



Post-Hospitalization Mortality in Covid-19 Patients

For Prelims: Indian Council of Medical Research (ICMR), [Covid-19](#)

For Mains: How can healthcare systems address the post-covid-19 mortality

Source: [DTE](#)

Why in News?

Recently, a new study conducted by the [Indian Council of Medical Research \(ICMR\)](#) has shed light on the **post-hospitalization mortality rate among former Covid-19 patients**.

- The study's comprehensive examination of factors such as **comorbidities (more than one disease or condition at the same time), age, and vaccination** sheds light on vulnerabilities and emphasizes the importance of managing health conditions to reduce mortality risk.

What are the Key Highlights From the Study?

- **Mortality Rate and Participant Demographics:**
 - The study examined 14,419 former Covid-19 patients across 31 Indian medical centers.
 - The **observed mortality rate one year after hospital discharge is 6.5%**.
 - Around **50% of patients** who died, passed away **within 28 days of hospital discharge**.
 - **The risk of mortality decreases as time elapses after discharge.**
 - The **elderly age group (60+) with comorbidities** is particularly **vulnerable to mortality**.
- **Prevalence of Post-Covid-19 Conditions:**
 - 17.1% of participants experienced Post-Covid-19 conditions, including **lethargy, breathlessness, cognitive abnormalities, and difficulty in concentrating**.
- **Focus on All-Cause Mortality:**
 - The study primarily concentrated on all-cause mortality, rather than attributing deaths solely to Covid-19.
 - All-cause mortality encompasses various causes of death, including comorbidities and other factors.
- **Vaccination and Disease Severity:**
 - Vaccination confers **approximately 60% protection before Covid-19 infection**.
 - Vaccines contribute to **reducing disease severity during hospitalization**.
- **Vulnerabilities Leading to Higher Mortality:**
 - Comorbidity, age, and gender were identified as factors influencing mortality risk.
 - Individuals with **one comorbid condition are over 9 times more likely to die**.
 - Men faced a **1.3-fold higher risk, and aged 60 and above were associated with a 2.6-fold higher risk**.
 - The study underscores the **importance of managing comorbidities to reduce mortality risk**.
- **Children's Vulnerability:**

- **Children aged 0 to 18 faced a 5.6 times higher risk of death** between four-week and one-year follow-ups.
 - Risk 1.7-fold higher in the first four weeks post hospitalization.
- Children with serious health conditions like **cancer and kidney disorders had a higher chance of passing away.**
- **Limitations of the Study:**
 - The study did not examine **long Covid symptoms.**
 - The operational definition of Post Covid Condition (PCC) used in this study is not an exact match with the definitions provided by either the [World Health Organization \(WHO\)](#) or the **Centers for Disease Control and Prevention(CDC)**, the national public health agency of the United States.
 - WHO definition for PCC says that we have to **wait for three months and then check if the symptoms persist for two months**, it says long covid symptoms **persist post-three months after initial infection.**
 - Long Covid-19, as defined by the CDC, encompasses various ongoing health problems post-Covid-19 infection, starting from **at least four weeks after infection.** However, the **ICMR study only did a symptomatic assessment at four weeks' time, not after that.**

Indian Council of Medical Research (ICMR):

- ICMR is the apex body in **India for the formulation, coordination, and promotion of biomedical research.**
- ICMR was established in 1911 as the Indian Research Fund Association (IRFA) and was renamed as ICMR in 1949.
- ICMR is funded by the Government of India through the **Department of Health Research, Ministry of Health and Family Welfare.**
- Its mandate is to conduct, coordinate and implement medical research for the benefit of the Society; translating medical innovations into products/processes and introducing them into the public health system.
- ICMR also collaborates with international organizations, such as WHO, [United Nations Children's Fund \(UNICEF\)](#), etc., on various health research projects and programs.
- ICMR has also supported human resource development and capacity building in biomedical research through various schemes and programs.

Mains

Q. COVID-19 pandemic accelerated class inequalities and poverty in India. Comment. **(2020)**