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Familial and prenatal parental factors associated with Autism Spectrum Disorder among children under 10 years attending Ayati center, Ragama

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Introduction: Autism spectrum disorder (ASD) is a neurodevelopmental disorder with characteristic features of qualitative impairment in social interactions and communication with a prevalence of 1.07% in Sri Lanka. It's a multifactorial disorder and evidence shows that prenatal, perinatal, prepregnancy and post pregnancy factors contribute to the development of this condition. The symptoms can be observed at least in first 2 years of life and early identification and intervention is important to achieve a near normal neuro development of the child.

Objectives: The study was conducted to determine the familial and prenatal parental factors associate with autism spectrum disorder children under 10 years who attend to Ayati center and North Colombo teaching hospital (CNTH), Ragama

Method: This was a case control study conducted from January to February 2021 with participation of 150 patients aged between 2-10 years who attended to clinic of Ayati center and CNTH, Ragama using an interviewer administrated questionnaire. Data were analysed to calculate odds ratios and 95% confidence intervals for each factor to identify whether there's a significant association between those factors and ASD.

Results: The association of 28 possible risk factors of ASD were assessed through this study. Among them maternal age [odds ratio(OR)=4.2, 95%CI:1.16- 6.68], being the male child (OR=3.8, 95% CI:1.58-9.14), gestational age less than 35 weeks(OR=16.1, 95% CI=1.94-733.42), blood relatives with other developmental delays(OR=6.7 95%CI:1.12-69.27) showed that the case group was having statistically more significant association with ASD than the control group.

Conclusion: Maternal age, being the male child, gestational age less than 35 weeks, blood relatives with ASD and other developmental delays significantly associated with ASD.