

## INTISARI

### HUBUNGAN ANTARA ASFIKSIA BERAT DENGAN ENSEFALOPATI HIPOKSIK ISKEMIK (HIE) RSUD dr. SOEHADI PRIJONEGORO SRAGEN

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**Latar belakang:** *Asfiksia neonatorum* ialah suatu keadaan bayi baru lahir yang menderita gagal bernafas secara spontan dan teratur beberapa saat setelah lahir. *Asfiksia perinatal* menyebabkan kematian terbesar sebesar 20% dari bayi baru lahir. Insiden *asfiksia* berat adalah 2,8% dari kelahiran hidup. Dampak jangka panjang bayi yang mengalami *asfiksia* berat antara lain *ensefalopati hipoksik iskemik, iskemia miokardial transien, insufisiensi tricuspid, nekrosis miokardium*, gagal ginjal akut dll. *Ensefalopati hipoksik iskemik perinatal* adalah suatu sindroma yang ditandai dengan adanya kelainan klinis dan laboratorium yang timbul karena cedera pada otak yang akut yang disebabkan karena *asfiksia*. Menurut studi pendahuluan dari data medis RSUD dr. Soehadi Prijonegoro Sragen tahun 2013 jumlah seluruh bayi yang lahir adalah 2195 bayi. Kejadian *asfiksia neonatorum* berat adalah 60 kasus dan 24 bayi yang mengalami *ensefalopati hipoksi iskemik* berat. Artinya angka kesakitan *ensefalopati hipoksik iskemik* akibat *asfiksia* berat sebesar 40 %. Angka kematian *ensefalopati hipoksik iskemik* akibat *asfiksia* berat sebesar 75% dan merupakan angka yang tinggi.

**Tujuan:** Penelitian ini adalah untuk mengetahui adanya hubungan antara *asfiksia* berat dengan *ensefalopati hipoksik iskemik* di RSUD dr. Soehadi Prijonegoro Kabupaten Sragen.

**Metode:** Desain penelitian adalah penelitian observasi dengan pendekatan *studi retrospektif*. Populasi penelitian ini adalah bayi dengan *asfiksia* berat yang lahir pada tahun 2013 dan tahun 2014. Teknik sampling menggunakan *total sampling*. Didapatkan besar sampel 104 responden dan teknik analisa data menggunakan uji korelasi *Chi Square* ( $\chi^2$ ).

**Hasil:** Penelitian didapatkan nilai  $\chi^2_{hitung}$  adalah 6,596 nilai  $p = 0,037$  dan dibandingkan dengan  $\chi^2_{tabel}$  dengan  $df=2$  dan taraf kesalahan  $\alpha=0,05$  diperoleh nilai 5,991. Karena nilai  $\chi^2_{hitung} > \chi^2_{tabel}$  ( $6,596 > 5,991$ ) dan  $p value 0,037 < 0,05$ . Kesimpulannya adalah ada hubungan yang signifikan antara *asfiksia* berat dengan *ensefalopati hipoksik iskemik* di RSUD dr. Soehadi Prijonegoro Kabupaten Sragen.

**Kata Kunci :** *asfiksia berat, ensefalopati hipoksik iskemik*

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## **ABSTRACT**

### **THE CORRELATION BETWEEN SEVERE ASPHYXIA AND HYPOXIC ISCHEMIC ENCEPHALOPATHY (HIE) AT dr. SOEHADI PRIJONEGORO LOCAL GENERAL HOSPITAL OF SRAGEN REGENCY**

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**Background:** Asphyxia neonatorum is a condition of a newborn baby who suffers from failure to breathe spontaneously and regularly some time after birth. This perinatal asphyxia is the largest cause of newborn baby mortality, namely: 20%. The incidence of severe asphyxia was 2.8% in liveborn babies. The long-term effects of severe asphyxia on the newborn babies are hypoxic ischemic encephalopathy, transient myocardial ischemia, Tricuspid insufficiency, myocardial necrosis, acute renal failure, etc. Perinatal hypoxic ischemic encephalopathy is a syndrome indicated by clinical abnormalities due to acute brain injury caused by asphyxia. Based on the preliminary research on the medical data of dr. Soehadi Prijonegoro Local General Hospital of Sragen Regency in 2013, the number of babies born at the hospital was 2,195. The incidence of severe neonatal asphyxia was found in 60 cases, and 24 babies suffered from severe hypoxic ischemic encephalopathy, meaning that the morbidity rate of hypoxic ischemic encephalopathy due to asphyxia was 40%, and the mortality rate of hypoxic ischemic encephalopathy due to asphyxia was 75%, which was the highest cause of mortality of the babies.

**Objective:** The objective of this research is to investigate the correlation between the severe asphyxia and the hypoxic ischemic encephalopathy at dr. Soehadi Prijonegoro Local General Hospital of Sragen Regency.

**Method:** This research used the observational research design with the retrospective study approach. Its population was babies with severe asphyxia who were born in 2013 and 2014. The samples of research were taken by using the total sampling technique. The number of samples was 104 respondents. The data of research were analyzed by using Chi square test ( $\chi^2$ ).

**Result:** The result of research shows that the value of  $\chi^2_{count}$  is 6.596 with the p-value = 0.037 which is compared with the value of  $\chi^2_{table} = 5.991$  with  $df = 2$  at the significance level of  $\alpha=0.05$ . The value of  $\chi^2_{count}$  is greater than  $\chi^2_{table} = 5.991$ , and the p value = 0.037 is smaller than 0.05. Thus, there is a significant correlation between the severe asphyxia and the hypoxic ischemic encephalopathy dr. Soehadi Prijonegoro Local General Hospital of Sragen Regency.

**Keywords :** Severe asphyxia , hypoxic ischemic encephalopathy

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