

2. “OMICRON” - The unwelcome Covid 19 mutant’s surging-wave! How much to fear and where are we?

Dr Rajendra Kumar Jha

The author is former Professor and Head, Department of Medicine, RIMS, Ranchi

Let us face the facts!

Omicron variant of Covid 19 is already in India though diagnosed in just about 100 persons so far , distributed in over sixty plus districts in our country .

Please don’t believe these numbers as sacrosanct. It is spreading very fast but at the moment it is hidden as numbers are still very small and patchy therefore not visible! Very soon it is likely to overwhelm. Please be vigilant and start taking guard!

At the moment it is spreading in big cities , connected directly by air to the outside world largely through international flights . Tier two and three cities will soon catch up. There is strong possibility that community transmission has already taken place specially in small social groups and soon it will involve many more at break neck speed making it visible !

Remember this variant , Omicron spreads very very fast , making it as infectious as famous Measles or small pox in pre vaccination era !

It is approximately three times faster than Delta , the famous Indian variant and six times as fast as alpha or the UK variant. Omicron numbers double within two and half to three days as reported from South Africa !

Though highly infectious , lethality or chances of death in vaccinated , is likely to be much less than in Delta variant patients but we will know more about it with reasonable certainty not before a month from now as course of the disease itself in serious cases, is longer than a month .



Preliminary studies show that the effect of vaccination is about 50-70% in those with two jabs and 90-95% with three jabs, quoting the recently published South African and UK data with mRNA and Covishield AstraZenica vaccines .

Good news is that scientists have already started developing specific potent vaccine against Omicron but it will take months before it can reach !!

Those who have two doses are better protected than those who have taken only one jab .

Western studies have strongly supported the use of third dose specially for elderly and other vulnerable groups irrespective of which vaccine one takes except that of Johnson and Johnson , which has failed the second phase against Omicron ! Immunocompromised and Health care workers should have there third jab as early as possible but our Government is waiting for our very own data to emerge though South Africa , UK and USA have firmly confirmed the requirement of third jab and they are well on the way to vaccinate the entire population ! This delay may turn out to be costly in the long run. Even children are being vaccinated there though the disease is known to be much milder in them but they are potential asymptomatic spreaders for elderly in the family !

Definitely we have done quite well on vaccination front and have the responsibility to give two doses to all adults which may take at least two more months to com! We can always increase the availability of vaccines which we have fortunately done before at a faster pace and expedite the process of vaccination to the vulnerable.

This is to share that today 's data from New York Times is very scary . Test positivity rate is doubling every three days from 3.9% on 9 th December to 7.8% on 12 th December in USA, And the positivity doubling rate is no different in South Africa,United Kingdom and Netherland too! There is no valid reason to believe that it will spare us Indians !

Please try to remain indoors as much as possible and follow all measures which we were told to do



while confronting Delta surge early this year - put proper mask covering your nose and mouth, keep distance specially from those who are not fully vaccinated and unknown to you and wash hands regularly ! Always try to come out of your houses in open space if meetings are not avoidable. Proper mask protects you from all respiratory causatives irrespective of whether it is Virus ,Bacteria or just dust or pollens causing allergy or Asthma.

This is to remind everyone that despite taking two doses of vaccines , half of us are likely to be infected if we do not take above precautions !

It is just about two years back when WHO announced the arrival of a strange respiratory viral disease and christened it as Covid 19 , which lead to serious viral pneumonia leading to even death , primarily in immunocompromised and elderly.

As we all know it originated from China in mysterious circumstances and spread to highly connected western world first , killing lakhs of them in a very short time . Definitely It's entry to the rest of the world including India followed rather slowly . It soon mutated into more infectious and lethal alpha mutant form in United Kingdom , creating unprecedented mayhem in UK , America and rest of the Western Europe. India and most of Asia were less harmed in comparison . We waited anxiously for a potent medicine at that stage but very little was offered . Several other mutants soon surfaced but they were either less infectious or originated in a limited geography. Then came the most dreaded Delta mutant which was three to four times more infectious and lethal than Alpha variant.

This unfortunately originated from India at the fag end of the first wave when we had started celebrating the victory over the Covid 19 ! This was of course premature and we were struck much more vehemently by the Delta mutant . We were mercilessly beaten this time by the virus as we had not done enough on vaccination front and infrastructure development specific to this viral illness . We eventually lost lakhs of people including treating Doctors and health care workers.

On November 24 ,2021, South Africa reported the identification of a new SARS -COV -2 variant, B.1.1.529 to the WHO from the specimens collected on November 11 from Botswana and on

November 14, from South Africa , which was quickly designated as Variant of Concern due to mutations present in spike protein (surface protein by which virus attaches the host cells through Receptor Binding Domain to be more precise) This new variant was named as OMICRON , based on the 15 th Greek letter. The spike protein of Omicron is characterised by as much as 30 Amino Acid substitution of which 15 are confined to all important Receptor Binding Domain (RBD) of spike protein which is the primary target of Vaccine induced immunity.

Omicron variant has critical and relatively more mutations in RBD zone , it leads to significant reduction in neutralising activity of sera from vaccinated or previously infected individuals suggesting reduced protection from available vaccines .

Monoclonal Antibodies against RBD zone of spike proteins available as potent treatment for some time in previous variants , may not be as effective making the future uncertain.

Available evidence support Sotromivab of GSK and Molnupiravir as front runners for early treatment against Omicron variant.

Diagnose of Omnicorn variant has also come as a huge issue. Loss of 'S ' gene in real time RTPCR is considered specific for the diagnosis of Omnicorn variant but recent information that this feature is not seen in one of three sub types of Omnicorn , making RTPCR test of uncertain value. Probably use of Genome sequencing is the only way for full proof diagnosis, which is scarcely available in most part of India .

Today we came across heartening news that Korean scientists have discovered a molecular diagnostic kit which gives result in just 20 minutes!

How to recognise Omicron infection clinically?

Symptoms in those who are vaccinated with two doses will be more muted no doubt but almost fifty percent will face it much as influenza like illness consisting of fever, cough ,running nose ,pain in throat with superadded severe body aches and extraordinary weakness.



Molecular biologist group from Ohio University brought out a paper yesterday that that Omicron does not involve lungs and therefore it's outcome should not be too bad , however few deaths from Omicron has already been reported from UK and South Africa.

Some of the vaccinated will develop severe illness too but proportion is not known yet. For a country of our size and population even a small percentage will build up severe pressure on our preparedness and resulting unwanted deaths.

Those who are not yet completed two doses of vaccination must hurry up and do it! We have already experienced the fury of Delta variant and should not undermine Omicron. Let us behave like a responsible citizen, fully understanding the idiom “No one is safe until Everyone is safe”.