This conclusions were that pregnancy yoga reduced the scale of labor in the second stage of p <0.05 or 0.001 <0.05. The second stage of labor was related to suppression of the lowest part of the fetus. With yoga regularly, the mother has been trained in managing pain. Relaxation techniques in yoga make mothers already trained to calm themselves so that when the mother experiences an uncomfortable condition automatically the mother performs relaxation techniques. Meditation that is usually done by every mother to end yoga, is useful in the process of self-acceptance of all conditions experienced by the mother. Acceptance of feelings of discomfort or pain during complete opening to mothers who do yoga. In yoga, mothers are also taught to make suggestions and make affirmations. Yoga can provide

short-term effects in the form of hypothalamic pathway modulation in the form of active coping mechanisms and long-term effects in the form of passive coping (Balakrishnan Vandana, 1 Kannan Vaidyanathan, 2 Lakshmiy Ammal Saraswathy, 1 Karimassery Ramaiyer Sundaram 2011). Yoga through an immunologic modulation mechanism can reduce the stress response which results in a decrease in the imflamation response where one of them is cortisol.

CONCLUSION

Old's first stage per copy between mothers who do yoga with those who do not do yoga are different (p <0.05). Oni happens because yoga does not only affect physical and psychological conditions. Flexibility of the muscles and ligaments and the readiness of the mother allows an unobstructed opening process for uterine contractions. Per copy Lama's second stage between mothers who do yoga and those who do not do yoga, there is a difference, that is, the length of stage II for mothers who do yoga is shorter than those who do not do yoga (0.00 <0.05). Each stage of yoga is intended to prepare for the delivery process, especially at the second stage. Relaxation techniques and mother's ability to suggest themselves play a role in shortening stage II. Baby's birth weight mothers who do not do yoga with those who do not do yoga have significant differences (p <0.05 or 0.00 <0.05). The relaxed and comfortable condition of the mother inhibits cortisol secretion and increases secretion Growth hormones and utero placental circulation can facilitate fetal growth. The second scale of pain in women who did not do yoga with those who did not do yoga had significant differences (p <0.05 or 0.00 <0.05). The ability of the mother to manage pain through stagean stageam, relaxation and meditation stimulates the secretion of endorphins that function like morphine so that the mother can adapt to labor pain at the second stage.

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