

Covid's Unequal Impact In India: Muslims, Adivasis, Dalits, Women Faced Greatest Decline In Life Expectancy

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A file photo of the nationwide COVID-19 lockdown in 2021/ MANOEJ PAATEEL

Using high-quality survey data from the National Family Health Survey, researchers have, for the first time, examined mortality impacts of the pandemic in India by sex, social group and age. Life

expectancy in India in 2020 was 2.6 years lower than in 2019, but not everyone fared the same. Indian women experienced a life expectancy decline of one year more than men; and Muslims, scheduled castes and scheduled tribes experienced greater declines in life expectancy than higher-caste Hindus.

Mumbai: A boy and a girl child born today in India, to Indian parents, may expect to live, on an average, up to 68.4 and 71.7 years, respectively.

Women may actually expect to live longer than men, on average, according to the [Sample Registration System](#) (SRS) for 2015-2019, a large scale demographic sample survey in a random sample of villages and urban blocks conducted by the office of the registrar general and census commissioner.

Researchers have now estimated that compared to 2019, life expectancy at birth was 2.6 years lower in 2020. They arrived at the estimate using high-quality empirical data on mortality and socioeconomic markers from India's fifth [National Family Health Survey](#) (NFHS-5),

This decline in life expectancy, however, did not affect

all Indians equally.

Indian women suffered a decline of one year more than men, in a departure from patterns in most other parts of the world where men suffered a greater burden of lower life expectancy after the pandemic.

Also, members of marginalised social groups suffered a greater decline in life expectancy than high-caste Hindus, widening an existing gap in life expectancy between Dalit-Adivasi groups and upper caste Hindus.

The study, '[Large and Unequal Life Expectancy Declines During the COVID-19 Pandemic in India in 2020](#)' published in Science Advances on 19 July, assessed changes in life expectancy, including by sex and social group, between 2019 and 2020 in India.

Conducted by Aashish Gupta of the University of Oxford; Payal Hathi of the University of California, Berkeley; Murad Banaji of the University of Oxford; Prankur Gupta of the University of Texas at Austin; Ridhi Kashyap of the University of Oxford; Vipul Paikra of the Research Institute for Compassionate Economics; Kanika Sharma of Emory University; Anmol Somanchi of the Paris School of Economics; Nikkil Sudharsanan of the Technical University Munich; and Sangita Vyas of the CUNY Hunter College, this is the first study to examine the impact of

the Covid-19 pandemic on India's mortality rates by sex and social grouping.

On the disproportionate impact of the pandemic on women, the study pointed to gender inequality in healthcare and allocation of resources within households to explain the greater decline in women's life expectancy.

Relative to a decline in life expectancy of 1.3 years for high caste Hindus, the loss for Muslims was 5.4 years, for scheduled tribes 4.1 years, and for scheduled castes or Dalits 2.7 years. "Before the pandemic began, each of these three groups faced large disadvantages in life expectancy at birth relative to high caste Hindus," the study said. "The pandemic exacerbated these disparities."

These declines were "comparable or larger in absolute magnitude" to those experienced by Native Americans, Blacks and Hispanics [in the United States](#) in 2020, it

said.

The findings are significant particularly in the context of the ground reality of the social determinants of healthcare in India.

While access to primary healthcare centres, specialised care and health insurance have all widened, millions of socio-economically marginalised Indians continue to face exclusions and discrimination, their caste status recorded by various government datasets but its impact not expressly acknowledged.

Previous studies have shown (see [here](#), [here](#), [here](#) and [here](#)) that life expectancy for Dalits and Adivasis is respectively three and four years lower than for upper caste Hindus, while Muslims' life expectancy is one year lower; that the disadvantage Muslims suffer in life expectancy has worsened over the past 20 years; that Dalit women may face specific discrimination in accessing maternal health services, and in general lower caste women were likelier to have poor health than women of higher castes.

“One of the most fundamental indicators of human welfare and wellbeing in society is life expectancy—in order to excel or progress on development indicators, one has to be alive,” said lead author Ashish Gupta, demographer, sociologist and Marie Skłodowska-Curie

fellow at the University of Oxford.

Life expectancy is one third of the components of the [Human Development Index](#), along with education and income. Yet, the last available life expectancy estimates for India (before the current study) were published in 2019.

“If we care about improving health outcomes in India,” Gupta told [Article 14](#), “we should care about assessing how we are doing on that front regularly, and for that we need robust mortality data.”

Discrimination & The Impact Of Covid-19

While data collection for NFHS-5 was done between 2019 and 2021, the study used a subsample of households interviewed in 2021, to study mortality in 2020 relative to prior years. This subsample, of 765,180 individuals, included households from 14 states and union territories, and is representative of one-fourth of India’s population, and is similar to the full sample in terms of demographic and socio-economic characteristics.

According to the study, mortality was 17% higher in 2020 than 2019, implying ‘excess deaths’ to the tune of 1.19 million in comparison to the previous year, mainly on account of the Covid-19 pandemic, though the virus

may not be the only cause of excess deaths.

The attendant decline in life expectancy is greater than in any high income country during the same period, the study said. While declines in life expectancy among citizens of high income countries were driven by rising mortality in groups above age 60 years, in India, mortality increased across age groups, and most prominently among the youngest and older age groups.

The toll was, however, experienced unevenly within India, with marginalised groups experiencing the largest reductions in life expectancy.

Besides the significantly lower life expectancy for scheduled castes and scheduled tribes in 2020 compared to 2019, Muslim life expectancy in 2020 was the lowest across the five social groups—SCs, STs, OBCs, Muslims and upper caste Hindus.

Muslims observed the greatest decline in life expectancy between 2019 and 2020.

Co-author of the paper Sangita Vyas, a development economist, demographer and assistant professor at CUNY Hunter College, said this was notable. “The fall in their relative ranking across groups and the very large decline in life expectancy among Muslims in India is consistent with reports of their further marginalisation in 2020,” she told **Article 14**.

Asked whether the experience of marginalised communities suffering greater declines in life expectancy also suggested that economically weaker individuals and communities suffered a disproportionate impact of the pandemic on account of the cost of healthcare, Gupta said, “Health is broader than healthcare, and while it is true that historically marginalised Indians have poorer access to healthcare, we must acknowledge the underlying conditions of what makes them sick in the first place.”

He said these communities faced more violence; they had lower nutrition levels; and they tended to be exploited.

On the question of economic status leading to poor access to healthcare, he said, one may also ask a parallel question, “Why are marginalised groups poorer, and is it partly because of marginalisation?”

Why Indian Women Saw Greater Life Expectancy

Decline

Relative to a decline of 2.1 years observed among males in 2020 compared to 2019, the decline for females was one year more, at 3.1 years, the study found.

The greater decline in life expectancy for women was in stark contrast to the global pattern of a greater increase in mortality during the pandemic for males compared to females, the researchers said.

“Such a large female disadvantage in the impact of the pandemic as observed in India has not been documented in any country,” said the paper.

Women in various social groups suffered this greater decline in life expectancy compared to men, with the exception of the scheduled tribes or Adivasi women, among whom conventional gender roles commonly assigned to caste Hindus may not apply.

The researchers said the data suggested that gender inequality, reflected among other things in household spending on healthcare, could have worsened during

the pandemic.

Vyas said the findings from their research that were most unexpected were the aspects that make India's experience of the pandemic different from other parts of the world. "That we see a larger decline in life expectancy for women, as large as one year more than for men, is really very much in contrast to global patterns," she said, "and it suggests just how severe patriarchy continues to be in India, how much gender inequality is likely playing a role in what we're seeing."

That Indian women suffered a disproportionate impact of the Covid-19 pandemic is now well-documented. They lost access menstrual hygiene products and contraception, suffering unplanned pregnancies with poor ante-natal care (see [here](#), [here](#) and [here](#)); faced greater threat of [domestic violence](#); and, without gender-responsive safety nets, suffered lower access to nutritious food and diverse diets in comparison to other family members (see [here](#) and [here](#)).

According to the study, among women, the largest contribution to decline in life expectancy between 2019 and 2020 was in the age groups of 0-19 years and 60-79

years, while for men, mortality in the age group of 40-59 years contributed most to declines in life expectancy.

Vyas said the wide **under-representation of women** in India's Covid-19 case data, despite seroprevalence studies (population-based epidemiological surveys to measure the presence of antibodies against a particular pathogen) showing similar levels of Covid-19 antibodies in men and women, meant women were less likely to get tested and seek care if they were infected, besides already suffering from suspension of immunisation, livelihood losses, etc.

2021 Deaths & State-Wise Patterns

The researchers said their study evidenced that the pandemic had worked to exacerbate historical and structural inequities, particularly along the dimensions of caste, religion, indigenous identity, rural or urban residence, age and sex.

Gupta said he hoped to build on this study, buoyed by the evidence that, like the NFHS, very large surveys that ask questions on mortality are possible to conduct in India. Additionally, an empirical exploration of the

mortality data of 2021 is yet to be undertaken, as is the work of developing clear pictures of state-wise patterns in mortality and decline in life expectancy.

Also, no cause-of-death data is available yet.

It is hard to estimate mortality by cause, said Gupta, and the NFHS data did not attempt to do so. Improving data on causes of deaths remains an important priority in India, and Gupta said he hoped the present study will nudge research in these directions.

Relative to other estimates during the same period, the extrapolated estimate for all-India excess deaths is about eight times the official number of Covid-19 deaths in India, 1.5 times the WHO's extrapolated estimate of excess deaths in India, and more than 2.5 times the estimated excess deaths in the United States in 2020.

Vyas said the study showed there was excess mortality in 2020 even among children, suggesting causes of

death among children stemming from the indirect effects of the lockdown and the pandemic, the disruptions to healthcare, immunisation, nutrition, livelihoods, etc. “There were news reports of migrants trying to make their way home and people dying in that process, some not being able to access food,” she said, “but when we initiated this project it was not clear to me that those disruptions would be large enough to show up as causes for excess mortality among age groups who would not have died of Covid.”

The study said its findings deepen policy-makers’ scientific understanding of pandemic mortality in India and in comparison with the rest of the world, and because India is the most populous country in the world, understanding the global toll of the pandemic relies on accurately estimating pandemic mortality in India.

(Kavitha Iyer is a senior editor with Article 14 and the author of ‘Landscapes of Loss’, a book on India’s farm crisis.)

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