

## ABSTRAK

Sejak Desember 2019, terjadi peningkatan kasus pneumonia yang disebabkan virus Corona jenis baru, yaitu SARS-CoV-2. Disebut pandemi salah satunya karena wabah yang berjangkit serempak di mana-mana, meliputi daerah geografis yang luas. Dampak wabah Covid-19 di Kecamatan Pondok Aren, Kota Tangerang Selatan terlihat hampir di seluruh sektor kehidupan masyarakat, mulai dari sektor ekonomi hingga sosial masyarakat. Penelitian ini bertujuan untuk mengidentifikasi distribusi spasial kasus covid-19 di Kecamatan Pondok Aren, Kota Tangerang Selatan serta hubungan Distribusi Spasial dengan Persebaran Pemukiman dan infrastruktur kesehatan sebagai strategi penanganan sebaran kasus. Metode yang digunakan adalah *Average Nearest Neighbor* (ANN) melalui peta dengan berbasis Sistem Informasi Geografis (SIG). Hasil dari penelitian menemukan menunjukkan bahwa berdasarkan data analisis spasial menunjukkan kasus positif Covid-19 Periode Maret 2020 sampai Maret 2021 cenderung meningkat secara signifikan, serta menunjukkan bahwa sebaran kasus bersifat mengelompok (*clustered*). Dan berdasarkan analisis Jangkauan Pelayanan Kesehatan dapat dikatakan permukiman di Kecamatan Pondok Aren dapat terjangkau dengan Fasilitas Pelayanan Infrastruktur Kesehatan, dan dapat terjangkau oleh Pasien Covid-19.

**Kata Kunci :** *Average Nearest Neighbor*; Sistem Informasi Geografis; Infrastruktur

## ABSTRACT

Since December 2019, there has been an increase in cases of pneumonia caused by a new type of Corona virus, namely SARS-CoV-2. One of them is called a pandemic because of the outbreaks that are spreading simultaneously everywhere, covering a wide geographical area. The impact of the Covid-19 outbreak in Pondok Aren District, South Tangerang City is seen in almost all sectors of people's lives, from the economic sector to the social sector. This study aims to identify the spatial distribution of COVID-19 cases in Pondok Aren District, South Tangerang City and the relationship between Spatial Distribution and the distribution of settlements and health infrastructure as a strategy for handling case distribution. The method used is Average Nearest Neighbor (ANN) through a map based on a Geographic Information System (GIS). The results of the study found that based on spatial analysis data, positive cases of Covid-19 for the period March 2020 to March 2021 tended to increase significantly, and indicated that the distribution of cases was clustered. And based on the Health Service Coverage analysis, it can be said that settlements in Pondok Aren District can be reached with Health Infrastructure Service Facilities, and can be reached by Covid-19 patients.

**Keywords :** *Average Nearest Neighbor*; *Geographic Information System*; *Infrastructure*