

Home / India News / Mandatory BCG vaccination may make Covid-19 less virulent in India: Study

Mandatory BCG vaccination may make Covid-19 less virulent in India: Study

The bacille Calmette-Gurin (BCG) vaccine has a documented protective effect against meningitis and disseminated TB in children, according to the World Health Organisation.

INDIA Updated: May 08, 2020 19:26 IST



The findings also indicate that population age structure can lead to high fatality rate across countries.(Getty Images/iStockphoto)

After scanning Covid-19 data of 29 countries across the world, a group of city-based researchers has suggested that factors such as BCG vaccination in developing nations like India have led to a situation where the rate of contamination and fatality from the disease is less than that in the developed world.

The bacille Calmette-Gurin (BCG) vaccine has a documented protective effect against meningitis and disseminated TB in children, according to the World Health Organisation. It is part of the mandatory childhood immunization programme in many countries including India.

“Our research showed that the rate of affected people is significantly lower in countries like ours than developed nations which did not make BCG vaccination mandatory,” said Prof Arindam Banik, director of a management institute, who led the group of four researchers from reputed institutes.

“Such vaccination somehow dilutes the virulence of novel coronavirus and develops immunity among a large number of people,” he told PTI.

Besides India, infants in countries like Portugal, Turkey, South Korea, Indonesia, Egypt and Ethiopia get BCG vaccination and all these countries have witnessed less Covid-19 cases. Whereas in the USA, Italy and the UK where that vaccination is not mandatory, a large number of people were afflicted with the disease, Banik said.

The findings will come out in a prestigious journal soon.

To calculate the rate of novel coronavirus infected people, the researchers took into account 45 days starting from the day the first such case was reported in a country and then divided its population by the number of Covid-19 cases.

“The 45-day period varies from one country to another.

If the starting point is February-end for Italy, it is early March for England, mid-January for China and March-end for India,” Banik told PTI.

Asked about the contention by many health experts that the rate of affected people in India is no way less than countries like the US and the UK, Banik said epidemiologists divide the total number of affected with total number of tests and that shows the figure on the higher side.

“We are confident that the Covid-19 situation will not be as severe in the later phase as in Europe where black, Asian migrants were the worst-hit as the healthcare system was less accessible to them,” he said.

Besides BCG vaccination, the academician said, they analysed other factors that determine the fatality rates across 29 economies spread across both the developing and developed world.

“We have explored various econometric models. Based on available data, our study revealed that factors such as public health system, population age structure, poverty level and BCG vaccination are powerful contributory factors in determining fatality rates among those afflicted with novel coronavirus,” he said.

The findings also indicate that population age structure can lead to high fatality rate across countries.

“The study shows that the population above 65 are at significant risk from Covid-19 contagion. Such findings are more consistent in the context of Europe. According to a WHO report, top 30 countries with the largest percentage of over- 65 population, all barring Japan are the member states in Europe and these countries are severely affected by Covid-19,” he said.

Evidence shows that over 95 per cent of those died there are more than 65 years of age and over 50 per cent of all deaths were people aged 80 years or older, he said.

“The WHO report also suggests that 8 out of 10 deaths are occurring in individuals with at least one underlying co-morbidity condition, particularly those with cardiovascular diseases, hypertension and diabetes,” he said.