

India explores biomolecular relationships among COVID-19, ageing, and diabetes

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The researchers believe that an ideal therapeutic candidate for COVID-19 should be able to target the pathways that are common to diabetes, ageing and the SARS-CoV-2 infection



Scientists at the Indian Institute of Science Education and Research (IISER) Bhopal have recently published a review of the biomolecular relationships among COVID-19, ageing, and diabetes.

Researchers at IISER Bhopal, along with researchers from The University of Arizona, USA, have presented that existing drugs used to treat diabetes, obesity and ageing can potentially be used to treat COVID-19. In addition, there are similar naturally existing biomolecules that can be also explored in combination for the COVID-19 treatment.

Their review, recently been published in the journal *Molecular and Cellular Biochemistry*, offers insight into future directions in COVID-19 therapeutics.

The published review shows that at the molecular level, there are intersecting pathways that are common to diabetes, ageing, and COVID-19. All three conditions are associated with oxidative stress and lowering of the immune response and complications arising from them lead to the onset of numerous other diseases such as cardiovascular disorders, eye diseases, neuropathy (nerve diseases), and nephropathy (kidney problems).

It is now known that the effects of the viral infection is severe on ageing population and people with existing diabetic conditions.