



OMICRON –THE NEW VARIANT AND NEW CHALLENGES FOR NURSES

Mr. Avadhesh Kumar Yadav*	Nursing Officer-B, Officer In Charge, Homi Bhabha Cancer Hospital /Mahamana Pandit Madan Mohan Malviya Cancer Centre Varanasi Uttar Pradesh 221005 (A unit of Tata Memorial Centre Mumbai, Department of Atomic Energy). *Corresponding Author
Mr. Rajendra Kumar Sahu	Nursing Officer-A, Homi Bhabha Cancer Hospital/ Mahamana Pandit Madan Mohan Malviya Cancer Centre Varanasi Uttar Pradesh 221005, (A Unit of Tata Memorial Centre Mumbai, Department of Atomic Energy).
Mr. Neelash Giri Goswami	Nursing Officer-A, Homi Bhabha Cancer Hospital/ Mahamana Pandit Madan Mohan Malviya Cancer Centre Varanasi Uttar Pradesh 221005, (A Unit of Tata Memorial Centre Mumbai, Department of Atomic Energy).
Mr. Vineeth P	Nursing Officer-A, Homi Bhabha Cancer Hospital/ Mahamana Pandit Madan Mohan Malviya Cancer Centre Varanasi Uttar Pradesh 221005, (A Unit of Tata Memorial Centre Mumbai, Department of Atomic Energy).

ABSTRACT A new variant of SARS-CoV-2 (B.1.1.529) was reported to the World Health Organization (WHO) on November 24, 2021. This new variant was first detected in specimens collected on November 11, 2021, in Botswana and on November 14, 2021, in South Africa. It's not yet clear whether Omicron is more transmissible when compared to other variants, including Delta. A wide range of symptoms has been reported in people with the Omicron variant, COVID-19, ranging from mild symptoms to severe illness. Symptoms of Omicron Variant may appear from 2 to 14 days after exposure to these variants of the virus. Anyone who has Omicron variant infection may have mild to severe symptoms. Preliminary evidence suggests that there may be an increased risk of re-infection with Omicron compared to other worrying variants. Vaccines remain critical in reducing morbidity and mortality, including against the dominant circulating variant, Delta. The widely used PCR tests continue to detect infections, including Omicron infection, as we have seen with other variants. Corticosteroids and IL6 receptor blockers will continue to be effective in treating patients with severe COVID-19. Conclusion – Omicron is a new Variant of the SARS COV-2 virus, Nurses are frontline workers they need to know about WHO and government guidelines about the care of SARS COV-2.

KEYWORDS : Omicron, SARS-COV-2, COVID new variants, Covid-19.

INTRODUCTION

A new variant of SARS-CoV-2 (B.1.1.529) was reported to the World Health Organization (WHO) on November 24, 2021 (1). This new variant was first detected in specimens collected on November 11, 2021, in Botswana and on November 14, 2021, in South Africa. The name was given by the World Health Organization on the recommendation of the Technical Advisory Group on Virus Evolution (TAG-VE) of the WHO on November 26, 2021. The United States identified Omicron as a variant of concern on November 30, 2021 (1). The first death due to the Omicron variant was reported by the Department of Health and Family Welfare, Govt. of India on 01/05/2020. The age of the first Omicron variant was a 74-year-old man who belonged to the Rajasthan western state of India. More than 90,000 cases were reported on January 6, 2020 - and an almost six-fold increase compared to last week, which, according to experts, is fueled by the Omicron variant (2).

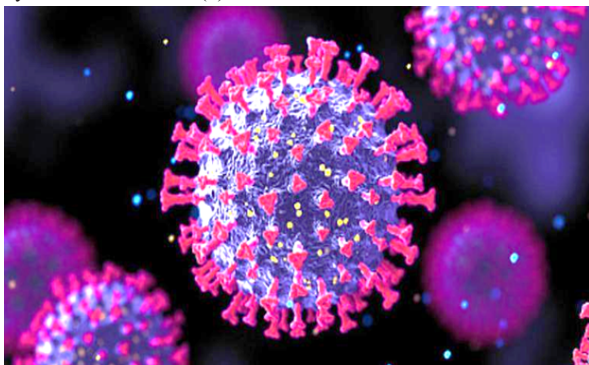


Image Source- <https://www.republicworld.com/world-news/rest-of-the-world-news/covid-19-south-africa-says-being-punished-by-travel-restrictions-for-omicron-discovery.html>

Transmissibility

It's not yet clear whether Omicron is more transmissible (e.g., more easily transmitted from person to person) when compared to other variants, including Delta (1).

Symptoms-

A wide range of symptoms has been reported in people with the Omicron variant, COVID-19, ranging from mild symptoms to severe illness. Symptoms of Omicron Variant may appear from 2 to 14 days after exposure to these variants of the virus. Anyone who has Omicron variant infection may have mild to severe symptoms.

According to CDC People with these symptoms may have COVID-19(3):

1. Cough
2. Fever or chills
3. Shortness of breath or difficulty breathing
4. Fatigue
5. Headache
6. Muscle or body aches
7. Loss of taste or smell
8. Sore throat
9. Congestion or runny nose
10. Nausea or vomiting
11. Diarrhea

The severity of disease:

Older adults and people with serious underlying conditions like heart or lung disease or diabetes seem to be at a higher risk of developing more serious complications from COVID-19 (3). Preliminary data suggest hospitalization rates are increasing, but this may be due to the increasing total number of people infected rather than a specific Omicron infection. Present time There is no information to suggest that symptoms associated with Omicron variant SARS COV-2 are any different from other variants of the SARS COV-2 virus. The first infections reported were in college students, younger people prone to milder illness, but understanding the severity of the Omicron variant will take days to several weeks (1).

Effectiveness of prior SARS-CoV-2 infection

Preliminary evidence suggests that there may be an increased risk of re-infection with Omicron compared to other worrying variants (i.e., people who have previously had COVID-19 could become infected with Omicron more easily), but the information is limited. Further information on this will be announced in the next few days and weeks (1).

Effectiveness of vaccines:

Vaccines remain critical in reducing morbidity and mortality, including against the dominant circulating variant, Delta (1). Current vaccines remain effective against serious illness and death. The CDC recommends that all individuals aged 16 and over receive a booster dose after completing their primary COVID-19 vaccination series (3).

Effectiveness of current tests

The widely used real-time reverse transcription-polymerase chain reaction (RT-PCR) tests continue to detect infections, including Omicron infection, as we have seen with other variants. Studies are currently being conducted to see if there is any effect on other types of tests, including rapid tests to detect antigens (1).

Effectiveness of current treatments

Steroids and IL6 receptor blockers will continue to be effective in treating patients with severe COVID-19. There are 2 classes of IL-6 inhibitors approved by the Food and Drug Administration (FDA): anti-IL-6 receptor monoclonal antibodies (mAbs) (e.g., sarilumab, tocilizumab) and anti-IL-6 mAbs (i.e., siltuximab). These drugs have been studied in patients with COVID-19 who have systemic inflammation (4). Other treatments are being evaluated to see if they are still as effective given the changes in parts of the virus in the Omicron variant (1).

Impact on Cancer patient

1. Cancer patients are immunocompromised, and they are more susceptible to any infection.
2. Due to infectivity it causes a delay in their ongoing cancer treatment like chemotherapy, surgery, radiotherapy, etc.
3. It causes a financial burden due to frequent covid-19 testing.
4. Due to delayed surgery or chemotherapy it increases the severity of cancer (such as increased tumor size, metastasis)
5. It causes emotional distress due to the risk of infection or delay of treatments.

Nurses Role and responsibility

1. All Nurses should follow policy made by the Ministry of Health and family welfare, Govt. of India
2. All health care institutions must have a written infection control policy for the care of SARS- COV-2 Infection based on the Govt of India Guidelines.
3. Nurses should follow strict hand hygiene techniques.
4. All nurses exposed to Covid-19 must be Use PPE against aerosol transmission of the virus, including respiratory protection, eye protection, protective clothing, and gloves
5. Protective requirements on notification of health care employees exposed to COVID-19 in the workplace, and provision of pay and benefits for those who must take time off as a result of exposure or infection
6. Nurses should minimize the unnecessary crowd at Inpatient and outpatient department
7. Mandates on screening and testing of patients admitted for medical or surgical treatment
8. Nurses should educate the patient and relative to wear mask-wearing, maintain physical distancing, and ventilation in the workplace.
9. All nurses who got positive aftercare of covid-19 patients should get quarantined according to the Govt. of India Guidelines.

CONCLUSION

Omicron is a new Variant of the SARS COV-2 virus, Nurses are frontline workers they need to know about WHO and government guidelines about the care of SARS COV-2. Nurses work as an educator for patients and caregivers they should educate them regarding preventing measures of SARS COV-2 Infection.

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