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FLEXSIM MODELING AND SIMULATION TO OPTIMIZE THE OBSTETRICIC POLYCLINIC QUEUE SYSTEM AND OBSTETRIC DISEASES AT DR. SARDJITO HOSPITAL YOGYAKARTA, INDONESIA

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ABSTRACT

There are several factors in assessing the quality of a hospital, namely the level of expertise of doctors owned, quality supporting facilities and infrastructure, and the queuing system implemented by the hospital. If the arrival rate and level of service provided to the patient are not balanced it will cause initiation for the patient and a loss to the hospital because the patient tends to switch to a hospital that has a more optimal level of service. In this study, the method used is a simulation method using flexsim software. The data were obtained using primary data that has been observed directly on the outpatient service queue system of dr. Sardjito Hospital. From the data searched for data distribution using flexsim feature, experfit. During the time the simulation was run found obstacles in the polyclinic queue of obstetrics and obstetric diseases which is in accordance with direct blame. It is known that the average waiting time of the polyclinic queue is for 3.5 hours which is classified as very long and the utilization of doctors works by 44.65%. So there need to be improvements in the form of alternative models in the queue, namely by increasing the number of rooms and doctors who work with as many as 2 and 3 units. From the results of a significant average waiting time from the initial model change with the alternative model, which is as much as 3 units for 2.6 hours with a ratio of 0.9 hours that became the chosen alternative. Based on the research can help the hospital in providing queue services in the queue of obstetric polyclinics and obstetric diseases to patients and the doctor's working time is more optimal and does not exceed the ability of the doctor's work.

Keywords: Discrete Event Simulation, Flexsim, Queue