

## Short Communication

# A preliminary study of mortality rate due to covid-19 in Asian countries

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**Abstract**

A novel coronavirus (nCoV) with its epicentre in Wuhan, People's Republic of China, has emerged as a public health emergency of international concern. COVID-19 has been labelled as a public health emergency of international concern (PHEIC) and the epidemic curves are still on the rise. While China is already on its path to recovery, countries like India, Pakistan, Indonesia, and Bangladesh are experiencing a surge in the number of COVID-19 cases. This short communication summarizes the mortality rate due to covid-19 in Asian countries.

**INTRODUCTION**

As of 8 June 2020, at least one case of COVID-19 had been reported in every country in Asia except North Korea and Turkmenistan. The affluent Southeast Asian city-state Singapore has reported a second wave of the deadly virus in the second half of March. The country of less than 6 million people reported more than 24,822 cases, the most in Asia after China, India and Pakistan. However, only 21 infections have resulted in fatalities, making it one of the lowest mortality rates [1].

**Background**

Countries with the highest numbers of confirmed coronavirus cases are USA, India, Iran, Saudi Arabia, Bangladesh and Pakistan. Among the earliest countries to report COVID-19 cases after the outbreak in China were Thailand, Japan, South Korea, Taiwan, and Vietnam, but these countries had successfully controlled the pandemic. The highest numbers of deaths are recorded in Iran, India, Turkey, China, and Pakistan, with more than 27,000 deaths combined. The death tolls in a number of countries, however, are claimed to be significantly higher than those given in official figures [2]. "Exclusive: More than 2,200 Indonesians have died with coronavirus symptoms, data shows" [3].

**Rationale**

It is one of the many mysteries of the coronavirus pandemic: Why has the death toll from covid-19 apparently been lower in Asia than in Western Europe and North America? "There are differences in testing, reporting, control from country to country. And there are differences in rates of hypertension, chronic lung disease, et cetera, on a country-by-country basis" [4]. Many reasons have been offered over the past few months as to why South Asia might be an outlier in the pandemic: its

tropical climate, protection offered by a tuberculosis vaccine called Bacillus Calmette-Guérin (BCG), exposure to malaria, and a weaker strain of the virus in the Indian subcontinent [5]. Possible factor could also be the environment in South Asian countries, indicating that regions with higher average temperatures and levels of sunlight and its associated ultraviolet radiation have shown relatively lower death rates so far [6].

Possible reasons for low mortality rate:-One possible reason can be the food habits of Asian people such as use of traditional herbs like tulsi, tinospora, ginger, garlic, turmeric etc. The European countries and the US are well equipped with trained manpower, high end medical infrastructure facilities, high literacy rates and public awareness to combat this COVID 19 pandemic. Apart from that, Commonwealth Fund's international comparison reports, presented European countries among top countries having advanced health care facilities with France on top and Italy on second position respectively [7].

Despite the excellent medical facilities access across these countries, they are having high burden of SARS-CoV-2 infection and cases reported compared to low income Asian/African countries where there is a presence of meagre medical facilities, illiteracy, poor public awareness, and unhealthy life style. Even with the origin and initial transmission of SARS-CoV-2 in the Asian countries i.e. China, at present Europe and America are attributed on top in terms of SARS-COV-2 confirmed cases and death rate. It is acknowledged that the elderly population makes up a high proportion of the COVID-19 mortality across all countries [8,9].

Certain immune variations such as genetic or acquired differences might separate people who fall severely ill and develop pneumonia with COVID-19 from those who contract the infection but hardly develop any discernible symptom [10]. An Indo-US team of researchers has found that Indians, compared

to other world populations, carry more natural killer cells that can detect and terminate infections at an early stage [11]. Obesity rates are higher in the US and the western world than in India. The prevalence of obesity in the USA around 40%, *versus* a prevalence of 6.2% in China, 20% in Italy, and 24% in Spain [12]. A recent study has demonstrated that hospitalized patients younger than 50 with morbid obesity (BMI  $\geq 40$  kg/m<sup>2</sup>) are more likely to die from COVID-19 [13,14]. In July, a review of the mortality data in 28 countries found at least 161,000 more people have died during the coronavirus pandemic than the official Covid-19 death counts report. India was not among the countries surveyed [15]. Of the 10,77,618 confirmed Covid-19 cases in India, up to 2.48 per cent of infected persons have died while 63 per cent have recovered. The country has recorded 6,77,423 total recovered cases while 26,816 have succumbed to the virus.

Cases of COVID-19 continue to rise and the WHO South-East Asia Region (SEAR) recorded the highest weekly increase in cumulative cases among all WHO Regions on week 37. The highest weekly percentage increase in region was reported in Myanmar (107%, 1513 cases), followed by Nepal (17%, 7902 cases) and India (16%, 640,545 cases). (WHO SEA, Home/Outbreaks and emergencies/Novel Coronavirus 2019 Member States Resolve to strengthen COVID-19 Response. Moreover, India's tests conducted per confirmed case were low compared to many Asian nations. Of the 21 Asian countries for which testing data were available, India was among the nine which conducted fewer than 13 tests for every confirmed case [16]. Many Asian countries dealt with covid-19 well because experience of SARS meant they were well prepared [17].

Material and Methods-Precautionary measurements under taken:- Considering the issue of testing, Govt. of India had raised the testing samples and despite the extended weekend, India has posted high daily testing numbers over Thursday-Friday-Saturday with 10,97,947, 11,32,675 and 11,42,131 tests respectively. An average of 11.5 lakh tests were done on a daily basis during the past ten days. Now the situation has been shifted

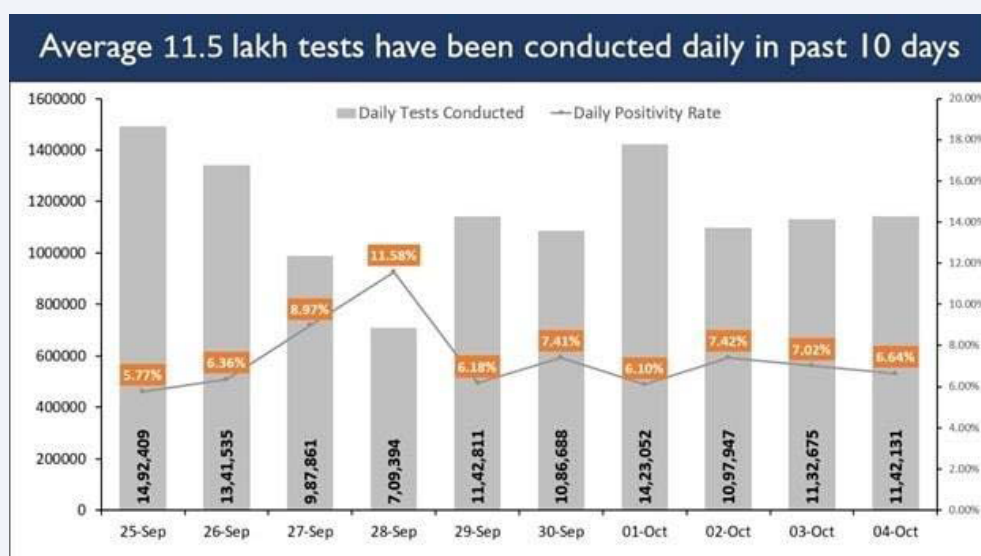
toward RT-PCR, the reliability of antigen is not statistically significant. Therefore the number of RT-PCR has been increased in India (Figure 1).

The same practice is also being adopted by other Asian countries, as early detection is helpful for rationalisation of infected patients. The precautionary measurements taken on time such as home isolation, quarantine, hygiene maintenance, traditional intervention i.e steam, hot water, intake of herb decoction, Vitamin -C, physical exercise including yoga and meditation will help drastically in improving or decreasing mortality rate and also in increasing the recovery rate as well.

## DISCUSSION

For COVID-19, there was initially no known antidote, but later, various modalities of treatment were developed - use of high-flow nasal oxygen instead of the early use of ventilators, making patients admitted to ICU lie in the prone position instead of the supine position, and the use of corticosteroids, anticoagulants, Remdesivir and other antiviral drugs. Clinicians are now better equipped in terms of skills while treating COVID-19 patients and managing those with severe symptoms [18].

On Aug 11, 2020, Russia became the first country in the world to approve a vaccine against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). "The main thing is to ensure unconditional safety and effectiveness of this vaccine in the future." Mass production is expected to begin in September 2020 [19]. The vaccine is administered in two doses and consists of two serotypes of human adenovirus, each carrying an S-antigen of the new coronavirus, which enter human cells and produce an immune response [20]. There are currently over 169 COVID-19 vaccine candidates under development, with 26 of these in the human trial phase. WHO is working in collaboration with scientists, business, and global health organizations through the ACT Accelerator to speed up the pandemic response? When a safe and effective vaccine is found, COVAX (led by WHO, GAVI and CEPI) will facilitate the equitable access and distribution of



**Figure 1** Tests conducted up to 04th Oct 2020.

these vaccines to protect people in all countries. People most at risk will be prioritized [21].

India is also on urge to develop vaccine against COVID-19. ICMR has developed the indigenous COVID-19 vaccine (BBV152 COVID vaccine) partnered with Bharat Biotech International Limited (BBIL) [22]. "HETERO" announces the launch of "FAVIVIR" in India to treat mild or moderate COVID-19 [23]. In India, two indigenous vaccines - one by Zydus Cadila and the other by Bharat Biotech - have reached phase one of human trials and five sites across the country are ready for the third and final phase of human trials of the Oxford-AstraZeneca COVID-19 vaccine [24]. Due to differences in reporting methods, retrospective data consolidation, and reporting delays, the number of new cases may not always reflect the exact difference between yesterday's and today's totals.

India's steady trend of posting high recoveries also continues. 82,260 recoveries registered in the last 24 hours (data updated up to 04<sup>th</sup> October 2020). In contrast, 75,829 new cases have been reported. The new recoveries have exceeded the new cases in the recent days (Figure 2).

The effect of increasing the numbers of testing had also helped in gradually decreased the spread of Covid-19 due to contact tracing as an early detection controlled the infected by isolation and quarantine and also with initial medication. Here is the graphical representation for the 13th day in an unbroken string, India has maintained its steady trend of clocking less than 10 lakh active cases (Figure 3).

## CONCLUSION

The present study concluded on the facts of mortality rates

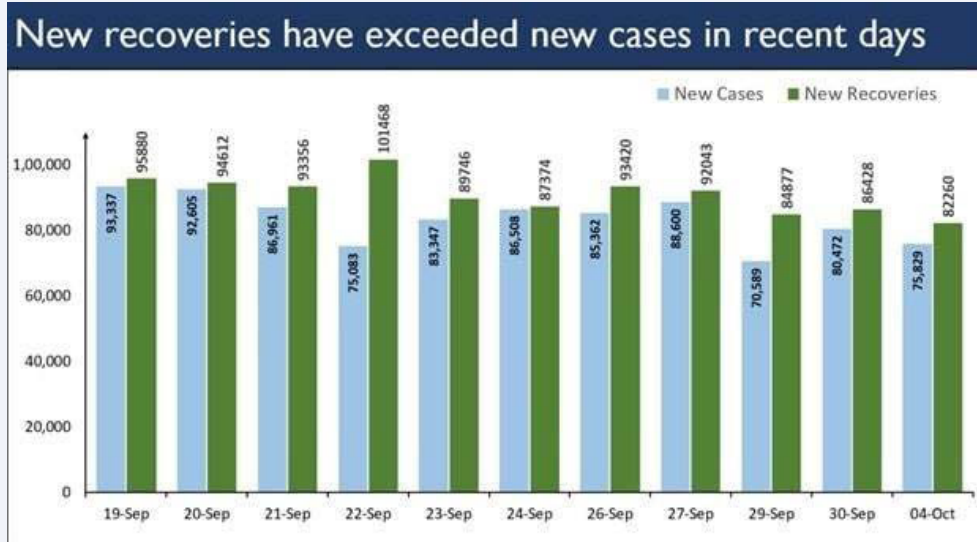


Figure 2 New recoveries have exceeded new cases (up to 04th October 2020).

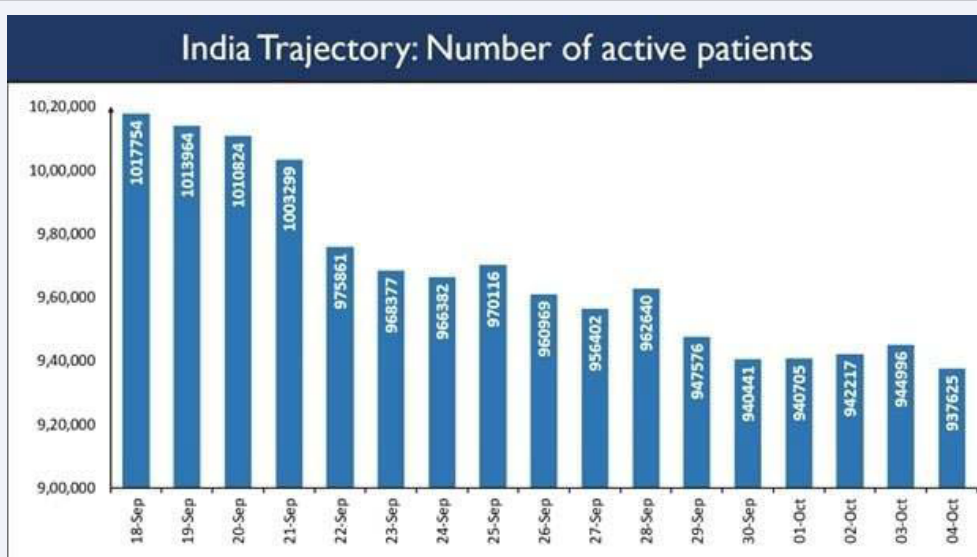


Figure 3 Decreasing number of active patients (upto 04th October 2020).

of Asian countries and other temperament and comes to the conclusion that for any pandemic amid new infectious disease, immunisation of the public is most important thing. Therefore, health authorities must explore it for better preparedness to fight with. Healthy lifestyle, hygiene maintenance and food habits to boost the immune system etc. are the responsibility of each person in the interest of individual as well as in public health.

Besides this, to control the mortality rate and to increase the recovery rate, testing is the important tool which is a key to control transmission and also decrease the number of new cases. Although, health authorities of Asian countries are taking all precautionary measurements, it is the moral duty of every individual to follow the guidelines and instructions issued by authorities for the combating of Covid-19.

## REFERENCES

- Tracking the spread of COVID-19 outbreak in Asia, health matters. 2020.
- Tom Allard, Kate Lamb. 2020.
- Reuters. BehrangTajdin& Louise Adamou. 2020.
- Researchers ponder why covid-19 appears deadlier in the U.S. and Europe than in Asia, The Washington Post Democracy Dies in Darkness.
- INFECTIOUS DISEASE Why South Asia's COVID-19 Numbers Are So Low (For Now), Quanta magazine.
- The curious case of South Asia's 'low' coronavirus deaths, Aljazeera, by Asad Hashim. 2020.
- <https://worldpopulationreview.com/countries/best-healthcare-in-the-world/#dataTable>.
- Li H, Wang S, Zhong F. Age-dependent risks of incidence and mortality of COVID-19 in hubei province and other parts of China. *Front Med.* 2020; 7: 190.
- Docherty AB, Harrison EM, Green CA. Features of 20 133 UK patients in hospital with covid-19 using the ISARIC WHO Clinical Characterisation Protocol: prospective observational cohort study. *BMJ.* 2020; 369: m1985.
- Lanese N. Could genetics explain why some COVID-19 patients worse than others.
- Du Z, Sharma SK, Spellman S, Reed EF, Rajalingam R. KIR2DL5 alleles mark certain combination of activating KIR genes. *Gene Immun.* 2008; 9: 470-480.
- World Health Organization Global Health Observatory (GHO) data: overweight and obesity. 2017.
- [https://www.who.int/gho/ncd/risk\\_factors/overweight\\_obesity/obesity\\_adults/en](https://www.who.int/gho/ncd/risk_factors/overweight_obesity/obesity_adults/en).
- Klang E, Kassim G, Soffer S, Freeman R, Levin MA, Reich DL. Morbid obesity as an independent risk factor for COVID-19 mortality in hospitalized patients younger than 50. *Obesity.* 2020. 10: 1002/oby.22913.
- Coronavirus: How many Covid-19 deaths is India missing? Soutik Biswas, India correspondent, BBC News.
- Data | India's COVID-19 situation worst among Asian countries, 2020.
- How Finland kept Covid in check, Country has one of lowest infection rates in Europe and its economy held up better than others, Richard Milne, Nordic and Baltic Correspondent Financial Times. 2020.
- Covid mortality rate is falling. But long-term morbidity needs to be monitored, The Indian Express. 2020.
- The Russian vaccine for COVID-19, Talha Khan Burki. 2020.
- Sputnik V: What we know about Russia's coronavirus vaccine, Russia, the first country to grant approval for a COVID-19 vaccine, started to release the first batch to the public. The push for a COVID-19 vaccine, World Health Organization.
- ICMR selects 12 institutes for clinical trial of COVID-19 vaccine, PTI July 03, 2020.
- <https://www.heteroworld.com/>, cited on dated 22.09.2020.
- Oxford COVID-19 vaccine: Human trials to be conducted in these 5 sites in India By Vikash Aiyappa.
- Ministry of Health and Family Welfare, Government of India.

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