

**THE INFLUENCE OF BEHAVIOR AND HOME ENVIRONMENT ON THE NUMBER OF AIR GERMS IN THE TUBERCULOSIS PATIENT'S HOUSES IN KUPANG CITY WANTI WANTI, SIPRIANUS SINGGA, OKTOFIANUS SILA<sup>3</sup>**

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The presence of germs, including TB germs, in the house is greatly influenced by home environmental factors and also the behavior of TB sufferers. This research aim is to determine the influence of home environmental factors and behavior on the number of air germs in the tuberculosis patient's house in Kupang City.

This observational research was conducted in 21 homes of TB sufferers as research samples from 2 Community Health Centers in Kupang City, NTT, Indonesia. The dependent variable is the number of air germs which is measured based on laboratory examination. The independent variables are the number of people sleeping in the same room, type of walls, type of floor, ventilation conditions, wearing masks in the house, drying mattresses/pillows, place to expel phlegm, type of cooking fuel, smokers, sunlight entering the bedroom, sunlight entering the room. going out, and passive smoking. All variables were analyzed using multiple regression.

Result the equation : Number of Air germs = -203,614 + 59,538Ventilation Conditions + 86,333Drying MattressPillows + 63,841Smoking + 83,515Mthr Light to Room. The model can predict 61% the influence factors of the number of air germs in the

Tuberculosis patient's house.

This model is suitable for predicting the number of room air germs, where the less ventilation conditions, the less frequently drying mattresses and pillows and also the less direct sunlight into the bedroom can have an impact on increasing the number of air germs. The number of room germs will also increase with smoking behavior. So it is need to placed suitable ventilation to increase sunlight enter the bedroom and need to drying the pillow mattress regularly and also stop smoking to decrease the air germ number.

**Keyword:** Air Germ Numbers; Home environment; Behaviour; House