

## **Guest Editorial**



**Dr. P. S. Shankar**MD, FRCP (Lond.), FAMS,
DSc. (Gul), DSc. (NTR), DSc. (RGUHS), DSc. (TU)

New variants of Covid-19 have emerged following the first, second and third waves of the pandemic and have created great panic among people. Viruses constantly change through mutation. When a virus has one or more new mutations it is referred to as variant of the original virus. The World Health Organization (WHO) has classified each emerging Variant as either a variant of Concern (VOC) such as the Alpha, Beta, Gamma and Delta variants, or Variants of Interest (VOI) such as the Eta, lota, Epsilon, Zeta, Kappa and Lamda. They have been named by using Greek alphabet. There are also Variants of High Consequence, and none of them have been recognized. At the end of December 2020, variants of Covid-19 began to appear allowing the virus to be more contagious than before. Genetic variants have been emerging and circulating during the pandemic worldwide. The changes in the variants occur when there is a mutation of the genes of the virus. Mutation of RNA viruses is a natural process, which we have seen in flu viruses. Geographic separation has resulted in genetically distinct variants. In VOC, a SARS CoV-2 variant exhibits greater transmissibility, increased fatality and a marked decrease in effectiveness of therapy and vaccines. Delta, Omicron and its descendent (BA2) variants are highly contagious strains. Omicron and its sub variants spread more easily than others. Persons who were vaccinated against the corona virus appear to get full protection against these descendent viruses.

There is an urgent need to focus on the rapid characterization of emerging variants and to monitor their impact on the steps taken to control their spread through treatment and vaccination. The causative virus of Covid-19 will continue to change over time and new variants emerge following a change in their genes. Vaccines could be less effective against some of the variants. Hence persons even after getting vaccine should continue with corona virus safety precautions to reduce the risk of infection, such as wearing mask, physical distancing and hand hygiene, good ventilation indoors, and limiting gatherings or congregations of people in close proximity with poor ventilation. This will reduce the spread of the infectious variants. There is a need to augment the facility to conduct genetic sequencing studies to keep track of these variants. We have to be vigilant and monitor them properly. We should ensure proper testing, treatment and vaccine which are the strong weapons against the virus. We should continue our efforts to prevent virus transmission and to vaccinate more people.