Fetal Outcomes on The Maternity Do Prenatal Gentle Yoga in Mataram

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Abstract

Pregnancy and delivery in a mother is a process that natural. Natural process this to run smoothly needed physical activity. Yoga is physical activity have the effect of the physical individuals do yoga and helping pregnant women to reach balance lives and also prompted a good physical the baby (fauziah l.2016). Research aims to understand on the fetal outcome on the maternity do prenatal gentle yoga in mataram. A method of this research is descriptive and the total sample in this research as many as 29 respondents to technique the sample used is the total the sampling method of as well as data taken using a questionnaire and a record of observation. The results showed that the fetal outcome in as a weight of a newborn infant are normal 29 respondents (as many as 100 %), the body length of a newborn infant all are normal respondents (as many as 27 % 93,1), Asphyxia in newborn infants are categorized not asphyxia as many as 26 respondents (89.7 %), the temperature of the body of the newborn categorized as normal as many as 29 respondents (100 %), hemoglobin levels of a newborn infant not anemia are categorized as many as 22 respondents (75,9 %). Conclusions from the results of research obtained almost all fetal outcome in a new baby seem normal. Are expected to carry out research komparasi to long duration gymnastic yoga for pregnant to see significant impact on a new baby born and the condition of pregnant mothers during pregnant.

Keywords: fetal outcome, prenatal gentle yoga, maternity

Introduction

Pregnancy and childbirth in a mother is a natural process. This natural process in order to run smoothly requires physical activity such as pregnancy exercise. This is done so that pregnancy takes place in excellent health conditions so that diseases during pregnancy and childbirth can be prevented or reduced (Manuaba, 2010).

The infant mortality rate is one indicator that describes the degree of public health. Factors that influence infant mortality include the level of knowledge/education of both parents, age at first marriage,
consumption patterns, healthy living behavior, socio-economic conditions, customs, environmental hygiene and health services. Based on Indonesia's population and demographic survey data, the National Infant Mortality Rate (IMR) is 34 per 1,000 live births (IDHS, 2017).

The number of infant mortality cases in Mataram City in 2016 was recorded as 34 cases. The following is the distribution of infant mortality in 2016 and 2017 based on Puskesmas in Mataram City: In 2017 the highest number of cases were in the Ampenan and Tanjung Karang Health Centers, which were 6 cases. Meanwhile, the proportion of infant mortality cases by age and cause of infant death in Mataram City in 2017 infant mortality cases (aged 0-11 months) were very prone to occur in infants aged 0-28 days (neonatal).

This is indicated by as many as 30 cases (88.24%) of infant deaths occurred in the neonate period (infants aged 0-28 days). The causes of infant mortality cases were mostly caused by low birth weight (33.34%) in 10 cases and asphyxia (23.34%) in 7 cases (Mataram Health Office, 2017). Based on the 2017 Tanjung Karang Health Center work area data report, the coverage of K1 was 1328 (100%) and K4 was 1328 (95.03%), September-December 2018 data for 121 pregnant women and 29 pregnant women who participated in pregnancy exercise. (PWS KIA Tanjung Karang Health Center, 2018).

Yoga is a physical activity that affects the physicality of individuals who do yoga and helps pregnant women to achieve mental balance and also has a good impact on the baby's physical (Fauziah L. 2016). According to Dewi and Novita's research, pregnant women who do prenatal yoga and exercise during pregnancy have a significant effect on the baby's physique. And based on the results of the study, it was also revealed that prenatal yoga activities had a higher influence relationship value than mothers who did not do prenatal yoga.

Based on the results of previous studies which showed significant results with the following results: Based on the results of these statistical tests, it can be seen that the total score of anxiety levels related to pregnancy was obtained by the Asymp value. Sig = 0.109 which is greater than the significance level = 0.05 then Ho is accepted (Fauziah L., 2016).
In Indonesia, there are exercises intended for pregnant women, one of which is known as prenatal yoga, prenatal yoga is a modification of basic yoga exercises adapted to the movements of pregnant women. Yoga is a body, mind, and mental exercise that really helps pregnant women in flexing their joints and calming their minds, especially for pregnant women in the second and third trimesters. The movements in prenatal yoga are carried out at a slower tempo and adjust to the pregnant woman's space capacity.

Prenatal yoga has five ways namely physical yoga practice, breathing (pranayama), positions (young), meditation, and deep relaxation that can be used to benefit during pregnancy so that it can help smooth pregnancy and birth naturally and help ensure good health baby. of elements of relaxation and meditation. Yoga during pregnancy can help women focus on the labor process, be prepared to deal with pain and turn stress and anxiety into energy (Sun, et al, 2010).

Doing yoga exercises can reduce maternal and infant mortality. In general, yoga has many benefits, both physically and mentally. The benefits can also be felt by the baby and the mother who accompanies him (Tina Maladi, 2013).

From the description above, the general purpose of this study was to determine the fetal outcome of mothers who gave birth gently prenatally in Mataram.

Method

The research design used is descriptive. This research was carried out in 2019. The variable in this study was a single variable, namely Fetal Outcome in pregnant women who did Prenatal Gentle Yoga in Mataram City.

The population in this study were all mothers giving birth in the Tanjung Karang Health Center working area, totaling 29 respondents who did Prenatal Gentle Yoga. The sampling technique in this research is total sampling. Total sampling is taking the same sample with the existing population of 29 people. In this study using an observation sheet which includes body length, Apgar score, body weight, body temperature, hemoglobin level, and placental weight.

Data processing techniques are carried out by means of data processing
(Editing), Coding (Coding), Scoring and Entry). The data analysis technique used in this study uses simple statistical calculations, namely presentations or proposals. In this study, data analysis was carried out using univariate analysis. The percentage or proportion will be a relative frequency distribution if the data used are quantitative data. In this univariate analysis, among others, the identification of respondents.

**Result and Discussion**

Based on the results of the study, the average characteristics of the respondents showed that most of them were in the normal category. Respondents who do pregnancy yoga will have a placenta with the appropriate weight so that it will give birth to a baby with a birth weight of more than 2500 grams. This can be explained considering that exercise will increase blood flow to the uterus which is an important route for nutrient supply and fetal metabolism, there is a positive relationship between placental weight and birth weight.

In line with a study conducted by Narendran et al 2005, which examined the effects of yoga from 20 weeks of age until delivery, showed that the number of babies weighing more than 2500 grams was significantly more than women who did not follow yoga. In addition, the number of women who underwent preterm labor was significantly lower and the occurrence of complications such as IUGR was significantly less common among women who practiced yoga.

<p>| Table 1. Frequency distribution of Respondents Characteristics in Mataram Karang year 2019. |</p>
<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LBW</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>No LBW</td>
<td>29</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>100%</td>
</tr>
<tr>
<td>Body length</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal</td>
<td>27</td>
<td>93,1%</td>
</tr>
<tr>
<td>Not Normal</td>
<td>2</td>
<td>6,9%</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>100%</td>
</tr>
<tr>
<td>Placenta weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal</td>
<td>26</td>
<td>89,7%</td>
</tr>
<tr>
<td>Not Normal</td>
<td>3</td>
<td>10,3%</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>100%</td>
</tr>
<tr>
<td>Level HB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Anemia</td>
<td>22</td>
<td>75,9%</td>
</tr>
<tr>
<td>Anemia</td>
<td>7</td>
<td>24,1%</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>100%</td>
</tr>
<tr>
<td>Apgar Score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Asphyxia</td>
<td>26</td>
<td>89,7%</td>
</tr>
<tr>
<td>Asphyxia</td>
<td>3</td>
<td>10,3%</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>100%</td>
</tr>
<tr>
<td>Body temperature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal</td>
<td>29</td>
<td>100%</td>
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<tr>
<td>Not Normal</td>
<td>0</td>
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</tr>
</tbody>
</table>
According to research by Aulia (2010), pregnant women who do pregnancy exercise will have a heavier placenta due to increased placental blood flow, thus nutrition to the fetus will be better.

Yoga will affect the condition of the newborn. Mothers who do yoga will give birth to babies who immediately cry or breathe spontaneously, have normal body temperatures and normal hemoglobin levels. Babies born to mothers who do exercise during pregnancy will give good tolerance during childbirth, babies are born in vigorous conditions and are able to adapt well outside the womb so that no babies need special care (Clap, 2005). The incidence of low APGAR is also reduced in infants of mothers who do exercise during pregnancy, there is no indication of neurological deficits, and studies show psychomotor improvements in infants.

Research conducted by Pivarnik (2011) also showed that exercise for pregnant women can significantly reduce plasma volume, total protein, and albumin concentration. Therefore, giving pregnant exercise can affect the decrease in plasma volume, as a result the concentration of hemoglobin, hematocrit, and the number of red blood cells will increase and reach a point of balance.

Practicing yoga during pregnancy has shown many benefits and no adverse effects have been produced (Narendran et al., 2005; Sun et al., 2010). Some of the benefits of prenatal yoga are reduced maternal stress levels, reduced pregnancy-related pain, improved sleep quality during pregnancy, and increased overall newborn extrauterine adaptation.

### Conclusion

The results showed that all respondents did not experience LBW, namely 29 people (100%, most respondents APGAR Score 7-10, namely 26 respondents (89.7%) and a small proportion of respondents APGAR Score 4-6, namely 3 respondents (10.3%, most of the respondents' body length was normal, namely 27 respondents (93.1%) and a small proportion of respondents' body length was abnormal, namely 2 respondents (6.9%), the body temperature of newborns were all
normal, namely 29 respondents (100%),
most of the respondents not anemic,
namely 22 respondents (75.9%) and a small
proportion of anemic respondents, namely
7 respondents (24.1%, most of the
respondents' placenta weight was normal,
namely 26 respondents (89.7%) and a small
portion of the respondents' placenta weight
was abnormal, namely 3 respondents
(10.3%).

References
senam hamil terhadap proses
ersalinan normal di klinik YK
madira Palembang. Jurnal
Kedokteran dan Kesehatan
Fakultas Kedokteran UNSRI, (1),
2782-2787.
continuing regular endurance
exercise on the physiologic
adaptations to pregnancy and
pregnancy outcome. The
American Journal of Sports
Medicine, 24(6_suppl), S28-S29.
Fauziah. (2013). Perubahan fisik pada
trimester III. Jakarta.
Narendran, S., Nagarathna, R., Narendran,
V., Gunasheela, S., & Nagendra,
pregnancy outcome. Journal of
Alternative and Complementary
Medicine, 11, 237-244.
Pivarnik, J. M., Chambliss, H. O., Clapp, J. F.,
Dugan, S. A., Hatch, M. C.,
Lovelady, C. A., ... & Williams, M.
activity during pregnancy and
postpartum on chronic disease
risk. Medicine & Science in Sports
& Exercise, 38(5), 989-1006.
Survei Demografi dan Kesehatan Indonesia,
2017
Effects of a prenatal yoga
programme on the discomforts of
pregnancy and maternal
childbirth self-efficacy in Taiwan.
Midwifery, 26(6), e31-e36.
Tina, M. (2013). Manfaat senam yoga bagi
orang dewasa, anak-anak dan
bagi bayi. Jakarta: EGC.