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in

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## Prediction of Tuberculosis Incidence Based on Gender and Nutrition Status During 2016- 2020 at Ponorogo Indonesia



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### Introduction

Lung Tuberculosis (TB), wcausediseases which predominantly infects the lung. Lung tuberculosis in Indonesia hich is is on fifth rank after India, Cina, South Afrika and Nigeria. Public Health Office of east Java reported that Prevalence of lung tuberculosis was 165 people per 100.000 population in 2014. Meanwhile in Ponorogo Regency, there were 378 new patient in 2013 and 334 new patient in 2015. In Ponorogo, Lung tuberculosis with BTA positive was more and more raised since 2011 up to 2015. There were many programs to reduced lung tuberculosis such DOT training to find lung tuberculosis patients. The prediction of TB patient in some certain time is one of the many ways to develop the program to reduce TB prevalence. TB is one of theme in SDG's milenium to act in whole the worldd by bacteria *Mycobacterium tuberculosis* is an infectious.

### Objective

These research was carried out to predict the lung tuberculosis patient based on gender and nutrition status during 2016-2020 at Ponorogo Regency

### Method

Data was collected from Community Health Center in Ponorogo Regency and organized based on nutrition status (obesity and not obesity) and gender (Male and female) yearly. Trend Method applied to analyze prediction. Using the highest R square between linear, quadratic and exponential trend will use to calculate the prediction of TB incidence.

### Results



The prediction of Lung Tuberculosis based on nutrition status during 2016-2020 with obesity are 77, 79, 81, 81, 81, without obesity are 223, 269, 285, 271, 227. The prediction of Lung Tuberculosis based on gender in male are 177, 211, 222, 221, gender in female are 122, 138, 141, 131.

### Discussion

Lung tuberculosis still high in Ponorogo Regency, based on nutrition status and Gender. The quality of nutrition should be improving due to increase the immunity system to protect from many kinds of infection. Promoting programs how to find and serve healthy food with low cost in essential to develop. Meanwhile gender in male had more risk to infect TB probably related with their life style such as have higher mobility than gender in female, as smoker, drunk alcohol. Tobacco smoker and alcohol were called "Lung TB agents". Male have a small time to asleep than female and have more burden physical activity, these style were reduce their immunity system. Male has easier to transmit TB than women, perhaps female has access to find the health facility.

### Conclusion

The conclusion of result was the incidence of TB based on nutrition status looks to decrease and the obesity looks stagnant (fatted), meanwhile based on gender the incidence trends to decrease for both.

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### Reference

1. SR.TB 'Aisyiyah Jawa Timur. 2014. *Analisa situasi tuberkulosis paru di kabupaten Ponorogo : dalam rangka mempercepat peningkatan peran seluruh pemangku kepentingan daerah untuk penanggulangan tuberkulosis. Ponorogo : Komunitas Tb care 'Aisyiyah*
2. Stranas Tuberkulosis. 2011. *Strategi nasional pengendalian tuberkulosis tahun 2010-2014 : Terobosan menuju sukses universal. Jakarta : direktoral jenderal pengendalian penyakit dan pencegahan lingkungan*