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"East Meets West on Holistic Nursing"

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“EAST MEETS WEST IN HOLISTIC NURSING”

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“East Meets West in Holistic Nursing”

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EFFECTIVENESS OF HYPNOBIRTHING IN REDUCING ANXIETY LEVEL OF PREGNANT WOMEN IN FACING LABOR OR CHILDBIRTH

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Harapan Bangsa School of Health Science, Purwokerto

ABSTRACT

Background: The pregnant women’s anxiety is an unhappiness feeling with physiological symptoms. If the high level of anxiety cannot be handled, it can cause complications on pregnancy and childbirth. In some countries such as United States, non-pharmacological methods have been developed to deal with childbirth hypnobirthing. Hypnobirthing is a natural method used to relieve fear, panic, stress and other pressures which haunt mothers during labor. Purpose: The study aimed to know the effectiveness of hypnobirthing technique to the primigravida pregnant women’s anxiety levels
Method: This study was pre-experimental with one-group pre-post test design using quantitative approaches. Data were obtained through questionnaire. The sample of the study was 16 primigravida pregnant women. The researcher applied Wilcoxon signed rank test with signification α = 0.05.
Result: The result of statistical analysis showed that the hypnobirthing technique has a significant effect on primigravida pregnant women’s anxiety with p=0,000 (p < 0.05). The average level of anxiety on respondents before given hypnobirthing was 27.31 and after given hypnobirthing was 12.12 with the difference at 15.188. Conclusion: The finding of this study showed that hypnobirthing technique is effective to reduce primigravida pregnant women’s anxiety level in dealing with labor.

Keywords: Hypnobirthing, Anxiety, Primigravida Pregnant Women

THE EFFECT OF KANGAROO METHOD APPLICATION TO BODY TEMPERATURE OF BABY WITH LOW BIRTH WEIGHT (LBW)

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ABSTRACT

Background: Low Birth Weight (LBW) care in Indonesia is still prioritizing the use of incubators but its presence is still very limited. Kangaroo method is now starting to be used as an alternative to incubator that is economically efficient and effective. Purpose: This study aimed to determine the effect of the application of the kangaroo method to body temperature of baby with LBW. Method: This research was conducted at the Hospital Prof. DR. W.Z. Johannes Kupang with a sample of 25 low birth weight infants using accidental sampling. Research design was quasi-experimental with one group pretest and post test design. Baby’s temperature was measured before the intervention then baby kangaroo method was applied for 3 days. Kangaroo Care method was carried out for 2 hours each day and then the baby’s body temperature was measured after that. The results are tested using paired T-test with a significance level of α = 0.05. Results: The results obtained LBW baby’s body temperature before the kangaroo care method was on average 36.6 °C and body temperature LBW babies after the kangaroo care method was on average 37.1 °C. The application of the kangaroo method increased the body temperature of baby with LBW (p =0.000). Conclusion: There was an influence on the increase in body temperature after being given LBW kangaroo care method. For health care workers was expected to continue to provide education about the effectiveness of kangaroo method to increase babies’ body temperature.

Keywords: Kangaroo Care Method, Temperature, Low Birth Weight (LBW).
Effect of Application Kangaroo Method to the Increase in body Temperature at the Baby Weight Low Birth (LBW)

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ABSTRACT

Background : Low Birth Weight (LBW) care in Indonesia is still prioritize the use of incubators but its presence is still very limited. Kangaroo method of treatment methods are now starting to be used as an alternative to incubator that is economically efficient and effective.

Objective : This study aimed at determining the effect of the application of the kangaroo method to the increase in body temperature at the baby LBW.

Method : This research was conducted at the Hospital Prof. DR. W. Z. Johannes Kupang with a sample of 25 low birth weight infants using accidental sampling, research design is quasi-experimental: one group pre test and post test design, baby's temperature measured before the intervention further provides care baby kangaroo method is done for 3 days, every day carried out the implementation of Kangaroo Care method for 2 hours and then measured the baby's body temperature, the results are tested paired T-test with a significance level of α = 0.05.

Results : The results obtained LBW baby's body temperature before the kangaroo care method on average 36.6 °C and body temperature LBW babies after the kangaroo care method on average 37.1 °C, and the application of the kangaroo method affects the increase of body temperature at the baby LBW (p = 0.000).

Conclusion: There is an influence on the increase in body temperature after being given LBW kangaroo care method. For health care workers is expected to continue to provide education about the effectiveness of treatment for infants with the kangaroo method to increase in body temperature at the baby.

Keywords: Kangaroo Care method, temperature, low birth weight (LBW).
BACKGROUND

Low birth weight (LBW) is an infant with birth weight less than 2500 grams regardless of gestation age (Miyata & Proverawati, A. 2010). Until now LBW remains a problem throughout the world, because it caused morbidity and mortality in the neonatal period. The prevalence of LBW estimated 15% of all births in the world with a limit of 3.3% - 38% and often occur in developing countries with low socio-economic. Statistically shows that 90% LBW occur in developing countries and its death rate 35 times higher than with a birth weight of more than 2500 grams (Pantiaawati, 2010).

The incidence of low birth weight infants (LBW) in Indonesia is still relatively high at 14%. The incidence in Indonesia varies from one region to another, ranging from 9% - 30%. Nationally, based on further analysis of Indonesia Demographic and Health Survey (IDHS), the rate of low birth weight is about 7.5%. This figure is higher than the LBW target which set by nutrition improvement program, Healthy Indonesia 2010 at maximum on 7% (IDHS, 2007 cited in Pantiaawati, 2010).

LBW care in Indonesia is still prioritizing on the use of an incubator but its existence is still very limited. This causes morbidity and mortality on LBW become very high, not only due to the immature condition, but also aggravated by hypothermia and hospital-acquired infection. On the other hand the use of incubator has many limitations, in addition to the amount that is limited, incubators have high maintenance costs, and requires a skilled personnel who able to operate it, and also need trained nurses to care infants (Suradi, at all, in 2009; Sudarti & Khoirunnisa, 2010). As a result of the use of incubator, babies are separated from their mothers, it would preclude direct skin contact between mother and baby which necessary for growth and development of infants. Therefore, we need a practical method as an alternative to incubator which is economically efficient and effective. The method is a method of kangaroo care (PMK) (Suradi, at all, 2009).

The warmth of mother's body is a heat source that is effective for infants born at term or low birth weight. This occurs when there is direct contact between skin of mother with baby's skin. This principle is known as the Skin To Skin Contac or kangaroo method (MK). This method is a simple way and useful to improve infant survival either momentary or long-term,
especially LBW weighing 1200-2000 grams (Suradi, at al, 2009).

Kangaroo method (MK) become a revolution treatment for LBW / preterm infants. This method is useful to recover premature infants and help parents to be more confident and be able to play an active role in caring for their baby. Methods kangaroo role in newborn care humanely and improve the bonding between mother and baby (Suradi, at al, 2009). Kangaroo Care Research (FMD) by Usman et al, (1996) in Suradi, R.at.al (2010) stated that the ability to maintain the temperature and weight gain in LBW conducted PMK showed better results. This study aims to determine the effect of the application of the kangaroo method to increase body temperature at LBW in hospitals Prof. DR. Z. W. Johannes Kupang.

METHODS

Location and Design Research
This study was conducted at Hospital Prof. DR. Z. W. Johannes Kupang. The design study is a quasi experimental design: one group pre test and post test design, the design of experiments by means of the samples are given a questionnaire (measurements) before and after treatment (treatment).

Population and Sample
The population is all babies born with LBW in hospitals Prof. DR. Z. W. Johannes Kupang during the period December 2011 - January 2012. The sampling technique that is by non-random method with accidental sampling technique is a sampling of the spontaneity (Ridwan, 2010). means sampling by taking samples of infants with low birth weight and using the application kangaroo care method encountered during the research carried out within a certain timeframe

Tools
This research data collection tool using a digital thermometer to measure body temperature rectally measured for 1 minute to do before and after the action is.

Data analysis
Data analysis performed in this study is to use a computer with SPSS for Windows version 16. The data are analyzed and presented in tabular form and narrative.

RESULTS
Results of univariate analysis that describes the demographic data of patients that maternal age, maternal education, gestational age, type of delivery, birth weight and can be seen in Table 1.
Table 1. Demographic Data

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-2</td>
<td>7</td>
<td>28,0</td>
</tr>
<tr>
<td>26-30</td>
<td>10</td>
<td>40,0</td>
</tr>
<tr>
<td>31-35</td>
<td>4</td>
<td>16,0</td>
</tr>
<tr>
<td>≥ 36</td>
<td>4</td>
<td>16,0</td>
</tr>
<tr>
<td>Education:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary S.</td>
<td>2</td>
<td>8,0</td>
</tr>
<tr>
<td>Junior H.S.</td>
<td>5</td>
<td>20,0</td>
</tr>
<tr>
<td>Senior H.S</td>
<td>15</td>
<td>60,0</td>
</tr>
<tr>
<td>Graduate</td>
<td>3</td>
<td>12,0</td>
</tr>
<tr>
<td>Gestational age:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 37 weeks</td>
<td>16</td>
<td>64,0</td>
</tr>
<tr>
<td>≥ 37 weeks</td>
<td>9</td>
<td>36,0</td>
</tr>
<tr>
<td>Labor:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spontaneous</td>
<td>19</td>
<td>76,0</td>
</tr>
<tr>
<td>Sectio Cesarea</td>
<td>6</td>
<td>24,0</td>
</tr>
<tr>
<td>Birth Weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BBLR</td>
<td>17</td>
<td>68,0</td>
</tr>
<tr>
<td>BBLSR</td>
<td>6</td>
<td>24,0</td>
</tr>
<tr>
<td>BBLASR</td>
<td>2</td>
<td>8,0</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>100,0</td>
</tr>
</tbody>
</table>

Results of body temperature at LBW in hospitals Prof. DR. Z. W. Johannes Kupang can be seen in Table 2.

Table 2. Body Temperature of LBW

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Pre Test</th>
<th>Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Day I:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥ 37.1°C</td>
<td>0</td>
<td>0,0</td>
</tr>
<tr>
<td>36.6°C-37.0°C</td>
<td>18</td>
<td>72,0</td>
</tr>
<tr>
<td>36.0°C-36.5°C</td>
<td>7</td>
<td>28,0</td>
</tr>
<tr>
<td>Day II:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥ 37.1°C</td>
<td>1</td>
<td>4,0</td>
</tr>
<tr>
<td>36.6°C-37.0°C</td>
<td>18</td>
<td>72,0</td>
</tr>
<tr>
<td>36.0°C-36.5°C</td>
<td>6</td>
<td>24,0</td>
</tr>
<tr>
<td>Day III:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥ 37.1°C</td>
<td>0</td>
<td>0,0</td>
</tr>
<tr>
<td>36.6°C-37.0°C</td>
<td>21</td>
<td>84,0</td>
</tr>
<tr>
<td>36.0°C-36.5°C</td>
<td>4</td>
<td>16,0</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>100,0</td>
</tr>
</tbody>
</table>

The results of analysis of the effect of applying the kangaroo method against an increase in body temperature at LBW in hospitals Prof. DR. WZ Johannes Kupang can be seen in Table 3.

Table 3 Analysis of the Implementation Kangaroo Method to Body Temperature at LBW

<table>
<thead>
<tr>
<th>Body temperature of LBW</th>
<th>Pre test</th>
<th>Post test</th>
<th>Enhancement</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>Mean</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Day I</td>
<td>36.6</td>
<td>0.191</td>
<td>37.1</td>
<td>0.174</td>
</tr>
<tr>
<td>Day II</td>
<td>36.6</td>
<td>0.167</td>
<td>37.1</td>
<td>0.185</td>
</tr>
<tr>
<td>Day III</td>
<td>36.7</td>
<td>0.185</td>
<td>37.1</td>
<td>0.177</td>
</tr>
</tbody>
</table>

The results of this study indicate there are significant relation between implementation kangaroo method to an increase in body temperature (p = 0.000) as indicated by the following data: (1) the first day before and after treatment Kangaroo (FMD) was found to increase the average temperature of 0.508°C (± 0.225); (2) The baby's body temperature on the day II before and after treatment Kangaroo (PMK) obtained an increase in the average temperature of 0.436°C (± 0.209); (3) the temperature of the baby's body on the third day before and after treatment Kangaroo (PMK) obtained an increase in the average temperature of 0.400°C (± 0.208).
DISCUSSION

These results indicate that an increase in body temperature through the implementation of kangaroo care method (PMK) significantly in hospitals Prof. DR. Z. W. Johannes Kupang. Karyuni & Meiliya (2008) suggests that babies who are sick or small (weighing less than 2.5 kg at birth or born before 37 weeks' gestation) needs additional thermal protection and warmth to maintain normal body temperature. This baby can experience hypothermia quickly and warm the baby can take a long time. The risk of complications and death increases significantly if the thermal environment is not optimal. Kosin (2010) stated that the LBW body temperature is not stable because of the ability to retain heat and the ability to add heat production is very limited because of the growth of the muscles have not been adequate, subcutaneous fat is still little, immature nervous system regulating body temperature, body surface relatively wide compared to the weight that makes easy to lose heat.

Based on the results of statistical tests found that there is the effect of applying the kangaroo method to increase body temperature low birth weight babies. Usman, et al (2006) in Suradi, R.at.all (2010) who found that the ability to maintain body temperature at LBW conducted PMK showed better results. Therefore FMD is very useful in the prevention of hypothermia in the treatment of LBW in hospital or at home. Kangaroo care method (FMD) causes skin contact with between baby and mother continuously and baby get hot (temperature corresponding mother) by conduction.

Cataneo (1998 cited in Sudarti & Khoirunnisa 2010) stated the importance of skin contact between mother to the baby continuously (only separated when the mother to the bathroom or take another medical examination). According to Sidi, et al, (2004) and Suradi ,, et al (2010) Patterns of low birth weight infant care can be done by the mother during hospitalization, in principle, is to maintain the baby's temperature to remain normal, increase breastfeeding and reduce the risk of infection and to improve ties affection between mother and baby.

In an open place and cool environment, babies require heat. Infants have physiology to increase the heat is influenced by the flow of blood to the skin. When the baby's skin becomes cold, afferent nerves convey in the central regulating heat in the hypothalamus. Nerves from the hypothalamus while achieving brown fat
will release local noradrenaline so that triglycerides oxidized into glycerol and fatty acids. Blood glycerol levels increased, but local sesara fatty acid consumed to produce heat. Regional brown fat become heat and it distributed to several parts of the body via the blood stream (Sachann, M Rossa, 1996; Guyton C.A, Hall E.J. 1997)

High blood flow velocity caused conduction of heat supplied from the body core to the skin is very efficient. Skin blood flow effects on conduction of heat from the body core to the skin surface represents an increase of heat conduction nearly 8-fold, that’s way "the skin is an effective heat radiator system ".Skin blood flow is the most effective mechanism for heat diffusion from the body core to the skin. By laying the baby face down into the mother’s breast, there will be a direct skin contact of mother and baby so the baby will gain warmth because the mother is a heat source that is good for the baby (Gay, W.R, 1995; Cree, L. 2003).

CONCLUSION
The results of this study concluded that there is significant result of implementation kangaroo method to increase body temperature at LBW in hospitals Prof. DR. Z. W. Johannes Kupang. This proves that the FMD is very effective to control the temperature and entwined deep emotional attachment between mother and baby (bounding), regardless of where, weight and gestational age.

REFERENCE
LEMBAR VALIDASI KARYA ILMIAH

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Nama para penulis (tersusun lengkap) : Kadek Ayu Erika, Marlina P. Pattipeilohy
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