Background: Premature labor is defined as a delivery of less than 37 weeks of gestation. The prevalence of preterm labor in Indonesia is still quite high around 16 -18%.

Aim: To know the description of risk factor of preterm labor at RSUD Dr. M. Soewandhie Surabaya on 2016

Method: Methods this study uses descriptive study that aims to describe in depth one or more other variables. The population in the study were mothers who experienced preterm labor at RSUD Dr. M Soewandhie Surabaya in January - December 2016 by inclusion criteria 390. The sample in the research is total sampling. The variables studied included maternal characteristics such as age, parity, BMI, previous preterm birth, pregnancy complications, KPD, placental disorders, uterine distension and PJT. Methods of data collection through medical records, then searched for variables that cause premature labor and analyzed descriptively. The data analysis used is univariate analysis.

Result: The results of this study illustrate the total sampling (10%) of mothers experienced preterm labor 390 cases, categorized (79%) spontaneously and (21%) iatrogenic. Risk factors for preterm labor were aged 20-35 years 257 cases (65.9%), multipara 220 cases (56.4%), BMI > 25 191 cases (45.9%), history of preterm labor 187 cases (47.9%), KPD 111 cases (28.5 %), Placental disorders 33 cases (8.5%), uterine distention 33 cases (8.5%) and PJT 9 cases (2.3%). Premature labor occurred spontaneously with 311 cases including IMT 18.5-24.9 with 152 cases and a history of preterm labor 164 cases. Causes of preterm birth iatrogenic pregnancy complications such as pre-eclampsia 52 cases (65.8%), placenta disorders 11 cases (13.9%).

Conclusion: Risk factors of preterm labor are age 20-35 years, multiparity, BMI > 25, KPD, uterine distention and PJT. The risk factor spontaneous premature labor is the history of preterm labor. The causes of iatrogenic premature labor are pre-eclampsia and placental disorders.

Keywords: preterm labor, risk factor of preterm