ABSTRACT

Anemia is a state of hemoglobin levels in the RBC (Red Blood Cells) are lower than normal according to age and gender. The prevalence of anemia during pregnancy according Riskesdas 2007,2010, and 2013 tend to increase. One of anemia risk factor is exposure to environmental tobacco smoke (ETS). This research was study the comparative risk of ETS exposure on the incidence of anemia in pregnant woman.

This study was an observational analytic with case control design. Research sample consisted of two groups, case and control sample with the comparative at 1:2. Sample cases were pregnant women anemia (n=18) and control samples were pregnant woman who did not anemia (n=36), collected by simple random sampling. To determine the influence of risk by calculating the value on OR 95% CI with Statacalc in Epi Info.

Results showed the majority of respondents were 20-35 years old, high school education, does not work, a family income <2.71 million, most of gestational age are at 3\textsuperscript{rd} trimester, with a spacing of >24 months, not with pregnant double (twin), all respondents have parity ≤4, ANChistory well, LILA ≥23.5cm, Fe tablets regularly. Comparison of risk exposure to ETS on the incidence of anemia in pregnant woman showed great significance to the OR=4.09 (1.07<OR<16.26), time of beginning the exposure 1\textsuperscript{st} trimester OR=5.43 (1.12<OR<34.41), the number of active smokers 1-2 OR=5.54 (1.20<OR<34.28), exposure duration ≤15 minute/day OR=6.33 (1.28<OR<40.53). The variables that not significant were time of beginning exposure 2\textsuperscript{nd} trimester and 3\textsuperscript{rd} trimester, active smokers >2, exposure duration >15 minute/day, the number of cigarettes husband and the husband aside.

The conclusion is the exposure to cigarette smoke can cause anemia in pregnant woman. It is recommended for pregnant woman to avoid ETS exposure during pregnancy.

Keywords: anemia, pregnant woman, environmental tobacco smoke exposure