

## ABSTRACT

*Autism Spectrum Disorder* (ASD) was a disturbance of pervasive development in children characterized by the disturbance and delayed in cognitive, language, behaviour, communication, and social interaction. In the past 10 to 20 years, increased the number of autism currently reached an average of 8 persons among 1000 resident or 1:125. The cause of autism is is yet not found until now. The purpose of this research is analyze risk factor of the trigger autism in children.

This research used case control design. In the case category (ASD) accounted for 35 children according to record data in special school and the control category as many as 105 children taken from public school. Independent variables were genetic, premature, postmature, antenatal bleeding, maternal age of pregnancy, caesar childbirth, low birth weight (LBW), interval of pregnancy, organic brain syndrome, asphyxia, vaccination, smoking, consumption of medicine and medicinal herbs, and spontaneous abortion. Whereas dependent variable was ASD incident.

The data analysis by calculated odds ratio with 95% CI. The result of the research obtained were genetic, postmature, antenatal bleeding, caesar childbirth, low birth weight, interval of pregnancy, organic brain syndrome, asphyxia, vaccination, smoking, consumption of medicine and medicinal herbs, spontaneous abortion was not the risk factor of the trigger ASD incident. The result obtained on the variables that significantly premature (OR= 7.12 , 95% CI: 2.56<OR<26.07) which means that the children born prematurely had a 7.12 times higher for the onset of autism than children born with normal gestational age and another variable maternal age over 35 years (OR=8.58 , 95% CI: 1.30 <OR< 92.57) which means that the mother was pregnant at the age over 35 years had a 5.58 times higher risk to had children had autism than the mother who become pregnant less than 35 years.

Based on this research, efforts are needed to increase knowledge about the health of the mother either before, during, and after pregnancy as an effort to improve maternal and child healthy

**Key words** : risk factor, autism, premature