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Dengan Tema  
"Quality Improvement in Nursing Education  
Toward Global Standard to Achieve Quality  
in Health Services"

Hermes Palace Hotel Banda Aceh, 28 - 30 November 2013

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## **National Seminar:**

**Quality Improvement in Nursing Education toward Global  
Standard to Achieve Quality in Health Services**

**Banda Aceh, Aceh – Indonesia, 28-30 November 2013**

**Secretary Office:**

**Asosiasi Institusi Pendidikan Ners Indonesia (AIPNI)**

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**RESEARCH REEPORT  
AINEC RESEARCH AWARD**

**ENVIRONMENTAL INFLUENCES ON BODY TEMPERATURE  
OF BABIES GIVEN EARLY BREASTFEEDING INITIATION  
IN THE DELIVERY WARD AT RUMKITAL  
DR. RAMELAN SURABAYA**

**BY :  
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**STIKES HANG TUAH SURABAYA  
2013, OCTOBER**

Environmental influences on body temperature of Babies given early breastfeeding initiation in the delivery ward at Rumkital dr . Ramelan Surabaya

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**ABSTRACT** : infant deaths that occurred in the first month can be prevented if the baby is breastfed by his mother in the first hour of birth . Early initiation of breastfeeding immediately after birth was very beneficial for both mother and baby, one of which is to prevent the occurrence of hypothermia in infants. Delivery room at Rumkital Dr. Ramelan Surabaya recommends mothers who gave births normally to perform IMD. Hypothermia incident has not been investigated at Rumkital Dr. Ramelan Surabaya. The purpose of this study was to determine whether there are environmental influences on infant body temperature in Delivery Room at Rumkital Dr. Ramelan Surabaya.

Using analytic observational study design, dependent variable of the study was hypothermia in infants. The independent variable was the environment at which the birth took place. Baby's body temperature was measured using a digital thermometer in the axilla infants given early breastfeeding initiation. Population in this research was mothers who delivered spontaneously in the delivery room of Rumkital Dr. Ramelan Surabaya. Sampling techniques applied was non-random sampling with consecutive sampling, of which the sampling was based on the availability. Statistical analysis used was regression.

The results showed an average temperature of 36.59° C baby's body. Room temperature obtained an average of 25° C. Statistical test p-value = 0.00, which meant there is the influence of the temperature of the room to the temperature of the baby who was given early breastfeeding initiation. On cold days, the baby's body temperature tends to decrease. Also the body heat can be lost through evaporation. Early initiation of breastfeeding is beneficial to control the baby's temperature.

Keyword: Environment, Body Temperature, Newborn

#### Background

Early initiation of breastfeeding in the newborn performed immediately after birth, should not be delayed to weigh or measure the baby's activity. Benefits of early breastfeeding initiation can also be seen from the research conducted by Bystrova et. al (2007) mentioning that *skin to skin* is recommended to reduce the incidence

hypothermia. Neonatal hypothermia due to lack of attention by health care providers is a very important cause of neonatal mortality (NTF, 2004). Incidence of hypothermia in the newborn was found in delivery ward Rumkital Dr. Ramelan Surabaya. Research conducted in Ghana and published in the scientific journal of Pediatrics says 22% of newborn deaths - the

infant mortality that occurred during the first month - could be prevented if the baby is breastfed by his mother in the first hour of birth. Toddler's death at the age of newborn babies (under one month) is accounted by 40 %. This figure is in accordance with The World Health Report in 2005. The neonatal mortality rate in Indonesia is 20 per 1,000 live births . Approximately 20 per 1,000 x 5 = 246 million were dead babies. IMD program can save at least 30,000 Indonesian infants who died within the first month of birth (Arifah, 2009).

Early initiation of breastfeeding done correctly increases the interaction between mother and her baby. As mother's skin touches, the way she saw her baby stimulates a hormone, called oxytocin which makes her relaxed so that it grows bond of love between mother and baby. Position of the baby in the mother's chest prevents hypothermia at the initiation of early breastfeeding.

Mother's body temperature is 1 degree higher at the time of delivery. Mother's body temperature adjusts the body temperature of baby. Mother's body temperature will drop 1 degree when baby's temperature is higher resulting in displacement of the mother to the baby's body temperature. Mother's body temperature rose two degrees when the baby's body temperature gets lower so as to warm baby ( Roesli , 2008)

## **Materials and Research Methods**

### **Design, Variable, Population and Sample**

This study used observational analytic design with cross - sectional design. Dependent variables in the study were the given temperature in the baby during IMD. The independent variable was the environment at which the birth took place Population in this research were mothers with spontaneous delivery in the delivery room of Rumkital Dr. Ramelan Surabaya. Early Initiation of Breastfeeding given immediately after the baby was born with a monthly average of 40 mothers. The samples were several mothers who underwent spontaneous delivery in the delivery room of Rumkital Dr. Ramelan Surabaya administering early initiation of Breastfeeding to babies immediately after birth in accordance with inclusion and exclusion criteria.

Criteria for inclusion in this study were applied to infants and mothers. Inclusion criteria for infants were: gestational age infants born > 37 weeks up to 40 weeks, body weight > 2500 grams up to < 4000 grams, Apgar score > 7. Inclusion criteria for the mother were those who were willing to research respondents, with the maternal vaginal delivery without complications. Exclusion criteria for infants were: infants who have congenital abnormalities birth, infants with other comorbidities such as congenital heart disease, infants with hypoglycemia. Exclusion criteria for mothers were: depressed mothers, birth mothers with premature rupture of membranes more than 24



hours.

### Procedure

Researchers introduced themselves to prospective respondents subsequently requested permission to have prospective respondents' willingness to participate in the study and explain the benefits, objectives and procedures of research ethics and the rights of the respondents. Respondents were willing to sign a consent form, whereas questionnaire and interviews were extended to fill the demographic data. Respondent mothers and babies at the time of delivery were still practicing IMD according to the recommended procedure. The temperature was taken at the end of the implementation of early breastfeeding initiation.

Temperature measuring instrument used for the baby was a digital thermometer, applied in axilla. After three minutes the result was documented in the observation sheet temperature. Measurement results were expressed in absolute values with units of Celsius degrees. Room temperature was measured at the time of execution of early breastfeeding initiation. The instrument used was a room thermometer. Measurement results were expressed in absolute values in of Celsius degree units. In data collection researchers were assisted by trained health personnel. The data were then collected and data analysis was carried out in accordance with the research objectives.

### Results

The research was conducted at Naval Hospital Dr. Ramelan Surabaya which began on 25 July to 7 September 2013. The research took place in E1 (delivery ward) which is a high risk perinatal and is supervised by the department of KIA (Mother and Infant Healthcare Service). The subjects in this study were mothers undergoing spontaneous delivery in room E1 Rumkital Dr. Ramelan Surabaya who were giving Early Initiation of Breastfeeding to their babies immediately after birth. The overview of data characteristics taken from the mothers generated information concerning: maternal age, education, occupation, pregnancy status, number of previous children, and husband's support towards breastfeeding.

Table 1.1 General respondents' Data on The Study of effects of environment to newly born babies' body temperature who were given early breastfeeding initiation in RSAL Dr. Ramelan Surabaya July 25 - 7 September 2013.

N	Respon o dents' Charac teristics	Freque ncy(f)	Perce ntage (%)
1	Age		
	a. 20 y.o – 24 y.o	8	19,05
	b. 25y.o – 29 y.o	21	50,0
	c. 30y.o – 34 y.o	8	19,05
	d. >35 y.o	5	11,9

2 Education Level		
a. Unfinished Elementary	0	0
b. SD graduate	0	0
c. SMP graduate	0	0
d. SMA/SMK graduate	30	71,4
e. University graduate	12	28,6
3 Occupation		
a. Housewife	28	66,7
b. Private Sector	12	28,6
c. Civil Servants/Military	1	2,35
d. Enterpreneurs hip	1	2,35
4 Pregnancy statuse number:		
a. 1	12	28,6
b. 2	18	42,9
c. 3	10	23,8
d. >3	2	4,7
5 Previous Children		
a. 0	12	28,6
b. 1	24	57,1
c. 2	6	14,3
d. 3	0	0
6 Husband support for Breastfeeding		
a. No	0	0
b. Yes	42	100

General data characteristics of respondents by age indicated: 8 respondents ( 19.05 % ) were aged 20-24 years , 21 respondents ( 50 % ) aged between 25 -29 years , 8 respondents ( 19.05 % ) were aged 30-34 years and 5 people ( 11.9 % ) aged over 35 years. In Education category the highest percentage went to high school graduate / vocational, i.e. 30 respondents (71.4 %), meanwhile, the remaining 12 respondents ( 28.6 %) have some

college education. Current data of respondents' occupation showed more than half of the respondents were housewives (IRT) of (66.7 %) while the least was self-employed and civil servant/military personnels as many as 1 (2.35%).

Data on current pregnancy status of most respondents were the pregnancy of the 2nd child (42.9%). In addition, the number of children before the birth of the current baby showed that more than half of the respondents had their first child (57.1%) while the least was pregnancy status for over than 3 times as many as 2 people (4.7%) with the number of children before the current delivery was at least 2, represented by 6 respondents (14.3%). Breastfeeding support was given by hubands as much as (100%).

In breastfeeding initiation, the length of time when the mothers were in touch with the babies was measured. Provision of early initiation of breastfeeding duration observed from infant attachment to mothers chest. Subsequently, environmental data were taken from the temperature of the delivery room. Regarding the baby's condition Apgar score was observed along with the length, weight and the baby's body temperature as displayed in the following table.

Table 1.2 Respondents' Data on the study of environmental effects on newborns who were given early breastfeeding initiation in RSAL Dr. Ramelan Surabaya July 25 - 7 September 2013.

No resp	Duration IMD (minute)	Babies' Data			Room Temp ( <sup>0</sup> C)
		BW/BL (gr/cm)	Temperature ( <sup>0</sup> C)	AS	
1	5	3750/51/L	36 <sup>5</sup>	8-9	22 <sup>0</sup>
2	8.5	3100/50/L	36 <sup>7</sup>	8-9	22 <sup>0</sup>
3	10	3700/52/L	36 <sup>7</sup>	8-9	25 <sup>0</sup>
4	7.45	2950/47/P	36 <sup>5</sup>	8-9	24 <sup>0</sup>
5	4.2	3200/53/L	36 <sup>7</sup>	8-9	25 <sup>0</sup>
6	12.45	3000/48/P	36 <sup>7</sup>	8-9	25 <sup>0</sup>
7	10.45	3150/49/P	36 <sup>9</sup>	8-9	24 <sup>0</sup>
8	12.16	3350/50/L	36 <sup>5</sup>	8-9	22 <sup>0</sup>
9	9.18	2900/50/P	36 <sup>7</sup>	8-9	22 <sup>0</sup>
10	10	3700/55/L	36 <sup>5</sup>	8-9	25 <sup>0</sup>
11	4.5	3400/51/P	36 <sup>5</sup>	8-9	25 <sup>0</sup>
12	10.3	2900/47/P	36 <sup>8</sup>	8-9	24 <sup>0</sup>
13	2.3	3750/51/L	36 <sup>6</sup>	8-9	24 <sup>0</sup>
14	4.46	2750/50/P	36 <sup>6</sup>	8-9	25 <sup>0</sup>
15	7.56	3500/53/L	36 <sup>5</sup>	8-9	22 <sup>0</sup>
16	8.57	3750/52/L	36 <sup>6</sup>	8-9	23 <sup>0</sup>
17	5.25	3000/51/P	36 <sup>5</sup>	8-9	24 <sup>0</sup>
18	10.37	3750/53/L	36 <sup>7</sup>	8-9	24 <sup>0</sup>
19	12.15	3100/51/P	36 <sup>7</sup>	8-9	24 <sup>0</sup>
20	7.45	3700/51/L	36 <sup>6</sup>	8-9	25 <sup>0</sup>
21	3.57	3000/50/L	36 <sup>5</sup>	8-9	25 <sup>0</sup>
22	11.21	3700/53/L	36 <sup>8</sup>	8-9	22 <sup>0</sup>
23	10.42	3400/52/L	36 <sup>7</sup>	8-9	24 <sup>0</sup>
24	6.31	3250/51/P	36 <sup>5</sup>	8-9	24 <sup>0</sup>
25	4.27	3100/49/P	36 <sup>5</sup>	8-9	25 <sup>0</sup>
26	4.39	2800/50/P	36 <sup>6</sup>	8-9	25 <sup>0</sup>
27	10.29	3250/51/P	36 <sup>8</sup>	8-9	22 <sup>0</sup>
28	8.38	3100/52/L	36 <sup>7</sup>	8-9	22 <sup>0</sup>
29	2.12	2750/50/P	36 <sup>6</sup>	8-9	23 <sup>0</sup>
30	7.32	3350/51/L	36 <sup>7</sup>	8-9	24 <sup>0</sup>
31	13.28	2500/49/P	36 <sup>6</sup>	8-9	22 <sup>0</sup>
32	9.36	3750/52/L	37 <sup>1</sup>	8-9	25 <sup>0</sup>
33	5.42	2950/51/P	36 <sup>5</sup>	8-9	23 <sup>0</sup>
34	9.48	3500/50/L	36 <sup>5</sup>	8-9	25 <sup>0</sup>
35	10.32	3100/52/L	36 <sup>5</sup>	8-9	25 <sup>0</sup>
36	12.45	3400/52/L	36 <sup>5</sup>	8-9	25 <sup>0</sup>
37	9.32	3100/52 /L	36,5	8-9	29 <sup>0</sup>
38	10.45	3300/51 /L	36,7	8-9	30 <sup>0</sup>
39	6.52	2900/49 /P	36,4	8-9	29 <sup>0</sup>
40	12.40	3000/50 /L	36,5	8-9	29 <sup>0</sup>
41	11.22	3000/52 /L	36,3	8-9	29 <sup>0</sup>
42	13.35	2850/49 /P	36	8-9	28 <sup>0</sup>
<b>Average Environment Temp 25,44<sup>0</sup> C</b>					
<b>Average Newly Born-Babies Temp 36, 5<sup>0</sup> C</b>					
<b>p = 0,000 &lt; α = 0,05</b>					

Table 1.3 showed that the average ambient temperature of 42 respondents in childbirth with 25.440 C were 36 respondents (85.72%) of the total respondents who earned less than the exposure to the ambient temperature and the average of the remaining 6 respondents (14.28%) of the total respondents who got exposure to ambient temperature over the average value. The average temperature of the newborn is given IMD of 42 respondents was 36.50 C, as many as 3 respondents (7%) of respondents who had below-average temperatures and the remaining 39 respondents (93%) of respondents who experienced temperatures higher than average values average . Statistical test results showed  $p$  value = 0.000 < 0.05 , which indicates there are environmental influences on temperatures in infants who do IMD.

### **Discussion**

Ambient temperature in room E1 Rumkital Dr . Ramelan Surabaya gained as much as 85.72 % above the average and the remaining 14.28 % was more than average. Maternity room temperature should be set between 25°C - 28°C but still earned less room temperature 25°C when the respondent gave birth and when respondents do IMD much as 52.3%, and the room temperature was between 25°C - 28°C and as much as 35.7 % of respondents were exposed to temperature >28°C by 12%. Different environmental temperature is due to the number of people who are in a room where there is a 3 bed

room 1 that if there are patients who gave birth to all the officers who served on the shift will come delivered and the number of nursing students, midwifery and medicine, as well as the husband is allowed to accompany respondents in labor. Irradiation indoor, outdoor temperature where the temperature at the time of data collection Surabaya range 32°C-35°C.

Temperature newborns less than an average of 7% and the remaining 93% are more than the average values. Baby temperature difference may be caused by the process of heat loss from the body through the process of convection that can come from evaporation, radiation and conduction as the cold air on the outside walls and windows, the baby born is not directly drained from the amniotic fluid, the cold hands of nurses, beds, blankets, stethoscope is cold, the air flow from the air conditioning pipe. To reduce the risk of heat loss in the newborn one intervention is implementing the program IMD soon as the baby is born, but the implementation may not run in accordance to its SPO.

Implementation of early skin contact between mother and baby immediately after birth is a permanent procedure in delivery ward on every mother who gave birth spontaneously and mother and baby are in good shape. Early skin contact activities carried out in an effort to implement the IMD program. Early Initiation of Breastfeeding completed then the baby was measured its weight, body length

and given identity, vitamin K injection, antibiotic ointment in the eye and then rooming is carried out. Skin contact early though has become standard procedure in the implementation of the IMD, but in fact these activities are not in accordance with the duration that is in theory as well as those already established in the fixed room procedure.

Timing of initiation of early breastfeeding on 42 respondents earned on average about 8.4 minutes. The data in Table 1.3 shows the number of 16 respondents ( 38.1 % ) to get the timing of initiation of early breastfeeding for <8.4 minutes, and 26 respondents (61.9%) to get the timing of initiation of early breastfeeding for >8.4 minutes so that it can be said more than half of the respondents get the duration of early SSC more than 8.4 minutes.

The observation of the timing of early breastfeeding initiation is performed on infants and maternal obtained varying duration. Facts on the field is due to differences in the duration of an understanding of time is recommended for skin to skin attachment between mother and baby is different each birth attendants, maternal and infant conditions are subject to change affecting the provision of skin contact in the IMD activities, the number of patients who gave birth in span almost the same time making birth attendants tend to want to quickly complete the process of delivery aid, so that the baby sooner removed from the mother's chest, the other

factors of mothers who lack an understanding of the benefits of skin to skin contact so that his own mother is asked to raise her baby before the recommended time also a factor supporting the provision of early skin contact duration different.

Implementation supervision/ monitoring of the implementation of early SSC is not done and just socializing alone also cause premature skin contact duration applying the appropriate SPO, and departments in implementing policies that only time for  $\geq 20$  minutes that should be in accordance with the prevailing theory that is  $\geq 60$  minutes. Roesli (2012) explains that early skin to skin contact between mother and baby were left for at least one hour , in order to suckle well . Procedures remain in the space E1 of the management of Early Initiation of Breastfeeding (Early Bonding) mentions the recommended duration of early SSC 8th in points that allow skin contact with baby's skin of the mother until the first feeding is completed or during the mother wants it (recommended  $\geq 20$  minutes).

Statistical test results showed that there are significant environmental effects on the baby's temperature is done IMD. Can be seen from the number of respondents who had a baby temperature below  $36.5^{\circ}\text{C}$  by 7% gain exposure to the ambient temperature  $28^{\circ}\text{C}$ - $29^{\circ}\text{C}$ . Obtained 93% with normal temperature  $36.5^{\circ}\text{C}$ - $37.1^{\circ}\text{C}$  are getting exposure to room temperature less than 56.4% on average, as

much as 35.9% with a temperature of 25°C, and 7.7%.

This can be affected by the loss of the baby's body heat through evaporation occurs, convection, conduction, radiation while in the delivery room, baby's birth weight, the implementation of the IMD.

During development, the embryo is surrounded by the maternal environment on the body temperature normal. At birth, the baby's temperature regulation mechanism is not fully functional. Babies lose heat rapidly due to its small size. Temperature regulation center receives the information from the two sets of temperature receptors in the skin and in the hypothalamus. Under normal circumstances, the body's set point temperature of approximately 37°C. If the body temperature rises above the target of 37.20 C activity in the center there are 2 temperature settings effector namely: 1) the muscle tissue in the blood vessels that supply blood and skin, and 2) the sweat glands. Experience the relaxation of muscle tissue, dilated blood vessels thus increasing blood flow through blood vessels near the surface of the body and the sweat glands increase the secretions. The skin is then working as a radiator to dissipate the heat into the environment and the process of evaporation of sweat glands so that the body temperature back to normal. Temperatures in the hypothalamic thermoregulatory center declined and became less active. Blood flow and sweat gland activity back to normal as

before. When the ambient temperature is high or during periods of exercise, skin blood vessels dilated and blood flow to peripheral areas increased, resulting in greater heat loss. Appropriate interventions to maintain the baby's body temperature in the normal state with IMD.

Roesli 2008 mention skin to skin contact immediately after birth, and infant feeding in the first hour itself is important in life. Mother's breast with baby warm during baby crawling for the right breast. This would reduce infant deaths due to the cold (hypothermi). Mother and baby feel more calm. Baby's breathing and heart rate is more stable. Roesli (2008) says there are some opinions that inhibit the occurrence of premature skin maternal contact with the skin such as baby cold baby. The baby is in a safe temperature if skin contact with the mother, the breast temperature increased 0.5 degrees in two minutes if the baby is placed on the mother's chest. The results Bergman (2005) in Roesli 2008, found that mothers who gave birth to the chest temperature to 1°C warmer than temperatures that do not give birth to the mother's chest.

Babies placed on the mother's chest when the feel the heat , the temperature of the mother's chest will drop 1°C, when the baby was cold, the mother's chest temperature will increase by 2°C to warm the baby. Newborns are homothermic, but his ability to keep warm is affected by ambient temperature extremes. Body heat loss can occur either at the time

was still in the delivery room or in the nursery. Heat transfer from the surface of the body to the environment can occur in 4 ways that radiation, conduction, convection and evaporation (Klaus et.al, in Klaus & Fanaroff, 1998). Radiation heat is lost baby because the baby's body is hotter in direct contact with a colder surface. It occurs when a baby is in a cold room. Counting room temperature at the time of the research conducted, obtained an average room temperature of 25°C in the maternity room Rumkital Dr. Ramelan Surabaya. Temperature of 25°C is the temperature that is comfortable for the patient and birth attendants, because at temperatures below 25°C near the door or window is open and the baby is naked it will lose heat through convection, which can cause hypothermi.

Implementation of the IMD in Delivery Room Rumkital Dr. Ramelan baby Surabaya condition attached to the mother's chest skin contact with the baby's mother's skin, the parts that are not attached to the mother leather wrapped bedong, use headgear. The recommended ambient temperature is the temperature of 25°C-32°C. The results support the view Roesli (2005) and JNPKR (2008 ) which states that the benefit of early initiation of breastfeeding in the baby's temperature control. On cold days, the baby's body temperature tends to decrease. Also the body heat can be lost through evaporation, which can happen if a newborn baby was flooded by amniotic fluid.

Newborns in Maternity room of Dr. Ramelan Hospital Surabaya directly given early breastfeeding initiation, the implementation of amniotic fluid drained inherent on baby's body, wrapped in a cloth body, just stay still wet palms with the rest of the amniotic fluid. So that body heat loss resulting from evaporation does not occur. The results showed an average body temperature of 36.5°C baby. Baby's normal body temperature is around 36.5°C categorized - 37.5°C.

Evaporation is heat loss due to evaporation of fluid from the baby's skin wet with amniotic fluid / water because the baby was not immediately dried. At a very young infants (<1500 g) increased heat loss through evaporation on the first day of life due to a very thin skin and very permeable (Klaus et . Al , in Klaus & Fanaroff, 1998). Factors affecting the baby's body temperature such as the environment, activity and weight infants. The study was conducted in infants with normal weight range between 2500 grams to 3750 grams. Weight baby already has a sub-cutaneous fat pads which is enough to minimize heat loss through evaporation. Efforts to reduce the evaporation of heat through evaporation by adding blankets are used for the implementation of early breastfeeding initiation.

The results showed that the average weight of the infants observed respondents is 3225 grams . Weight loss is included in the normal weight category. Babies with normal weight have

relatively more body surface area is proportional to the weight so as to conserve body heat. The cause of hypothermia in infants is thin subcutaneous fat tissue, body surface area comparisons with a large body weight, and fat reserves of glycogen and brown slightly.

Heat loss in newborns will easily occur because of the ability to retain heat and heat production capability is very limited, which may cause the baby to experience hypoxia, metabolic acidosis, hypoglycemia, apnea, failure to gain weight even increased mortality, so the temperature setting is fundamental to neonatal care while keeping the baby warm by carrying out appropriate SPO IMD after the baby is born, keep the temperature of 25°C treatment rooms 28°C, heating procedure done after the baby is born like a kangaroo method, place the baby under radiant heating or incubator if necessary, Avoid placing the baby in contact with a source of heat or cold source, keep the baby dry skin and keep the baby's head remains closed, watch your baby to changes that indicate a cold stress.

### Conclusion

Environmental influence on the incidence of infant hypothermi given early breastfeeding initiation suggestion

1. Respondents pregnancy classes as an alternative insight enhancer mother especially early breastfeeding initiation problems during delivery so that patients

can ask for early breastfeeding initiation facilities for health personnel.

2. SPO develop implementation early breastfeeding initiation (IMD) are adapted to the type of delivery and involve partner to improve bonding between mother, baby and family

3. Future studies are expected to use a different design with a treatment group compared with the control group making it produce more varied conclusions and further research can proceed to analyze the factors that affect hypothermia, so it can look more precisely the extent of the influence of Early Initiation of Breastfeeding (IMD) against hypothermia .

### References

- Arifah, I. (2009). *Perbedaan Waktu Keberhasilan Inisiasi Menyusu Dini antara Persalinan Normal dengan Caesar di Ruang An-Nisa RSI Sultan Agung Semarang*. Program Studi Ilmu Keperawatan Fakultas Kedokteran Universitas Diponegoro : Skripsi tidak dipublikasikan.
- Bobak. (2004). *Buku Ajar Keperawatan Maternitas, Edisi 4*. Jakarta : EGC
- Hidayat, AAA. (2007). *Riset Keperawatan dan Teknik Penulisan Ilmiah*. Jakarta : Salemba Medika.
- Janov, A. (2010). *Skin to Skin Contact Kangaroo Mother Care*, <http://www.pregnancy-and-giving-birth.com>, ¶ 3, diunduh tanggal 18 Agustus 2013 jam 17.56 WIB.
- JNPK-KR. (2008). *Asuhan Persalinan Normal & Inisiasi*



- Menyusui Dini*. Jakarta : Departemen Kesehatan Republik Indonesia.
- Kostyra, M., et al. (2002). *Effect of early skin to skin contact after delivery on duration of breastfeeding*, <http://www.ncbi.nlm.nih.gov/pubmed> , ¶ 4, diunduh tanggal 15 Agustus 2013 jam 01.30 WIB.
- Kritiyanasari, W. (2009). *ASI, Menyusui & SADARI*. Yogyakarta : Nuha Medika.
- Maritalia, D. (2012). *Asuhan Kebidanan Nifas dan Menyusui*. Yogyakarta : Pustaka Pelajar.
- Marmi. (2012). *Asuhan Kebidanan pada Masa Nifas*. Yogyakarta : Pustaka Pelajar.
- Moore, ER., et al. (2007). *Early Skin to Skin Contact for Mothers and Their Healthy Newborn Infants*, <http://www.ncbi.nlm.nih.gov>, ¶ 2, diunduh tanggal 19 Agustus 2013 jam 11.30 WIB.
- Newman, J. (2005). *The Important of Skin to Skin Contact*, [http://www.naturalchild.org/guest/jack\\_newman2](http://www.naturalchild.org/guest/jack_newman2), ¶ 6, diunduh tanggal 7 April 2013 jam 12.10 WIB.
- Nurasiah, A., Ari,R & Dewi,L. (2012). *Asuhan Persalinan Normal Bagi Bidan*. Bandung : Refika Aditama.
- Nursalam. (2011). *Konsep dan Penerapan Metodologi Penelitian Ilmu Keperawatan, Pedoman Skripsi, Tesis, dan Instrumen Penelitian keperawatan*. Jakarta : Salemba Medika.
- Purwaningsih, Wahyu. Dan Siti, F. (2010). *Asuhan Keperawatan Maternitas*. Yogyakarta: Numed.
- Rahmawati, E. (2012). *Hubungan Pelaksanaan Inisiasi Menyusui Dini (IMD) dengan Waktu Pengeluaran ASI pada Ibu Post Partum Di RSUD Sidoarjo*. Program Studi S1 Keperawatan Stike Hang Tuah Surabaya : Skripsi tidak dipublikasikan.
- Ramaiah, S. (2007). *ASI dan Menyusui Panduan Praktis bagi Ibu Setelah melahirkan*. Jakarta : PT Bhuana Ilmu Populer.
- Roesli, U. (2012). *Panduan Inisiasi Menyusui Dini Plus ASI Eksklusif*. Jakarta : Pustaka Bunda.
- Sujarweni, VW. (2012). *SPSS untuk Paramedis*. Yogyakarta : Gava Media.
- Welch, J. (2011). *The Amazing Powers of Skin to Skin Contact*, <http://bummis.wordpress.com> , ¶ 2, diunduh tanggal 18 Agustus 2013 jam 15.30 WIB.