Abstract of Master's Dissertation

No.1

Course	Master of Public Health	Name	Machi MAEJI (KAKIMOTO)	
Thesis Title	Social, perinatal, and symptomatic characteristics among the native and immigrar children with autism spectrum disorders in Mie, Japan: A Comparative Case Serie at a single center			

Abstract of Master's Dissertation

Background: Autism Spectrum Disorder (ASD) is one of the neurodevelopmental disorders, characterized by impairments in social communication and restricted interests. Early diagnosis and interventions are essential because it affects patients and their families throughout their lives. On the other hand, the number of immigrant children is increasing in Japan and their developmental problems sometimes highlight their social/cultural maladaptation. However, studies about immigrant children with ASD are profoundly lacking in Japan.

Objectives: This study aimed to clarify social, perinatal, and symptomatic differences between native and immigrant children with ASD through analysis of clinical cases in Mie, Japan.

Methods: A retrospective case-series study with a quantitative method was conducted at a children's psychiatric hospital, Mie prefectural Medical Center for Child Growth and Development (MMCCD). Participants were all previous patients who had their first consultation between January 2016 and December 2020, and were diagnosed with an autism spectrum disorder (ASD). They were divided into two groups, the Immigrant and the Native group. The data of socio-demographic features, perinatal complications, and standardized cognitive tests were collected through existing records in MMCCD, then analyzed with Chi-square analyses for binary and ordinal nominal variables, and Student's t-test for continuous ones.

Abstract of Master's Dissertation

Course	Master of Public Health	Name	Machi MAEJI (KAKIMOTO)

Results:

Social, perinatal, and symptomatic characteristics of the 1884 Native and 45 Immigrant children with ASD were compared at the time of the first visit to MMCCD. Of the total immigrant children, half of them were offspring of Brazilian parents, and 82% were born and raised in Japan.

The mean age of the first visit was 6.39 years old (95% CI: 5.50-7.27) in the Immigrant children, younger than 7.83 years old (95% CI: 7.67-7.98) in the Native children (P<0.005). Immigrant children were more often referred by a welfare institution (P<0.005). As a total for both groups, rates of single-mother households and family history of psychiatric diseases were higher than that of the overall population, at 11.8 % and 31.4 %, respectively.

Even though antenatal complications were almost the same, the Immigrant group showed 44.4% of Caesarean sections, much higher than 18.9% in the Native group (P<0.005).

In comparing a cognitive test, Developmental Quotient (DQ) in the Kyoto Scale of Psychological Development 2001, the mean of DQs was 52.4 (95% CI: 45.1-59.6) in the Immigrant group, which was significantly lower than 68.5 (95% CI: 67.0-70.0) in the Native group (P<0.005).

The difference in symptoms between the Native and the Immigrant participant groups hardly existed, except for insomnia, probably due to random sampling error.

Conclusion:

The Immigrant children with ASD visited a psychiatric hospital at a younger age, accompanied by multifaceted problems such as lower cognitive levels and familial vulnerabilities (single-mother households and psychiatric family history). These are deeply associated with socio-economic, cultural, and language barriers in immigrant children and families. Multi-professional collaboration including a welfare institution, a proper assessment of their complex problems, and the promotion of parental empowerment are recommended to tackle these challenges.

(482 words)