# THE EFFECT OF MOMMING GUIDE KANGAROO MOTHER CARE

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# Effect of Momming Guide Kangaroo Mother Care Skin to Skin Contact on Body Temperature Stability in LBW in Puskesmas

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#### ABSTRACT

Background: Babies are children who are in the age range 0-12 months. Infancy is the first phase of human life, which at this time requires adaptation to the environment. Low Birth Weight (LBW) is a newborn who has a birth weight of less than 2,500 grams (up to 2,499 grams). LBW is a problem that is often faced in the care of newborns. Babies with LBW require intensive care until they reach a stable condition. Babies with LBW have a tendency to increase the incidence of infection and are susceptible to complications, problems in babies with LBW that often occur are disorders of the respiratory system, central nervous system, cardiovascular, hematology, gastrointestinal, kidney, and thermoregulation. One of the actions that can be given to babies with LBW is by using the Kangaroo Mother Care (KMC) method. KMC method of treatment is a skin to skin contact therapy, namely heat transfer by conduction from mother to baby so that the baby remains warm and stable in normal temperatures. Research Objectives: To find out the difference in the effect of Momming Guide KMC Skin To Skin Contact on Body Temperature Stability in LBW in Puskesmas. Methods: Quasi experimental research type with the design of "Pre test Post test with Control Group Design". Sampling was carried out by purposive sampling with the criteria of parents (mothers) who have babies with low birth weight. Results and Discussion: The difference in temperature stability of newborns with the 1st month, 1st month with 2nd month and 2nd month with 3rd month there is a difference with p = 0.000. Conclusion: There is a difference in the Momming Guide KMC Skin To Skin Contact model on the stability of body temperature in LBW in Puskesmas.

Keywords: momming guide; KMC; skin to skin contact; temperature stability; LBW

#### **Background**

Babies are children who are in the age range 0-12 months. Infancy is the first phase of human life, which at this time requires adaptation to the environment. Low Birth Weight (LBW) is a newborn who has a birth weight of less than 2,500 grams (up to 2,499 grams). LBW is a problem that is often faced in the care of newborns. Babies with LBW require intensive care until they reach a stable condition (Ministry of Health of Indonesia, 2013). According to the World Health Organization (WHO), the prevalence of LBW in 2015 was estimated at 15% of all births in the

world. The Infant Mortality Rate (IMR) has increased from 2005 by 260 people, while in 2006 it was 273 people, which means an increase of 0.9%. About a third of this number of LBW died before stabilizing or in the first 12 hours of the baby's life (Pratiwi, A., According to the results of the Basic Health Research in 2018, the prevalence of LBW in Indonesia was 6.2%. According to the National Population and Family Planning Agency (BKKBN) in the 2017 Indonesian Demographic and Health Survey (IDHS), the IMR in Indonesia is 24 deaths per 1,000 live births.

At this mortality rate, 1 in 67 children died in the first month of life. At the same time, the IMR decreased by 31% from 35 deaths per 1,000 live births to 24 deaths per 1,000 live births (IDHS, 2017). According to the Yogyakarta Special Region Health Office, the prevalence rate of LBW in DIY province in 2018 was 5.52%. This figure is higher than 2017 at 4.86%. According to the DIY Provincial Health Office in the Health Profile in 2018, the IMR in DIY was ranked in the top five best nationally along with East Kalimantan, DKI Jakarta, Riau, and South Sulawesi with 25 per 1,000 live births. A common cause of infant and neonatal mortality in the province of DIY is LBW (DIY Provincial Health Office, 2018). Babies with LBW have a tendency to increase the incidence of infection and are prone to complications, problems in babies with LBW that often occur are disorders of the respiratory system, central cardiovascular, nervous system, hematology, gastrointestinal, kidney, and thermoregulation (Basic Health Research, 2013).

Babies with LBW in general do not have maturity in the body's defense system to adapt to the environment. Premature babies with low birth weight tend to be hypothermic. This is due to the thinness of subcutaneous fat in infants so that it is very easily influenced by environmental temperature (Pratiwi, A., 2015). Babies with LBW will have an impact in the long term in the future that will affect the quality of the nation's next generation. General management of infants with LBW is very necessary to complications. prevent General management that can be given to infants with LBW is maintaining body temperature, regulating and monitoring nutritional intake, preventing infection, weighing weight, giving oxygen, and monitoring the airway. Several studies

have been conducted on the Kangaroo Mother Care (KMC) method, the results say that this method is not just a substitute for incubators in infant care, the advantages that incubator care cannot provide (Solehati, T., et al., 2018).

One of the actions that can be given to babies with low birth weight is by using the Kangaroo Mother Care (KMC) method. Kangaroo Mother Care (KMC) method of treatment is a skin to skin contact therapy, namely heat transfer by conduction from mother to baby so that the baby remains warm and stable in normal temperatures. The mother's body temperature is an efficient inexpensive source of heat, can provide a warm environment for the baby, as well as improve the mother's relationship with her baby (Bebasari et al., 2017). Based on research from Atik, et al. (2016) conducted at the Mardi Rahayu Kudus Hospital, the results showed that the Mardi Rahayu Kudus Hospital had not been able to carry out Kangaroo Mother Care (KMC) optimally because of the lack of willingness of the mother or baby's parents to do KMC for fear of the baby being small so make mothers and their families feel less courageous to approach their babies and mothers also feel less confident to take care of them. According to research results in 2018 the prevalence of LBW in Indonesia was 6.2% of the baby birth rate, while in DIY Province the prevalence rate in 2018 in Sleman Regency in 2018 was 59 cases of the number of births so an average of 15-20 people per month. Based on a preliminary study in four puskesmas in the Special Region of Yogyakarta/DIY (Puskesmas Tegalrejo Yogyakarta City, Puskesmas Mlati II Sleman Yogyakarta, Puskesmas Sewon II Bantul Yogyakarta and Puskesmas Sentolo Kulon Progo Yogyakarta) from interviews with 12 mothers who have babies with low birth

weight (LBW) in four health centers in Yogyakarta, 76 percent of mothers said they did not understand how to use Kangaroo Mother Care (KMC) and care for babies with LBW.

Research based on the Kangaroo Mother Care (KMC) method in infants with low birth weight (LBW) is very important. Body Temperature on LBW at the Yogyakarta Special Region Health Center. This research is in accordance with the RIP (Research Master Plan) and the research Roadmap of the Applied Nursing Undergraduate Anesthesiology Study Program (STKA) as part of the health profession directing research with the Yogyakarta Ministry of Health Poltekkes Roadmap, which is based on the use of innovative health science and technology, where material about Momming Guide Kanggoroe Mother Care Skin To Skin Contact Against Body Temperature Stability in LBW has been included in the Health Promotion Course for semester IV STKA Study Program which is applied to target families in the community.

# Methods

This research is a quasiexperimental study with a pre-test-posttest design with a control group design. The research design can be described as follows:

Pre test	Intervention	Post test
$O_1$	$X_1$	$O_2$
$O_3$	$X_2$	$O_4$

Figure 1. Research Design

### Description:

X1: The intervention in the experimental group using the Momming Guide Kanggoroe Mother Care Skin To Skin Contact method was carried out

- once a week for 3 months with a duration of 30 minutes.
- X2: Giving leaflets about Momming Guide Kanggoroe Mother Care Skin To Skin Contact to the control group.
- O1: Pre-test body temperature stability for LBW infants in the intervention group
- O2: Post test of body temperature stability in LBW infants in the intervention group
- O3: Pre-test body temperature stability for LBW infants in the control group
- O4: Post test of body temperature stability in LBW infants in the control group

This research was conducted in 4 working areas of the Yogyakarta Special Region Health Center (Puskesmas Mlati II Sleman Yogyakarta, Puskesmas Tegalrejo Yogyakarta City, Puskesmas Sentolo I Kulon Progo and Puskesmas Sewon II Bantul Yogyakarta). The time of the study was carried out in 2021 (July November 2021) and 2022. Independent variables: Effect Momming Guide Kanggoroe Mother Care Skin To Skin Contact. Dependent variable: Stability of body temperature in LBW infants. The population is all narents (mothers) who have LBW babies in the working area of the Yogyakarta Special Region Health Center (Mlati II Health Center Sleman Yogyakarta, Tegalrejo Health Center Yogyakarta City, Sentolo I Health Center Kulon Progo and Sewon II Health Center Bantul Yogyakarta). Inclusion Criteria:

Parents (mothers) who have LBW babies and parents (mothers) who have LBW babies, male or female. Exclusion criteria: parents (mother) who have

LBW babies with congenital abnormalities, parents (mothers) who have LBW babies with infections and parents (mothers) who have LBW babies with complications.

In this study, the respondents were two groups of arents (mothers) who had LBW babies in the working area of the Yogyakarta Special Public Health Center (Mlati II Health Center Sleman Yogyakarta, Tegalrejo Health Center Yogyakarta City, Sentolo I Health Center Kulon Progo and Sewon II Health Center Bantul Yogyakarta) as many as 34 in each intervention group and control group. The data from the examination will be analyzed descriptively and analytically with the help of the SPSS for windows version 16.0 program using the pair t-test and Wilcoxon test (Sugiyono, 2007) with a significant level of 0.05.

### **Results and Discussion**

**a.** Research location and respondent characteristics

Table 1. The location of the study and the number of respondents in 4 Health Centers of the Special Region of Yogyakarta (DIY)

	Research	Number Of Respondent				
No	location	Experim	ent Group	Co	ntrol Group	
	Puskesmas	f	%	f	%	
1	Sewon II	9	26,47	9	26,47	
2	Mlati II	10	29,41	10	29,41	
3	Tegalrejo	6	17,65	6	17,65	
4	Sentolo	9	26,47	9	26,47	
	Total	34	100	34	100	

Table 2. Characteristics of respondents in the experimental group and in the control group in 4 Puskesmas in DIY

No	Characteristics of	Experin	nent Group	Contro	l Group
	Respondents	f	%	f	%
1.	Baby Age (Day)				
	1 day	11	23,4	12	35,3
	2 days	13	38,2	15	44,1
	3 days	10	29,4	7	20,6
2.	Gender				
	Man	14	41,2	16	47,1
	Woman	20	58,8	18	52,9
3.	Child Order				
	1st child	6	17,6	9	26,5
	2nd child	10	29,4	6	17,6
	3rd child	10	29,4	10	29,4
	4th child	8	23,5	9	26,5

# b. Univariate Analysis

**Table 3.** Stability of body temperature in newborns, 1st month, 2nd month and 3rd month in the experimental group in four Puskesmas in DIY

No	Temperature Stability	Newwborn baby		1st month		2nd month		3rd month	
		f	%	f	%	f	%	f	%
1.	< 36 °C	5	14,7	0	0	0	0	0	0
2.	36-37,5 °C	29	85,3	34	100	34	100	34	100
3.	> 37,5 °C	0	0	0	0	0	0	0	0
	Total	34	100	34	100	34	100	34	100

**Table 3.** Stability of body temperature in newborns, 1st month, 2nd month and 3rd month in the control group in four Puskesmas in DIY

No	Temperature Stability		wborn aby	1st	month	2nd month		3rd month	
		f	%	f	%	f	%	f	%
1.	< 36 °C	28	82,4	28	82,4	21	61,8	10	29,4
2.	36-37,5 °C	6	17,6	6	17,6	13	38,2	24	70,6
3.	> 37,5 °C	0	0	0	0	0	0	0	0
	Total	34	100	34	100	34	100	34	100

**Table 5.** Test the normality of the experimental group temperature stability on respondents in four Puskesmas in DIY

Variable	Parameter	p	discription
Temperature	Newborn baby	2,90	Normal
stability	1st month	4,41	Normal
-	2nd month	2,59	Normal
	3rd month	0,36	Tidak Normal

**Table 6.** Test the normality of the temperature stability control group on the respondentsin four Puskesmas in DIY

Variable	Parameter	p	discription
Temperature stability	Newbord baby	5,63	Normal
	1st month	4,13	Normal
	2nd month	0,44	Tidak Normal
	3rd month	1,93	Normal

# c. Bivariate Analysis

**Table 7.** Analysis of the data using the t-test the difference in temperature stability of newborns in the 1st month, 2nd month and 3rd month in the experimental group in four Puskesmas in DIY

	significans			
Variable	New born baby- 1st month	1st month - 2nd month	2nd month- 3rd mont	
Temperature stability	0,000	0,910	0,364	

**Table 8.** Analysis of the data using the t test test for differences in temperature stability at month 1, month 2 and month 3 in the control group in four Puskesmas in DIY

	significans				
Variable	New bord baby- 1st 1st month -		2nd month-		
	month	2nd month	3rd month		
Temperature stability	0,000	0,000	0,000		

#### d. Discussion

1) Differences in body temperature stability before the Momming Guide Kanggoroe Mother Care Skin To Skin Contact on LBW at the Puskesmas di DIY.

In Table 3 above, it can be seen in the experimental group that the body temperature of newborns was mostly 36-37.5 oC as many as 29 respondents (85.3%). In Table 4 above, it can be seen in the control group that the body temperature of newborns was mostly <36 oC as many as 28 respondents (82.4%). LBW babies have not been able to regulate temperature perfectly in the face of changes in the intrauterine environment to extrauterine life (Octa, 2014; Fatsman, 2014). temperatures cause LBW babies to use brown fat reserves to generate heat. LBW has low subcutaneous fat tissue, brown fat and glycogen storage so they are at risk of experiencing body temperature instability (Lawn, 2013). Bobak (2007) also revealed that LBW infants have less muscle mass, less brown fat reserves, less subcutaneous fat to store heat and less ability to control skin capillaries. This causes low birth weight to easily lose body heat and is at risk for hypothermia Bobak, 2007; Nurlaila, 2015). Method of skin to skin contact of mother and baby (Skin to Skin Contact). This method is a form of interaction between parents and their babies, which is better known as the Kangaroo method of care. Research

conducted (Lawn et al., 2010) states that skin to skin contact is effective for fostering a positive effect on the affectionate bond between mother and baby. Skin to skin contact can have a significant positive impact on infants and affect the relationship between parents in interacting. This method is proven to improve the baby's metabolic status, thermal regulation, breathing pattern and oxygen saturation, reduce apnea and bradycardia, increase milk production, shorten hospitalization days and function as an analgesic during painful medical procedures. Research conducted by Lawn et al (2010) showed that skin-toskin contact increased body temperature towards normal in low birth weight infants and increased heart rate and increased oxygen levels. The KMC method is a supportive treatment that is carried out by placing the baby between the mother's breasts so that there is direct contact with the mother's skin and the baby's skin. This study is also in line with research conducted by Mory (2010) which said that there was an effect of skin-to-skin contact between mother and baby on the body temperature of mother and baby before and after KMC intervention was carried out.

2) Differences in body temperature stability after the Momming Guide model of Kanggoroe Mother Care Skin To Skin Contact on LBW at the Puskesmas in DIY.

In Table 3 above, it can be seen in the experimental group that the body temperature at month 1, month 2 and month 3 mostly body temperature was 36-37.5 oC as many as 34 respondents (100%). In Table 4 above, it can be seen in the control group that the body temperature in the first month was mostly <36 oC as many as 28 respondents (82.4%). In the second month most of the body temperature <36 oC as many as 21 respondents (61.8%). In the 3<sup>rd</sup> month, most of the body temperature was 36-37.5 oC as many as 24 respondents (70.6 %). In infants with low birth weight problems, such as patients with unstable body temperature, subcutaneous little fat. immature system regulating nervous body temperature, and relatively wider body surface compared to body weight, causing hypothermia. Hypothermia is a condition where the body temperature is below 360°C, where the normal body temperature is 36°C to 37.3°C. In experiencing hypothermia patients because the body temperature is below 36°C, the subcutaneous layer is thin, the temperature regulation system is not functioning perfectly, and the patient's body surface is dry. Wider than the patient's weight and the patient experiences convection and radiation, namely heat loss that occurs when the baby is exposed to cooler ambient air because the treatment room uses air conditioning. Body temperature is a picture of the balance between the production and expenditure of heat from the body which is measured in degrees. There are two types of body temperature, namely core temperature and surface temperature. Core temperature is the temperature of internal body tissues, such as the abdominal cavity and pelvic cavity. The core temperature is at a temperature range of 360 - 37.5°C and is

relatively constant. Surface temperature is the temperature of the skin, subcutaneous tissue, and fat. Unlike the core temperature, the surface temperature is not constant, the temperature will increase or decrease in response to environmental conditions. Newborns lose four times more heat than adults, resulting in a drop in temperature. In the first 30 minutes the baby can experience a decrease in temperature of 3-4 °C.

The decrease in temperature is caused by heat loss by conduction, convection, evaporation and radiation. The baby's immature ability to produce heat makes the baby very susceptible to hypothermia hypothermia, causes metabolic and physiological processes to slow down and the body performs a mechanism by means vasoconstriction of blood vessels, where the blood supply oxygen to the body's organs is disturbed which can cause increased respiratory rate, increased heart rate, low blood pressure and if oxygen perfusion to the brain is not up it can cause a decrease in consciousness. If this situation continues and does not get treatment, it can cause cerebral ischemia and cause all brain neurons to be necrotic, followed by necrosis of lung tissue, heart, kidneys, liver, and skin, which can lead to death in infants. To maintain body temperature in LBW babies in the hospital using an incubator, there is also a way to warm the baby's body with the kangaroo mother care method. Kangaroo Mother Care is a skin-to-skin contact treatment by treating babies naked and babies wearing only diapers and hats. Where the position of the baby's body is placed upright on the chest between the mother's breasts, and the head is turned to the right or left so that the baby can suckle to the mother then covered with special clothes used

for the kangaroo method. mechanism of the kangaroo method in increasing body temperature is carried out by conduction, namely heat transfer between objects with different temperatures in direct contact with each other. Heat moves down the normal gradient from a hotter to a cooler object as it is transferred from molecule to molecule. In this case, LBW babies take their mother's body temperature directly skin-to-skin contact. considering that the mother's body temperature is higher than the baby's body temperature. The role of the 'skin as thermoregulation includes vasoconstriction which affects the amount of blood flow from the heart to the skin, loss of heat and body sensation. Skin, subcutaneous tissue and fat store heat in the body, the amount of blood flowing from the heart to the periphery is 30% of the blood that passes through areas of the skin that have lots of blood vessels. Heat is transferred from the blood through the walls of blood vessels to the surface of the skin and is lost to the environment by heat loss mechanisms. When the core temperature becomes too low, the hypothalamus will experience vasoconstriction and blood flow to the skin is reduced so that the skin will feel cold. When there is a cold sensor, the hypothalamus will give a signal to generate heat production and reduce heat loss by vasoconstriction, shivering, and releasing epinephrine, which increases cellular metabolism, causing increased heat production. The skin is a good thermoregulatory system because blood flow to the skin is the most effective mechanism for spreading heat from core temperature to skin surface temperature. By giving the kangaroo method that the author gave to the patient, the process of losing body temperature by means of convection and radiation experienced by the patient did not occur because the

baby's skin was not in direct contact with colder air, but came into contact with the mother's skin which had a hotter temperature so that it could occur. Heat transfer from mother to baby.

# 3) The Effect of Momming Guide Kanggoroe Mother Care Skin To Skin Contact on Body Temperature Stability in LBW at Puskesmas in DIY.

In Table 7 above, it can be seen that the difference in temperature stability of newborns with the 1st month there is a difference with the value of p = 0.000(<0.05). There was no difference between the differences in the stability of the baby's body temperature at the 1st and  $2^{nd}$  months with p value = 0.910 (> 0.05). There was no difference between the difference in the stability of the baby's body temperature at the 2<sup>nd</sup> and  $3^{\text{rd}}$  months with p value = 0.364 (> 0.05). The difference in weight of newborns with the 1st month, 1st month with 2nd month and 2<sup>nd</sup> month with 3<sup>rd</sup> month there was a difference with p value = 0.000 (<0.05). Several studies have been conducted on the kangaroo method, the results say that the kangaroo method is not only a substitute for the incubator in LBW care, but also provides many advantages that cannot be provided by incubator care (Suradi & Yanuarso, 1996 in Perinasia, 2008). Kangaroo method care (PMK) is useful in stabilizing the baby's body temperature, heart rate and breathing stability, baby behavior is better, crying less and breastfeeding often, calorie use is reduced, baby sleeps longer, the baby-mother bond is better and will reduce infection in infants. (Perinasia, 2008). Research by Ruth, et al (2002) said that the kangaroo method of care had a positive and significant impact on motor development and cognitive perception in infants in the parenting process. The kangaroo method

good impact the neurophysiological development of infants, increases parental interaction, and helps families in the development of their babies. Agudelo, Rosello, and Belizan (2003) research that the kangaroo method of care is an alternative for treating low birth weight so that mothers easily breastfeed their babies more often and exclusively. The study recommends that the use of the kangaroo method because it can reduce morbidity in low birth weight infants. The kangaroo method of care has a positive impact on newborns, especially LBW and premature so that it can be used as a hospital program, especially perinatology room. The advantages of the kangaroo method of care are that it is beneficial for both the baby and his parents. The benefits for the baby are the effectiveness of thermoregulation, stable heart rate, regular breathing frequency including reduced apnea, increased oxygen saturation, weight gain and faster baby development, reduced crying, supports exclusive breastfeeding. prolongs deep sleep and others. The benefits that can be felt by parents are speeding up bonding, increasing confidence in caring for their small baby, eliminating feelings of separation and incompetence, and parents feeling satisfaction because thev participated in caring for their baby (Priya, 2004). Research related to PMK, among others, has compared the kangaroo method of care conventional nursing for babies born prematurely and having low birth weight. The results of the study stated that the respiratory rate, temperatur. Body weight and oxygen saturation were better in infants who underwent kangaroo treatment compared to infants who did not receive FMD (Ali, et al., 2009). Another study was

conducted by comparing mothers who did PMK with mothers who did not do PMK. The results of the study found that mothers who did kangaroo care felt more confident in caring for their babies compared to mothers who did not take care of the kangaroo method. Kangaroo method care also increases the mother's closeness with her baby, reduces feelings of stress on the mother as well as on the baby, and makes the mother and baby, and makes the mother and baby more calm and relaxed (Tessier, et al., 1998 in PERINASI, 2008). Another effort in handling hypothermia in infants with LBW is the KMC method of treatment (Dewi, 2010 & Padila, P., Amin, M., & Rizki, R. (2018) KMC method of care is treatment for LBW by making direct contact between the baby's skin with the mother's skin (skin-to-skin contact) by placing the baby on the mother's chest (Endang, 2010). The KMC method is able to meet the needs of LBW by providing situations and conditions that are similar to the uterus so as to provide LBW opportunities to adapt well in the world. This method can be done in the hospital and at home because the KMC method is a simple way to treat LBW babies who use the mother's body temperature to warm her baby (Puspitaningtyas, 2011). Some of the advantages of using KMC are meeting the most basic needs of babies, namely the contact of the baby's skin to the mother's skin where the mother's body will become thermoregular for the baby so that the baby gets warmth, facilitates breastfeeding, infection protection, stimulation, safety and affection (Sulistiyowati, 2016). According to the results of his research, it is said that when the baby's body temperature is cold, the mother's chest will warm, so that the body temperature is stable; Conversely, if the baby's body temperature is too

high, the mother's chest will lower it. When the baby's body temperature is low, the mother's chest will try to raise it to the normal range. So that when the body temperature has reached the normal limit, the mother's chest will maintain to remain stable. The mother's body temperature and the baby's body temperature before the intervention was 36 °C. After that, the baby is placed on the mother's chest for 1 hour and the body temperature is measured. Research results from several articles indicate that the kangaroo mother care method has an effect on physiological responses in low birth weight infants, namely maintaining body temperature, increasing O2 saturation and stabilizing pulse. According to Astuti, Mutoharoh and Priyan, (2015) in 28 infants, through a quasi-experimental method with pre and post test control group designs, about the effect of applying KMC with increasing LBW weight. According to Markum (2009) several ways that affect the increase in body temperature in LBW include babies being placed in an incubator equipped with a temperature control device, couves that are given a heating lamp, swaddling the baby and KMC care. The results of this study are in line with previous studies showing that in terms of effectiveness as measured by increasing body temperature of LBW babies, the application of KMC method of treatment can have the effect of increasing body temperature on LBW babies optimally which can be started by doing IMD, namely immediately after the baby is born the baby is placed on the stomach. Mother to look for the mother's nipple and has been carried out on all LBW infants.

# e. Research Limitations

At the time the research took place at the same time as the Corona Virus 19

Pandemic Outbreak, so that the number of pregnant women who gave birth at the puskesmas decreased and the number of visits by post partum mothers to weigh their babies to the puskesmas also decreased so that the research implementation that should have been carried out in the puskesmas building was continued by home visits. mothers who have babies with LBW.

# 2. Conclusions and Suggestions

#### a. Conclusion

- 1) The difference in body temperature stability before the Momming Guide Kanggoroe Mother Care Skin To Skin Contact model was carried out. In LBW at the Yogyakarta Special Region Health Center, most of the body temperature was 36-37.5°C and in the control group, body temperature newborns was mostly body temperature. <36 °C.
- 2) Differences in body temperature stability after the Momming Guide model of Kanggoroe Mother Care Skin To Skin Contact on LBW at the Yogyakarta Special Region Health Center, most of the body temperature is 36-37.5°C
- 3) There is an effect of Momming Guide Kanggoroe Mother Care Skin To Skin Contact on Body Temperature Stability in LBW at Puskesmas Yogyakarta Special Region.

# b. Suggestion

1) For the family. Can be used as a guide for families who have LBW babies in providing interventions for Momming

- Guide Kanggoroe Mother Care Skin To Skin Contact.
- For nurses in inpatient health centers. Can be used as the implementation and replication of the intervention model with the Momming Guide Kanggoroe Mother Care Skin To Skin Contact.

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