

ABSTRAK

Dinas Kesehatan Kabupaten Karawang sebagai pelayanan kesehatan yang menyediakan upaya kesehatan masyarakat dan upaya kesehatan perseorangan tingkat pertama. Dinas Kesehatan menyelenggarakan kegiatan vaksinasi akibat masuknya virus Covid-19 di Indonesia membawa dampak besar terhadap kehidupan masyarakat mulai dari aturan pemerintah yakni PPKM, wajib vaksin 1, vaksin 2, dan booster. Masalah yang menjadi fokus penelitian adalah bagaimana meningkatkan efektivitas pelayanan peserta vaksinasi di Dinas Kesehatan Karawang. Tujuan dengan dilaksanakannya penelitian ini adalah untuk menguji efektivitas pelayanan peserta vaksinasi di Dinas Kesehatan Karawang. Metode pengumpulan data dilakukan dengan observasi terhadap peserta vaksin serta studi pustaka dan dokumentasi. Penelitian dilaksanakan dengan menganalisis sistem antrian yang diterapkan Dinas Kesehatan Karawang dengan menggunakan ukuran kinerja maupun efektivitas sistem antrian berupa P_o , L_q , L_s , W_q , dan W_s yang kemudian dibandingkan dengan keadaan yang sesungguhnya di lapangan. Tahap selanjutnya dilakukan simulasi kejadian diskrit menggunakan software promodel terhadap efektivitas sistem antrian vaksinasi untuk mengurangi waktu tunggu ialah dilihat dari tingkat utilisasi meja atau tingkat kesibukan petugas akan sibuk melayani pelanggan sebesar 51%, sisanya 49% dari waktu sibuk $p < 1$ akan digunakan petugas untuk istirahat dan lain-lain. Rata-rata waktu pelayanan tiap pasien dalam antrian (W_q) = 1,5 menit dan rata-rata waktu pelayanan tiap pasien dalam sistem (W_s) sebesar 0,045 jam atau 2,7 menit.

Kata Kunci : efektivitas, simulasi kejadian diskrit, sistem antrian, promodel, teori antrian, vaksinasi

ABSTRACT

Karawang District Health Office is a health service that provides public health efforts and first- level individual health efforts. The Health Service is holding vaccination activities due to the entry of the Covid-19 virus in Indonesia which has had a major impact on people's lives starting from government regulations namely PPKM, mandatory vaccine 1, vaccine 2, and booster. The problem that is the focus of research is how to improve the effectiveness of vaccination participant services at the Karawang Health Office. The purpose of carrying out this research was to test the effectiveness of the services of vaccination participants at the Karawang Health Office. The data collection method was carried out by observing vaccine participants as well as literature and documentation. The research was carried out by analyzing the queuing system implemented by the Karawang Health Office using performance and effectiveness measures of the queuing system in the form of P_o , L_q , L_s , W_q , and W_s which were then compared with the actual situation in the field. The next stage is to simulate discrete events using pro-model software on the effectiveness of the vaccination queue system to reduce waiting time, judging from the level of table utilization or the level of the busyness of the officers who will be busy serving customers by 51%, the remaining 49% of the busy time $p < 1$ will be used by officers for breaks and others. The average service time for each patient in the queue (W_q) = 1.5 minutes and the average service time for each patient in the system (W_s) is 0.045 hours or 2.7 minutes.

Keywords : effectiveness, queuing theory, queuing system, discrete event simulation, promodel, vaccination.