FACTORS CAUSE NEONATAL ASPHYXIA OCCURRENCE OF NEONATAL ASPHYXIA IN THE PERINATOLOGY OF DR.PIRNGADI GENERAL HOSPITAL MEDAN 2014

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Abstract

Neonatal asphyxia is a condition in which a baby can not breathe spontaneously and regularly soon after birth so can cause infant growth is not optimal due to lack of oxygen from the mother to the fetus that can cause the baby hypoxia. The occurrence of asphyxia due to several factors such as maternal age, gestational age, parity, birth weight, type of delivery and prolonged labor.

This is a descriptive study that aims to describe the causes of neonatal asphyxia in newborns in Perinatology space Hospital Dr. Pirngadi MedanTahun 2014. This study was a survey, and the population in this study were all women who give birth to babies with neonatal asphyxia, amounting to 90 people.

The result showed that majority of respondents (80%) age <20 years, 41.3% of respondents preterm gestational age (28-36 weeks), 47.4% of respondents grandemultipara (number of children> 5), 51.1% of respondents having a baby with normal birth weight, 57.1% of respondents do not normal childbirth and 59.3% of respondents who gave birth to a baby with neonatal asphyxia experienced prolonged labor.

Mother suggested to give more attention to health both before and after childbirth and health workers also to improve their knowledge and skills in performing the management of asphyxia by means ranging from aspects promotive, curative, rehabilitative so that mortality and morbidity in infants decreased.

Keywords : Causes, asphyxia Neonatorum
Bibliography : 25 readings (2005-2013)

BACKGROUND

Neonatal asphyxia is a form of emergency newborn respiratory depression that continues to cause various complications and is a cause of mortality and morbidity in infants (Maryunani A, 2009).

WHO data (2005) mentions approximately 23% of neonatal deaths are caused by asphyxia with the proportion of stillbirths is greater (Sari et al, 2011).

In 2011, Indonesia is the fifth highest IMR for ASEAN countries is 35 per 1,000, Myanmar 48 per 1000, Laos and Timor Leste and Cambodia 46 per 1000 36 per 1000 with 32% of cases of prematurity, asphyxia 30%, infections (22%), congenital anomalies (7%), and others 9% (Herianto et al, 2012).

Various factors causing neonatal asphyxia including preterm labor, prolonged labor, preeclampsia and eclampsia, delivery by actions, infant factors and other factors (JNPK-KR, 2007).

Asphyxia if it lasts too long can cause brain bleeding, brain damage and possible developmental delays and lead to lifelong disabilities such as blindness, deafness, brain defects and death, therefore it is necessary interventions and appropriate action to minimize the occurrence of infant deaths (MOH, 2008).

Tahir study (2012) showed that the factor delivery (prolonged labor, type of delivery, and premature rupture of membranes) at risk of having a baby with neonatal asphyxia percentage of mothers who experienced prolonged labor amounted to 20.3% (OR = 3.417; 95%) and those who do labor act of 57.7% (OR = 4.444; 95%) and women who experienced premature rupture of 37.9% (OR = 2.471; 95%) had statistically proven meaningful relationship. While research Herianto, et al (2012) showed that the proportion of women aged <20 years and> 35 years of 46.7%, based on parity mothers with parity nullipara and grandmultipara by 66.7%

and by birth weight is known that infants with low birth weight by 33.3%.
Data Medical Record Hospital Dr Pirngadi Medan the number of babies suffering from neonatal asphyxia in 2011 as many as 41 people, in 2012 as many as 23 people and in 2013 as many as 26 people.

RESEARCH METHODS
Type a descriptive study with survey research design is a method that describes the relationship between the various variables studied, from objects that have a unit or individual that is quite a lot. Location perinatology research conducted in space Hospital Dr. Pirngadi Medan, which was conducted in December 2013 - June 2014. The population is all women who give birth to babies with neonatal asphyxia in a room Perinatology Hospital Dr. Pirngadi field with the total population is 90 people baby. Sampling using the total population taken by collecting status / medical record from 2011 respondents as many as 41 people, in 2012 as many as 23 0rang and by 2013 as many as 26 people so the total number of samples as many as 90 people. Data analysis Descriptive see the proportion of variable maternal age, maternal gestational age, parity, body weight infants, the type of delivery and prolonged labor

RESEARCH RESULT
An overview of research results factor in the neonatal asphyxia in newborns in hospitals perinatology space Dr.Pirngadi field include maternal age, maternal gestational age, parity, infant birth weight, type of labor, prolonged labor and neonatal asphyxia classification.

DISCUSSION
1.Mother age
Age is one component of reproductive status, Hanifa (2005) suggested that in the group of 20-35-year-old mother's maternal mortality rate is lower than that seen in women aged less than 20 years, and compared with a group of mothers aged 35 years or more.

From the research that has been done can be seen that the majority of mothers were aged <20 years gave birth asphyxia 80% by weight and maternal age> 35 years also gave birth asphyxia 50% by weight. According to this theory is because in the age> 35 years of a woman's reproductive function began to decline, and at age <20 years of reproductive organs of a woman also has not functioned perfectly so that the risk of having a baby with asphyxia.

At the age of 20-35 years of age known as safe for pregnant and do labor. However, from the research can be seen that at this age there is 42.9% of mothers give birth to babies with severe asphyxia, it is because in this age of mothers giving birth many abnormally (sectio). In addition to the 20-35 year-old women who can give birth to a baby because of the possibility of maternal neonatal asphyxia is accompanied with other diseases that are being experienced as premature rupture of membranes, solutio placenta, and placenta previa.

In line Herianto study (2012), that the proportion of mothers aged 20-35 years gave birth neonatal asphyxia by 53.3%, at age <20 years and> 35 years of 46.7%. Herianto research results mentioned that the aging will be followed by changes in the development of organs in the pelvic cavity and this situation will affect the life of the fetus in the womb. Tahir research results (2012) showed that the proportion of mothers who gave birth at most neonatal asphyxia at the age of 25-28 years that is equal to 24.2%. Therefore, the age factor to be considered in a marriage that neonatal asphyxia at birth does not occur.

2.Gestation
Pregnancy postdates (posterm) has a close relationship with perinatal morbidity and mortality, babies born to mothers over 42 weeks due to a decrease in the hormone progesterone stimulate the birth process and increases uterine sensitivity to oxytocin. The result showed that 100% of infants experiencing severe asphyxia due to the aging of the placenta resulting in reduced supply of food and oxygen from the mother to the fetus, besides pregnancy that is too long can lead to oligohydramnios.

Based on the results of the study showed that women with gestational age between 28-36 weeks (preterm) gave birth asphyxia as many as 46 people with severe asphyxia 41.3%. It's caused by babies born preterm organ - not yet mature organs such as the liver, respiratory system, kidneys, gastrointestinal (digestive

system), and thermoregulatory. This causes the respiratory system, especially the baby's lungs are not yet working optimally, the surfactant is still less so that there is the possibility of the development of lung disorders, respiratory muscles are weak, so the baby's cry sounded weak and whimpering infant may suffer as a result of asphyxia (Maryunani A, 2013).

Hartatik research results (2013) says that infants with neonatal asphyxia majority of preterm gestational age by 28 people (70%) gave birth asphyxia risk 2.9 times. In line Wahyuningsih research, E (2011) says that the pregnancy term, the potential occurrence of respiratory depression newborn asphyxia continues to be decreased by 87% at 28-40 weeks gestation

Mansjoer (2005), stating that neonatal asphyxia usually occurs in babies born to mothers with preterm birth or through time.

3.Parity
Manuaba (2004) suggested that high parity enable the occurrence of complications of pregnancy and childbirth that can cause disruption of transport oxygen from the mother to the fetus which would cause asphyxia.

Based on the survey results revealed that mothers who give birth to children more than 5 (grandmultipara) gave birth to a baby with asphyxia was as much as 100%, and primiparous mothers who gave birth to children with severe asphyxia as many as 18 people (47.4%).

Wahyuningsih research results, E (2011) as many as 16 people (53.3%) of respondents parity primiparity asphyxiated due to the content of the muscles are still stiff and not perfect so the ability of low conception this causes frequent occurrence of complications such as his disorder hypotonic so that blood flow to the uterus is reduced resulting in decreased oxygen to the placenta.

4.Baby Weight
Table 4. known that babies born with normal weight did not experience severe asphyxia 41.9%. Maryunani, A (2009) suggested that infants with low birth weight or <2500 grams growth is normally recorded have difficulty breathing immediately after birth because of the number of functioning alveoli is still small, and the surfactant is less so easy alveoli collapse during the expiratory lead to respiratory distress such as respiratory distress and neonatal asphyxia.

Results of this study also found that 51.1% of infants with normal weight suffered severe asphyxia due to other factors such as occurred nuchal cord, childbirth complications and others. Herianto (2012) suggests that there is a significant relationship between low birth weight with neonatal asphyxia, OR 3.5 times the risk of having a baby with neonatal asphyxia.

5.Delivery type
Many indications that resulted in a mother should do is not normal delivery as the location of the abnormality of the fetus, prolonged labor, placenta previa preeklampsi and eclampsia etc. (Purwaningsih W, 2010). Based on the research as much as 57.1% of babies were born with severe asphyxia on respondents who gave birth to the action section. Bobak et al (2005) states that babies born via sectio Caesaria more often with respiratory infections or neonatal asphyxia because the baby whose birth too fast can not experience the adaptation or transition between the world inside the womb and outside the womb. Consistent research Tahir (2012), women with abnormal labor 57.7% risk of having a baby with 4.44 times asphyxia.

6. Parity
Babies are too long in the birth canal is bad as fetal heart rate fast / irregular, there is meconium in the amniotic fluid that can lead to infant hypoxic even asphyxia. The severity of injury increases with the length of labor that risk rises rapidly after more than 24 hours in primi and more than 8 hours on a multi (Oxorn, 2010).

These results indicate the respondents who experienced prolonged labor gave birth to babies with severe asphyxia by 59.3%. Oxorn, (2010) states that the duration of labor, the higher morbidity and mortality of fetal asphyxia and becoming more frequent, consistent with research Tahir (2012), suggests that women who experienced prolonged labor

due to his inadequate 3.41 times the risk of having a baby neonatal asphyxia. Really need to pay attention during childbirth pelvic abnormalities, premature rupture of membranes, his disorders, obstructed labor leaders to avoid prolonged labor.

CONCLUSION

1.Majority respondents (80%) gave birth to infants with asphyxia Neonatorum age <20 years.
2.Majority (41.3%) of respondents preterm gestational age (28-36 weeks) gave birth asphyxia.
3.Majority respondents (47.4%) grandemultipara (number of children> 5) gave birth to a baby with neonatal asphyxia.
4.Baby with normal birth weight neonatal asphyxiated by (51.1%)
5.Respondent with abnormal childbirth (57.1%) gave birth to a baby with neonatal asphyxia.
6.Respondent who gave birth to a baby with neonatal asphyxia experienced prolonged labor (59.3%).

ADVICE

1.To health workers, especially in the field Dr.Pirngadi perinatology hospitals to provide health education for pregnant women as well as for personnel attending births for more attention to the course of the delivery process and must always be alert to the conditions of labor complications that can reduce the incidence of neonatal asphyxia.
2. For the mother should follow the family planning program, to plan a pregnancy, pay attention to nutrition during pregnancy, antenatal
Another
3.Researchers advised to examine other factors causing the occurrence of neonatal asphyxia and how the relationship between the factors studied the incidence of neonatal asphyxia.

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