ABSTRACT

Service quality was something fundamental for hospitals quality to able compete and thrive. In 2014 the highest complain from patient was 83% had complain about services time. This research is due the problem of patient's queue time and complain for the response time in pharmacy outpatient services. Queueing system was the most used to assess response time. The objective of the research was to find the better model queueing system.

This study is an observational descriptive study with cross sectional design. Sample calculated by proportional random sampling formula, that is equal to 74 prescription and collected by accidental random sampling. Primary data was obtained by observation in each step in prescription's services. Secondary data was collected from documentations in the outpatients care pharmacy.

The results showed that the arrival distribution in patent prescription followed poisson distribution and the services distribution followed exponential distribution. Calling population was infinite, queueing discipline was First Come First Served (FCFS) and written in Kendalls notation (M/M/1/FCFS/~/~). The highest utilization rate occurred in drugs preparation process 256% and after simulation became 73% with increased service rate by 81%. The lowest utilization rate occurred in giving drugs process was 19%.

The conclusion from this study was the drugs preparation process had high workload and cause queueing.

Keywords: outpatient pharmacy, queueing system