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The truth behind herd immunity in Indian pretext

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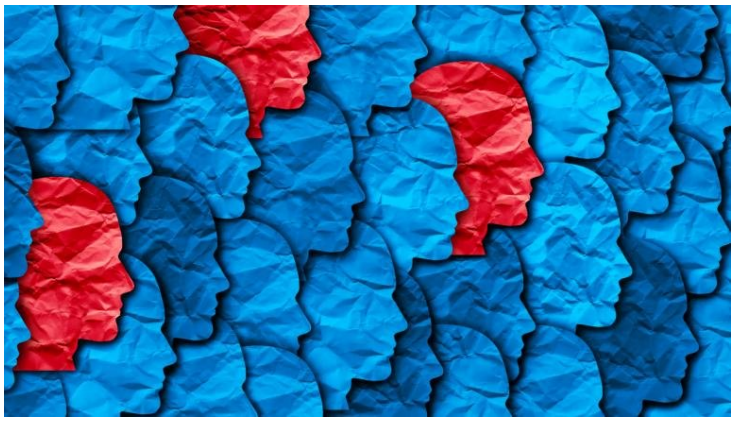

The COVID-19 Pandemic has shaken the world to its very core. Certain norms have been found instrumental in protecting oneself from the virus- physical distancing, staying at home, sanitising from time-to-time, using an N95 mask when heading out, and so on. At the same time, countries all over the globe are trying to find a vaccine or a solution which can help us return to a normal, pre-COVID world. While research and testing are in full swing, scientists all over are also open to experimenting with other tactics that might help the public become immune to the virus.

In the midst of this discussion and deliberation, the concept of 'herd immunity' arose. A form of indirect protection from infectious diseases like COVID-19, the phenomenon of 'herd immunity' ensures that a large percentage of the population becomes immune to the infection, either through vaccination or previous infections.

Now that schools and colleges have diverted to virtual learning, the idea of in-person classes seems rather distant. However, in-spite of us finding an alternative for the time-being, online classes in the long term are not feasible for all. Online classes are especially a problem for those middle-class families with multiple children in school, or those belonging to economically-weaker sections of society. While online classes have their own advantages and disadvantages, scientists and researchers have located a new plus-point to the reopening of schools and colleges eventually, once the cases get out of control.

Elaborating on this, Dr. Amitav Banerjee, Professor & Head Community Medicine, Dr DY Patil Medical College, Pune commented, "If we choose to open schools and colleges once the curve stabilises, there are very strong chances that we will be able to achieve herd immunity. Children & young adults have a fresh immunity, which makes them better prepared to fight infections. It has a multiplier effect- if we develop it, we can protect many people. If we study USA data, 24 districts in USA do not a single child fatality"

"The mean age & BMI has been an important factor in the number of deaths. Recent CDC update mentions that obesity is a major risk factor for fatality from Covid-19 virus. Japan never had a lockdown & despite having higher mean age there were very few fatalities, which reconfirm CDC findings", Dr Banerjee added.

The idea behind achieving herd mentality, however simple it may sound, is actually quite complex in terms of achievement. Explaining how exactly herd immunity is achieved, Dr. Sanjay K. Rai, Professor, Centre of Community Medicine, AIIMS New Delhi elaborated, "there are two basic ways of achieving herd immunity- by developing a vaccine, and by exposure to infection. Since there is no possible way of knowing by when we can find a vaccine and how effective it will be, the only other alternative is through infection."

The opening of schools and colleges, at present, seems like a bizarre idea which will only put the future of the country at risk. However, in this dark situation, Dr. Rai finds a silver lining, "If schools and colleges go back to functioning in full swing, keeping in mind distancing and sanitisation norms, there is a possibility that sooner or later, everyone will get exposed. Children have fresh immunity, and they can be major contributors to us achieving herd immunity. The process is quite complex, though- careful interpretation and increase in testing are vital for it to be successful."

Dr Chandrakant S Pandav, Former HoD, Center of Community Medicine, said, "Lockdown may not be the ultimate solution to fight COVID 19. It may delay the infection but cannot protect us forever. There are multiple diseases, vaccines for which remain elusive & if that happens with COVID 19, herd immunity is our only solution to end the pandemic."

Dr Swadeep Srivastava, Founder, Heal Foundation said, "The experts have presented a new perspective about immunity at large. The limited activity & exposure of sunlight have a negative effect on the immunity of a person. Schools have moved to online classes and most corporates have accepted the work from home culture, the changes, which were supposed to save people from COVID, may be making them vulnerable to infections due to decreasing immunity. With no certainty around vaccines, herd immunity seems to be the only option & opening schools & colleges can be a rational *call."*