



Preliminary Study of Down Syndrome Risk Factors (Case Study of Tangerang City and Regency) in 2019

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Abstract:

Down syndrome is the largest autosomal disease in the world caused by nondisjunction of chromosome 21. This study aims to find out the risk factors of Down syndrome that exist in the parents around the Industrial District of Tangerang City and Tangerang Regency in 2019. Study of the Down syndrome risk factors around the industrial district is based on previous research which found that parents who have Down syndrome children have almost 50% work in the industry. The risk factors examined in this study include intrinsic and extrinsic characteristics. Intrinsic characteristics are factors that exist in parents such as mother's age, father's age, childbirth order, history of maternal fertility, history of parent consanguinity, and economic status. Extrinsic characteristics are factors that can be related to the environment such as the location of residence, length of stay around the industrial area, work history of parents, and sources of drinking water. This study uses a case-control study with retrospective data. Case and control subjects were obtained at Special Education School in Tangerang City and Regency. The case subjects were students who were classified as Down syndrome, while the control subjects were students who were classified as mental retardation but were not caused by Down syndrome. Data collection was carried out using a questionnaire by interviewing parents. Respondents who collected as 50 cases and 50 controls.

Biography:

Oscar Oleta Palit is a graduate student, majoring in Environmental Health, Faculty of Public Health, Universitas Indonesia. He entered college in 2014 and graduated in January 2020. During his college years, Oscar was active in various community service and scientific research activities such as becoming an enumerator, facilitator, teaching assistant, research assistant, and researcher. These activities focus on areas related to environmental health such as air pollution, vector control, hygiene and sanitation, solid waste management, health behavior, food safety, non-smoking area monitoring, environmental health risk



analysis, spatial analysis, and public health baseline studies. Down syndrome research that wants to be published at the seminar is thesis research to get a bachelor's degree.

Publication of speakers:

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2. Prusti, J. S., Panda, S. K., Sahoo, S. K., Mishra, D. N., Sahu, M. C., Das, S. R., ... Nayak, S. (2014). Incidence of Down's Syndrome With Demographic and Chromosomal Pattern in Odisha. *Journal of Evolution of Medical and Dental*
3. Sherman, S. L., Allen, E. G., Bean, L. H., & Sallie B. Freeman. (2007). *Epidemiology of Down Syndrome*.
4. *Mental Retardation and Developmental Disabilities*, 13(23), 222-227. <https://doi.org/10.1002/mrdd>
5. Molina, Oscar. (2020). La regolazione dell'economia delle piattaforme: dilemmi, problemi e divergenze. *The Italian Journal of Public Policy*. 2020. 77-100. 10.1483/96930.

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