

**ASSOCIATION BETWEEN NEONATAL SEPSIS AND SPEECH DELAY
RELATED TO SENSORINEURAL HEARING LOSS IN CHILDREN: A
STUDY IN RSUP DR SARDJITO YOGYAKARTA FROM 2009 to 2013**

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ABSTRACT

Background: The influence of risk factors (RF) of hearing loss (HL) varies from birth until many years of live. This include serious consequences to speech, language and cognitive delays, poor social adjustment, poor educational achievement and subsequent economic disadvantage. This study aimed to analyze whether the risk factor sepsis in the newborn influenced to the incidence of speech delay related to sensorineural hearing loss (SNHL).

Method: This is a case control study. By consecutive sampling, we managed to collect medical records of 174 children who had been measure for hearing function (i.e. BERA test) in RSUP Dr. Sardjito Yogyakarta from January 2009 until December 2013. Subjects with speech delay related to SNHL at least for an ear, are classified as case group; the others who have normal hearing are classified as control group. We use Chi-square test, then we calculate odds ratio manually and with SPSS for Windows 20.0.

Result: Neonatal sepsis was found in 10 out of 87 cases (5,7%) and 6 out of 87 controls (3,4%) which were no significant difference statistically (OR=1,753, CI95%=0,608-5,056 and p=0,294).

Conclusion: There is no association between neonatal sepsis and speech delay related to sensorineural hearing loss in children.

Keywords: Neonatal sepsis, sepsis neonatorum, risk factor, speech delay, sensorineural hearing loss.