ABSTRACT
The Relationship of Current Preeclampsia with Maternal History of Low Birth Weight and History of Intrauterine Preeclampsia at dr. M. Soewandhie State Hospital and Airlangga University Teaching Hospital

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Background: Preeclampsia (PE) still becomes a major cause of maternal and fetal mortality and morbidity. The aim of this study was to evaluate the relationship of current preeclampsia with history of Low Birth Weight (LBW) and history of intrauterine preeclampsia.

Methods: This study was case-control study that conducted from February-September 2017 at dr. M. Soewandhie Surabaya state hospital and Universitas Airlangga teaching hospital. Subjects were 102 pregnant and postpartum women at age of 20-39 years old with matched gestational age. Data were collected by interviewing subjects and accessing medical record. Statistical analysis was using chi square and regression logistic.

Results: Five respondents (9.8%) in case group and one respondent (2.0%) in control group had history of LBW. Four respondents (7.8%) in case group and one respondent (2.0%) in control group had history of intrauterine preeclampsia. Statistical analysis showed that both history of LBW (p=0.205) and history of intrauterine preeclampsia (p=0.362) did not have significant relationship with current preeclampsia. Preeclampsia was likely more influenced by other covariates, i.e. age, parity, history of PE on previous pregnancy, history of abortion, and BMI on third trimester.

Conclusions: Study result showed that history of maternal LBW and history of intrauterine preeclampsia was non-significant risk factor of current preeclampsia. These finding could become a platform of new approach to understand the pathogenesis of preeclampsia. Further research is needed to elaborate the role of epigenetics on preeclampsia.

Keywords: preeclampsia, low birth weight, intrauterine preeclampsia