

GESTATIONAL DIABETES MELLITUS AND BIRTH WEIGHT WITH RESPIRATORY DISTRESS SYNDROME (RDS)

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ABSTRACT

Objective study: To know if there is a connection between Diabetes Mellitus Gestational and Birth Weight with the Occurrence of Respiratory Distress Syndrome (RDS) in Neonates. **Methodology:** Research This uses quantitative including type study observational analytics with a cross-sectional approach. The population is as many as 124. Sample in the study This has as many as 95 types of sample proportional random sampling using the formula Slovin. Instrument study form sheet observations and sheets record medical. The statistical test used is Fisher Exact in the 2x2 table and Kolmogorov Smirnov in the 3x2 table. **Results:** Research results using Fisher Exact shows There is a connection between Gestational Diabetes with incident Respiratory Distress Syndrome (RDS) found $p\text{-value } 0.014 < 0.05$ and shows There is a connection between Birth Weight with the incidence of Respiratory Distress Syndrome (RDS) using the Kolmogorov Smirnov test obtained $p\text{-value } 0.019 < 0.05$. **Conclusions:** Be referenced. Expected therapy can help mom _ pregnant with Maternal Diabetes in the prevention incident Respiratory Distress Syndrome in the Neonate later Possible will benefit others.

Keywords: Gestational Diabetes, Birth Weight, Respiratory Distress Syndrome.

INTRODUCTION

Reason neonatal death is a disturbance or abnormality respiration 35.9%, prematurity 32.4%, sepsis 12%, hypothermia 6.3%, abnormalities blood/jaundice 5.6%, post maturity 2.8%, and abnormalities congenital 1.4%. Meanwhile, the enhancement amount death neonates in 2012 was caused by emergency breath neonates, namely 159 cases of asphyxia 68.24%, 26 cases of *Meconial Aspiration Syndrome* 11.2%, 56 cases of *Respiratory Distress Syndrome* 24.03%, LBW

and neonates premature 146 cases 62.7%, sepsis 102 cases 43.8%, 16 cases pneumonia 6.9%, 5 cases apnea prematurity 2.2% (Marfuah, 2013). Factors reason for perinatal death is premature, disorder breathing, sepsis, and neonatal and congenital abnormalities. At 0-7 days, disturbance in breathing cause perinatal mortality of 35.9% and premature by 32.3%. While at the age of 7-28 days, the reason for death highest is neonatal sepsis at 20.5% and abnormalities congenital at 18.1% (MOH RI, 2008). Respiratory distress syndrome is from failed breath marked with hypoxemia, decreased lung compliance, dyspnea, pulmonary edema bilateral without fail heart, and infiltrates that spread (Somantri, 2009). Respiratory distress syndrome (RDS) is gathering symptom which consists of dyspnea, frequency more breathing than 60 times

per minute; there is cyanosis, yes groans at the moment of expiration (*expiratory grunting*), as well exists suprasternal retraction, intercostal and epigastric moments inspiration. Disease This is a membrane hyaline, where change or decrease pulmonary component surfactant (active substance alveoli that can prevent collapse lungs and can withhold remainder air at the end-expiration) (Hidayat, 2008). Data The World Health Organization (WHO) notes that nearly 200 million people worldwide suffer from *gestational diabetes mellitus* and estimate that in 2025, the sufferer Can reach around 330 million. In Indonesia alone, based on data, which recorded more than 13 million sufferers of *Diabetes Mellitus Gestational*; based on these data is estimated will increasingly become more than 20 million sufferers by 2030. Not only parents, adolescents, and adults, young also attack *Diabetes Mellitus* (Pudjiastuti, 2011). Abnormalities default fetus moment This is one reason death perinatal in 10% of case pregnancies with *Diabetes Mellitus* type 1, type 2, And *Diabetes Mellitus gestational*, which is not a flirtation with ok. Babies with macrosomia will experience lung disturbance maturation that eventually improves incident *Respiratory Distress Syndrome* (Gonzalez GNL et al., 2014). Birth

weight indicates important perinatal death, death of babies, and morbidity.

In A study fetus with a heavy birth weight of < 2500 grams own a risk of death baby by 20 times, and a Jenin with a birth weight <1500 grams owns a risk of death 90 times (Maria, 2008). *Respiratory distress syndrome* (RDS), also called *hyaline membrane disease* (HMD), is a syndrome bad caused by breath deficiency surfactants, especially in newborns with gestation lacking (Stark, 2010).

Manifestation from RDS causes atelectasis of alveoli, edema, cell damage, and so on, causing the leak of serum proteins in the alveoli to hinder surfactant functions. Surfactant is something substance that can lower voltage alveoli walls of the lungs. Growth surfactant lungs reach the maximum for the week 35th pregnancy. A deficiency of surfactant causes a disturbance ability of the lungs to maintain stability; alveoli will return to collapse at every end of expiration so that breathing next needs more negative intrathoracic pressure accompanying large business strong inspiration. Clinical sign syndrome bad breath is breathing rapid, perioral cyanosis, moaning time expiration, substernal and intercostal retraction(Pantiawati , 2010). Thoracic photo: On the basis of exists disturbance possible breath caused by various reason And for see circumstances lung, so baby need done inspection Photo thoracic.

Inspection blood: necessary inspection blood Complete analysis of blood gases and electrolytes. Management mainly in babies RDS that is therapy oxygen Which covers ventilation mechanic, gift surfactant, inhalation Nitric Oxides (iNO), And support nutrition. Ventilation mechanic is action Which often needed on maintenance baby new born Which experience something diseases and problems breathing including babies premature. Ventilation mechanic This given in time Which short or often Also given in period time Which long (Balaguer, Escribano & Figuls, 2008). Ventilation mechanic is Wrong One action for give supply oxygen on baby Which experience hypoxaemia. Measures noninvasive Also in do for increase effectiveness ventilation and perfusion. Action noninvasive This done as support to action invasive like on installation ventilation mechanic baby Which experience problem breathing. False One action noninvasive Which support therapy oxygen is arrangement position disease DM that happened to the mother pregnant who is not have history diabetes previously but have glucose high blood during pregnancy (ADA, 2016). In circumstances This placenta support baby for still grow. Hormones present in placenta help baby in the

process of development but hormone This prevent insulin action in the body his mother (IDF, 2012).

Gestational diabetes affects condition Mother at the end pregnancy, after formation body baby but baby still growing for a reason it's not gestational diabetes cause baby become disabled born (ADA, 2016). Gestational Diabetes If No controlled or No done handling can hurt baby. Pancreas Mother Work extra For produce insulin but not insulin can control glucose blood, so glucose high blood _ pass placenta with give rate glucose blood tall to baby, matter This can cause pancreas baby Work extra For produce insulin For get rid of glucose blood (ADA, 2016). Disease diabetes mellitus Not yet is known reason main. According Minister of Health [KEMENKES] (2017) causal factors DM occurs there are 2 factors that is factor that is not can modified (race , age , breed gender and history family with DM) and can modified (pattern life , obesity , and activity). Whereas according to Sacher and McPherson (2002) stated reason occurrence of diabetes mellitus Because exists defects in insulin action, insulin secretion or both.

1. Complications I

a). hypoglycemia

hypoglycemia is circumstances Where rate glucose in the low blood pressure occurs when blood sugar levels down below 60 to 50 mg/dl (2.27 to 3.3 mmol/L) (Smeltzer & Bare, 2006).

b). Diabetic Ketoacidosis

Diabetic ketoacidosis caused by no presence of insulin or No enough real amount of insulin This resulted disturbances in metabolism carbohydrates, proteins and fats (Smeltzer & Bare, 2006).

2) Complications Chronicle

According to Smeltzer & Bare (2006) complications chronic diabetes can attack all internal organ system body. Category complications chronic namely:

a) Disease Macrovascular

Change atherosclerotic in vessels blood big often occurs in diabetes. Various type disease macrovascular can happen depends on location lesion atherosclerotic (Smeltzer & Bare, 2006). Usually about artery coroner cause infarction myocardial, cerebrovascular cause stroke, vascular peripheral cause incident gangrene and amputation on patient diabetes.

b) Disease microvascular

Complications microvascular is complications Which only happen on patient diabetes. Example from disease microvascular is retinopathy diabetic This happen caused by changes in the vessels blood

small on eye retina. There are 4 pillars of managing diabetes mellitus. The four pillars is DM education, a good DM diet and balanced, appropriate and regular medication, and *exercise*. Heavy baby born is weighed baby in time 1 O'clock First after born. Connection between heavy born with age pregnancy, heavy baby born can grouped: baby not enough month (BKB), that is baby Which born with period gestation < 37 Sunday (259 day).

According to Kosim (2009) Heavy baby born based on weight can grouped to be:

Low Birth Weight Babies (LBW)

Birth weight with heavy born < 2500 grams without looked age gestation (Kosim, 2009). According to Prawirohardjo (2007, p.376), LBW is neonates with birth weight at the time birth not enough from 2500 gram (up to 2499 gram). Formerly baby This said premature Then agreed called low birth weight infant or Low Birth Weight Babies (LBW). Because of the baby the No forever premature or not enough month but can Enough month nor more months. Research by Gruendwald, shows that one third baby heavy born low is baby term. (Kosim, 2008). According to Jitowiyono and Weni (2010) babies with LBW can shared into 2 groups, namely: Premature Pure and Dismaturity Premature pure is neonates with age pregnancy not enough than 37 weeks and have appropriate weight with weight for gestational age, or normal called neonates not enough month according to gestational age.

Dismaturity or Small for gestational age is baby born with less weight from real weight for pregnancy. Baby heavy born low is problem important in its management Because have trend to direction increase occurs infection, distress arrange breath body so that easy to suffer hypothermia. Besides that baby with Low Birth Weight Babies (LBW) easy attacked complications certain like jaundice, hypoglycemia can cause death. Group baby heavy born lowyang can be termed with group risk high, because the baby is heavy born low showing number higher health and death _ with heavy baby born enough.

1) Baby Heavy Born Normal

New baby normal birth is born baby _ from pregnancy up to 42 weeks and birth weight > 2500 - 4000 grams (Jitowiyono & weni, 2010).

2) Baby Heavy Born More

Heavy baby born more is a newborn baby with heavy born more than 4000 grams (Kosim , 2009). Baby with heavy born more Can caused Because exists influence from pregnancy postterm, if happen change anatomy of the placenta so happen decline fetus, from study Vorher looked that after age 36 weeks of gestation average chart growth fetus horizontal and visible exists decline after 42 weeks.

However often the placenta Still can function with Good so that heavy fetus increase Keep going in accordance with increase age pregnancy. average heavy fetus > 3600 grams by 44.5% in pregnancy postterm , whereas in term pregnancy it was 30.6%. Risk labor baby with weight > 4000 grams in pregnancy postterm increased 2-4 times more big from term pregnancy (Prawirohardjo, 2008). Besides That factor risk baby heavy born more is Mother pregnant with diabetes mellitus, mother _ with 40% DMG will give birth to baby with excessive BB on all age pregnancy (Prawirohardjo ,2008). Heavy born is results interaction from various factor through something process Which going on during is at in content. factors who can influence heavy baby born is as following:

Factor environment internal influence heavy baby born between other as following :

1) Mother's age pregnant

According to Sitorus (2009) states Age Mother tight relation with heavy baby birth, pregnancy under 20 years old is pregnancy risky high , 2-4 times more high in comparison with pregnancy in sufficient women _ age .At a still age young , the development of the reproductive organs and functions physiology Not yet optimal.Besides That emotions and his psyche Not yet Enough ripe , so that on moment pregnancy Mother the Not yet can respond her pregnancy in a manner perfect and often happen complications . Besides That the more young age Mother pregnant , then that child born will the more light . Although pregnancy under age is very risky but pregnancy on 35 years old too No highly recommended dangerous . Remember start age This often appear disease like hypertension , tumors benign breed, or disease degenerative joints _ bone back and hips . According to Sitorus (2009) states that Other difficulties of pregnancy on 35 years old This ie when Mother it turns out suffer disease like above that scared baby born with bring abnormality .

In labor _ alone , pregnancy at age more This will face difficulty consequence weak contraction womb as well as often arise abnormality on bone pelvis middle . Remember that factor age hold role important to degrees health and welfare Mother pregnant as well as baby , then should plan pregnancy at age between 20-35 years . According to MOH RI (2008) states that Mother should Mother pregnant at the age of 20-35 years , because of that period it's a safe time For pregnant reason , start age 20 years uterus and parts – part others Already Correct – Correct Ready For For accept pregnancy.On age the usually woman Already feel Ready For become mother . And preferably No pregnant on age > 35 years , because health body Mother Already No as

good as at 20 – 35 years , usually Mother Already have two children or more , likely obtain child disabled more big .

According to MOH RI (2008) states that pregnancy at age under 20 years uterus and pelvis Mother Not yet develop with well , until need watch out possibility experience difficult labor and poisoning _ pregnant , meanwhile pregnancy at age > 35 years health and circumstances womb No as good like 20-35 years old _ before , until need watch out possibility happening prolonged labour , bleeding and risks disabled default . Besides That the more young and getting old age a Mother Which currently pregnant , will influential to need nutrition Which required . Age Which young need addition nutrition a lot Because besides used For growth and development himself you have to yourself too share with the fetus she is carrying. Meanwhile old age _ it takes a lot of energy too because increased organ function weakened and required For Work maximum so need addition enough energy _ To use support that pregnancy currently going on (Kristyanasari , 2010).

2) Distance Pregnancy / Birth

ideal birth spacing is 2 years or more , because distance short birth _ will cause a Mother Not yet Enough For restore condition her body after give birth to before . This is Wrong One factor reason weakness and death Mother as well as that baby born. According Sitorus (2008) state that Risk reproduction process can pressed if minimum distance between birth 2 years . According to MOH RI (2009) states necessary pregnancy _ watch out is distance labor final with beginning pregnancy Now not enough from 2 years , when distance too close , then uterus and health Mother Not yet recover with ok . On circumstances This need watch out possibility growth fetus not enough ok , labor long or bleeding .

3) Parity

Parity in a manner wide includes gravida/ amount pregnancy , premature / number births , and abortions / number miscarriage. Moderate in a special sense that is amount or many child born . Parity said tall when a mother / woman give birth to child to four or more . A woman who has have three child and happened pregnancy Again circumstances his health will start down , often experience not enough blood (anemia), occurs bleeding past road birth and location baby breech or transverse . According to MOH RI (2009) total children > 4 people need watch out possibility long labour , Because more Lots child , womb

Mother more weak .

4) Much Hemoglobin (Hb)

Maternal hemoglobin (Hb) level being pregnant really matters heavy born baby. According to Sitorus (2008) states that A Mother pregnant said suffer anemia when rate the hemoglobin under 11 gr%. Matter This clear raises disturbance growth results conception , often happen immaturity , prematurity , disabled default , or fetus born with low weight . _ According to MOH RI (2009) levels hemoglobin not normal for the mother pregnant will add risk get baby heavy born low birth weight (LBW), and interference development brain , risk bleeding before and at the time childbirth , even can cause death mother and baby , if Mother pregnant the suffer anemia heavy . circumstances This caused Because lack of supply blood nutrition will oxygen on *placenta* to be influential on function placenta to fetus .

5) Status nutrition Pregnant Mother

Status nutrition Mother on time conception And during pregnant can influence growth fetus Which currently conceived. Besides That nutrition Mother pregnant determine heavy born baby , then _ monitoring nutrition Mother pregnant really important done . There are several way you can used For determine nutritional status Mother pregnant including monitoring _ increase heavy body during pregnant , measure circumference arm on (LILA) And measure rate hemoglobin , increase weight during _ pregnant around 10 -12 kg, where the first trimester increases not enough from 1 kg, second trimester about 3 kg, and in the third trimester about 6 kg this weight as well _ aim monitor growth fetus .

LILA measurements are intended For know is somebody suffer Not enough Energy Chronic (SEZ), whereas measurement rate hemoglobin For know condition Mother is experience anemia iron (Kristyanasari , 2010). According to Sitorus (2008), As size at a time supervision for adequacy nutrition Mother pregnant can see _ from increase heavy her body. Mother is thin and long pregnancy accompanied addition low weight _ or down up to 10 kg, has highest risk _ For give birth to baby with LBW. So that Mother pregnant must experience increase body weight ranges from 11-12.5 kg or 20% of weight before _ pregnant . Medium Circumference Upper Arm (LLA) is possible anthropometry _ describe state of nutritional status Mother pregnant and for know risk Lack

Energy Calories (KEK) or nutrition less . Mother who has size Circumference The upper arm (LILA) below 23.5 cm is at risk give birth to baby

LBW (Kristyanasari , 2010).

6) Disease Moment Pregnancy

Illness at the time possible pregnancy _ influence heavy baby born among them is Diabetes Mellitus gestational (DMG), smallpox water, And disease infection TORCH. Disease DMG is intolerance glucose Which started or new found on time pregnant . No can ruled out possibility exists intolerance glucose that doesn't is known Which appear along pregnancy , complications Which Possible often happen on pregnancy with diabetes is varies , In the mother will increase risk happening preeclampsia , section cesarean delivery , and type 2 diabetes mellitus in later days , while in the fetus increase risk happening macrosomy (Prawirohardjo , 2008).

Disease infectionTORCH is something term type disease infection that is *Toxoplasma*, *Rubella*, *Cytomegalovirus* and *Herpes* . Fourth type disease This The same the danger for Mother pregnant that is can disturbing the fetus she is carrying . Conceived baby the Possible will caught cataract eyes , deaf , *hypoplasia* (interruption growth organs _ like heart , lung , and spleen). It can also result heavy baby abnormal , mental retardation , hepatitis, inflammation membrane brain , inflammation of the iris of the eye , and some type disease other (Prawirohardjo , 2008). Neonates is baby new born until with 1 month old after born . Neonates early 0-7 days old and Neonates carry on 7-28 days old . New baby born normal is born baby _ from 37 weeks of gestation up to 42 weeks and birth weight 2500 grams until with 4000 grams (Muslihatun , 2010).

METHODS

Study This use quantitative including type study observational analytic with cross-sectional approach . Population as many as 124 samples in the study This as many as 95 types sample proportional random sampling using formula Slovin. instrument study form sheet observations and sheets record medical . The statistical test used is Fisher Exact table 2x2 for variable gestational diabetes relationship with incident Respiratory Distress Syndrome (RDS), and using testststistic Kolmogorov Smirnov table 3x2 for variable connection between Birth Weight with incident respiratory Distress Syndrome (RDS)

Table 1 Distribution Frequency Gestational Diabetes Relationship With Incidence of Respiratory Distress Syndrome (RDS) in Year 2019

Diabetes Gestational _	Total		P Value	Odds Ratio
	Yes _	No		
Diabetes	38 40,0%	1 1,1%	0,014	9.289
Non Diabetes	45 47,4%	11 11,6%		
Total	83 87,4%	12 12,6%		95 100%

Research results using Fisher Exact table 2x2 is obtained p value $0.014 < 0.05$ indicates There is connection among Gestational Diabetes with the incidence of Respiratory Distress Syndrome (RDS) at .Odds ratio test (95% CI) of 9.289 can be concluded that neonates with gestational diabetes mother tend experienced Respiratory Distress Syndrome (RDS) by 9.5 times more big of neonates with that mother No have gestational diabetes . From the results the can in conclusion that neonates with Mother Diabetes gestational is a factor risk to respiratory Distress Syndrome (RDS) Because mark OR more from one .

Table 2 Distribution Frequency Connection Birth Weight With Incidence of Respiratory Distress Syndrome (RDS) in Year 2019

Wights	(RDS)		Total	P Value
	Yes _	No		
Low	52 54.7%	3 3.2%	55 57.9%	0,019
Normal	30 31.6%	8 8.4%	38 40,0%	
Hight	1 1,1%	1 1,1%	2 2,1%	
Total	83 87,4%	12 12,6%	95 (100%)	

Research results using the Kolmogorov Smirnov table 3x2 is obtained p value $0.019 < 0.05$ indicates There is connection between Birth Weight with incident Respiratory Distress Syndrome (RDS) .

RESULTS AND DISCUSSION

Based on results analysis relationship with gestational diabetes with incidence of Respiratory Distress Syndrome (RDS) . is known that Gestational Diabetes who experienced Respiratory Distress Syndrome (RDS) as many as 38 people (40.0%) while those who don't experienced Respiratory Distress Syndrome (RDS) as many as 1 person (1.1%) and who did not have diabetes Gestational who experienced Respiratory Distress Syndrome (RDS) were 45 people (47.4%) while those who did not 11 people (11.6%) experienced Respiratory Distress Syndrome (RDS) . Research

results using the Fisher Exact obtained a p value of $0.014 > 0.05$ with the Odds Ratio results show 9.289 exists connection among diabetics gestational with incidence of Respiratory Distress Syndrome (RDS) in . Results study showing out of 39 mothers there is 1 mother with Gestational Diabetes but the baby No experience respiratory Distress Syndrome (RDS) matter This because age content Mother Which Enough month And Mother diligent consult with doctor specialist content so that condition development fetus monitored the circumstances . Besides that , from 56 mothers there are 45 mother who doesn't have gestational diabetes but the baby experiencing respiration

Distress Syndrome (RDS) p it's on due to the process of childbirth happen seizures in the mother caused by increasing pressure blood Mother so that cause bad fetus . Results study in line with study Muflihan FA, Diabetes gestational is multifactorial disorders , one of which is diabetes in pregnancy cause coagulant blood engendering increase _ disturbance performance heart increase and gain cause not enough or more supply resulting in oxygen to the fetus bad breath in neonates ⁶.

kindly theoretical mentioned that diabetes _ what happened to the mother pregnant who is not have previous history of diabetes but have glucose that blood tall during pregnancy is a risk factor happening bad breath the fetus is caused by Gestational Diabetes if No controlled or No done handling can hurt the baby ⁷ . Pancreas Mother Work extra For produce insulin but insulin is not can control glucose blood , so glucose high blood _ pass placenta with give rate glucose blood tall to baby , p This can causing the baby's pancreas Work extra For produce insulin For get rid of glucose blood so that can cause RDS ⁸.

Researcher assume that gestational diabetes is one _ factor Which influence happening bad breath because when Mother Having diabetes during pregnancy can cause supply nutrition not enough or excess and increasing viscosity engendering blood _ disturbance need nutrition and can cause lack of supply oxygen that can resulted bad breath in neonates . Based on results analysis connection Birth Weight the most with Respiratory Distress Syndrome (RDS) events viz can is known that experienced neonates _ LBW and experience the incidence of Respiratory Distress Syndrome (RDS) was 52 people (54.7%) while those who did not experience incidence of Respiratory Distress Syndrome (RDS) as many as 3 people (3.2%), who experienced BBLN and experience incident respiratory Distress Syndrome (RDS) as much 30

person (31.6%) whereas Which No experience incidence of Respiratory Distress Syndrome (RDS) as many as 8 people (8.4%) and neonates who experienced BBLN and experienced the incidence of Respiratory Distress Syndrome (RDS) was 1 person (1.1%) while those who did not experience incidence of respiratory distress syndrome (RDS) as many as 1 person (1.1%).

Research results use Kolmogorov Smirnov table 3x2 obtained p Value $0.019 > 0.05$ indicates exists connection between Weight _ Born with incident Respiratory Distress Syndrome (RDS) in. Research resultsshowing of 55 neonates there are 3 neonates with LBW no experience Respiratory Distress Syndrome (RDS) matter This due to the birth process that is not experience obstacle as well as baby No happen buildup liquid on channel breathing as well as lungs baby so that No happening bad breath neonates . Besides that , of 38 neonates there are 30 neonates with BBLN experiencing Respiratory Distress Syndrome (RDS) p This due to the process of childbirth Mother experienced the second stage of the long so cause asphyxia as well as amniotic fluid broken (KPD) that causes bad breath neonates . On research This obtained of 2 neonates there is 1 neonate with BBLN no experience Respiratory Distress Syndrome (RDS) p This due to the birth process that is not experience obstacle as well as No exists sign asphyxia nor buildup fluid as well as pressure on the wall lungs so that No happening bad breath neonates .

Research results This in accordance with study Marfuah , et al . Is known that of 120 neonates , neonates with Respiratory Distress Syndrome (RDS) with birth weight _ low as many as 95 neonates (79.2%). Neonates with heavy body born low will experience dysmaturity lungs Which can cause hardship arrange breath to be cause awkward breath in neonates. Neonates with birth weight _ more own nearly the same risk with birth weight _ low due to stress _ lungs by excess fluid and fatwho can cause bad breath in neonates ¹. Theoretically baby heavy born low birth weight (LBW) is problem important in management Because have trend toward enhancement happening infection , hardship arrange breath body so that easy For suffering from hypothermia ⁹ . Besides That baby with the weight of the divine bay low (LBW) easy attacked complications certain like jaundice , possible hypoglycemia _ cause bad breath and death neonates .

Group baby heavy born indescribably low _ _ _ with group risk high , because in infants heavy born

low showing number more death and health _ tall with heavy baby born enough ¹⁰ .According assumption researcher birth weight _ low own risk tall experience bad breath due _ organ immaturity especially lung in neonates that causes lack of oxygen volume inside lungs nor supply oxygen in blood to brain in neonates. Neonates with birth weight _ more also have risk tall experience bad breath Because exists emphasis muscle and fat in the lungs that cause lack of oxygen volume inside lungs nor supply oxygen in blood brain on neonates .

CONCLUSION

Characteristic results respondents in Lily room and NICU based age Mother is known that most responses _ i.e. 20 – 35 years as many as 69 people (72.6%) based on education the most is high school education that is as many as 42 people (44.2%). Based on work Mother the most is Mother House households (IRT) as many as 73 people (76.8%), and based on type sex the most is type sex man – man as many as 49 people (51.6%) and women as many as 46 people (48.4%). Mother with Gestational Diabetes in Lily room and NICU as many as 39 mothers (41.1%), and mother which is not suffering from Diabetes gestational as many as 56 mothers (58.9%) . In the Lily room and NICU neonates withLBW namely 55 neonates (57.9%) , 38 newborns (40.0%) low birth weight and 2 newborns (2.1 %) BBL . Connection among Gestational Diabetes with incidence of Respiratory Distress Syndrome (RDS) was found p- value 0.014 < 0.05 indicates exists connection among Gestational Diabetes with incidence of respiratory distress syndrome (RDS) in . Connection between Heavy Body Born with incident respiratory Distress Syndrome (RDS) obtained mark p.s Value 0.019< 0.05 show exists connection between Heavy Body Bornwith incident respiratory Distress Syndrome (RDS).

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