Medical Xpress

COVID-19 Omicron wave in South Africa characterized

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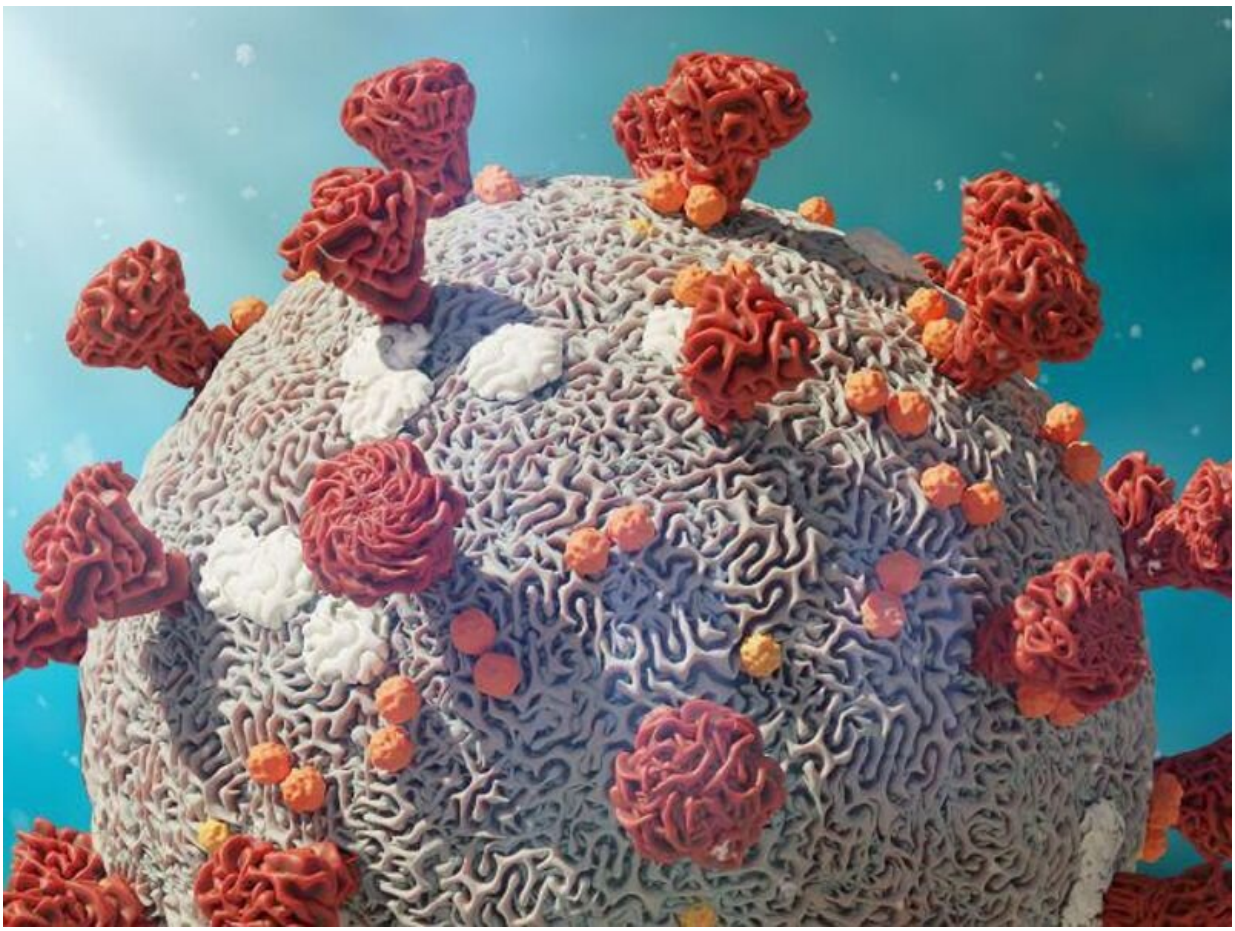

(HealthDay)—In South Africa, the pattern of patients hospitalized with

COVID-19 early in the fourth wave showed fewer hospitalizations and reduced severity of illness compared with earlier waves, according to a research letter published online Dec. 30 in the *Journal of the American Medical Association*.

Caroline Maslo, M.D., Ph.D., from Netcare Ltd. South Africa in Johannesburg, and colleagues examined data for hospitalized COVID-19 patients during the fourth wave, attributed to B.1.1.529 (omicron), versus previous waves in South Africa. Wave 4 (Nov. 15 to Dec. 7, 2021) was compared to the periods when 26 percent community positivity rates were reached in the previous waves (wave 1: June 14 to July 6, 2020; wave 2: Dec. 1 to 23, 2020; wave 3: June 1 to 23, 2021).

The researchers found that in the first three waves, 68 to 69 percent of patients presenting to the emergency department with a positive COVID-19 test result were admitted to the hospital compared with 41.3 percent in wave 4. Patients hospitalized during wave 4 were younger (median, 36 years versus 59 years in wave 3); the proportion of female patients was higher. In wave 4, significantly fewer patients with comorbidities were admitted and fewer patients presented with an acute respiratory condition (31.6 percent versus 91.2 percent in wave 3). Overall, 24.2 and 66.4 percent of 971 patients admitted in wave 4 were vaccinated and unvaccinated, respectively; vaccination status was unknown for 9.4 percent. There were significant decreases observed in the proportion of patients requiring oxygen therapy in wave 4 (17.6 percent versus 74 percent in wave 3) and in the percentage receiving mechanical ventilation; admission to the intensive care unit was 18.5 percent compared with 29.9 percent in wave 3. The death rate varied from 19.7 percent in wave 1 to 29.1 percent in wave 3; the mortality rate decreased to 2.7 percent in wave 4.

"Further research is needed to determine if the differences between waves are affected by preexisting acquired or natural immunity (44.3

percent of the adult South African population was vaccinated as of December 2021 and >50 percent of the population has had previous exposure to severe acute respiratory syndrome coronavirus 2) or if omicron may be less pathogenic than previous variants," the authors write.

More information: Abstract/Full Text