## Predictor Factor of Maternal Death Related Covid-19 : A Case Control Study

## Khoirunnisa Novitasari

Airlangga University School of Medicine, Indonesia

Nowadays, Covid-19 has become our concern, included its impact to pregnant women. The rate of maternal mortality related Covid-19 increased. Early detection of significant factor related to clinical worsening of pregnant women with Covid-19 can be a rationale to do aggressive treatment and closed monitoring. The aim of study is to analyze the risks and predictor factor of maternal death with Covid-19. Material and method : Case control study, case grup consists of all maternal death related Covid-19 till August 2020 (15 patients) in Soetomo Hospital, tertiary hospital in Indonesia. Control grup consists of all pregnant women survived with Covid-19 confirmed till August 2020 (30 patients). We used bivariat analysis and multivariat using logistic regression. Result : We found five significant factors of maternal death related Covid-19. They are respiration rate p=0,04 Cl 95% 3,75 (1-14), D-dimer >2400 with p=0,035 CI 95% 4,12 (1,06-16,03), SpO2 p=0,001 CI 95% 18 (3,61-89,5), CRP >7,15 p=0,003 Cl 95% 7,5

(1,86-30,7) Obesity p=0,09 Cl 95% 4,5 (0,9-22,3), A simple scoring is made based on probability equation of 5 factors and can predict the probability of level severity cause death from 3,9% (score 1) to 98,3% (score 5) with AUC (ROC) 94,7%. Conclusion : the risk and predictor factors of maternal death related covid included respiration rate, perifer saturation, CRP, D-dimer and Obesity. This simple prediction score can be used to define pregnant women with Covid-19 that need closed monitoring and aggressive treatment to avoid maternal morbidity and mortality.

Biography: Khoirunnisa Novitasari, has completed his MD at the age of 24 years from Airlangga University, then worked for one year in Jember, East Java as primary doctor in Secondary Hospital and now continue her study as the resident of obstetric and gynecologic in Airlangga University, Soetomo Hospital the tertiary hospital in Indonesia.