DYNAMIC SYSTEM MODEL DEVELOPMENT AS RECOMMENDATION FOR HEALTH DEPARTMENT IN ORDER TO REDUCE MATERNAL MORTALITY RATE

(CASE STUDY : SAMPANG DISTRICT)

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Abstract

Maternal mortality rate is health indicator to measure healthiness in a country. Two important factors that affect maternal mortality are antenatal care coverage and the coverage attended by skilled health care delivery. Antenatal care coverage is used as a preventive measure for early detection of high risk pregnancies experienced by the mother. While the coverage of deliveries by health personnel are used to ensure that mothers give birth safely and cleanly.

This thesis will discuss the simulation of dynamical systems of the factors that influence the high maternal mortality rate in the District of Sampang terms of antenatal care coverage and the coverage of deliveries by health personnel.

From the simulation results is known that factors antenatal care coverage and coverage of delivery by health personnel have a significant effect on the rise and fall of AKI. Handling late to get care at the hospital and the addition of a village midwife also proven to reduce the maternal mortality rate to 5%. Optimization of maternal health promotion
through maximum utilization of classroom programs also reduce maternal mortality rate of pregnant women by 3%. Optimization of a class of pregnant women reached by modeling the rewards to the participants of the class of pregnant women in the labor price discount midwife and health centers.

**Key words**: maternal mortality, simulation, dynamic system modeling