



## Reversed Trend of Life Expectancy Gain and Cognitive Impairment During COVID-19 Pandemic and Post-Infection

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The World Health Statistics, the latest edition, released by the World Health Organization (WHO) indicates that, at birth, the reversed trend of steady gain in life expectancy, including healthy life expectancy at birth (HALE) [1]. Between 2019 and 2021, the life expectancy at birth of both men and women decreased approximately 1.7 years [1], whereas more concentrated was identified in women in 2021 [1] that reduced by 0.5 and 1.1 years to 64.1 years and 63.0 years in 2020 and 2021, respectively [1]. Between 2019 and 2021, South East Asia and the Region of the Americas were most affected WHO regions, with about 3 years of life expectancy and 2.5 years of HALE, respectively [1], whereas the Western Pacific Region was the smallest impact [1]. In low-income and low-middle-income countries, the life expectancy was cut by 0.6 years and 2.4 years, respectively, by World Bank income groups [1], with hardest impact occurring in lower middle-income countries with more than 70 % of life-expectancy loss and HALE in 2021 [1]. In upper-middle-income countries, more than half of the life-expectancy-year loss and HALE were found [1].

Cognitive impairment, is often reported after COVID-19 infection and during pandemic [2]. A recent study was conducted in January 2022, investigation of the association between cognitive impairment and poor mental health and well-being, mental fatigue and sleep problem and revealed that 7.0% of first-positives and 7.5% of reinfected children and young adults experienced cognitive impairment with no difference between infection-status groups at 12-months post-first-testing ( $p = 0.78$ ) [2].

In conclusion, several behavioral, such as trouble sleep and mental health can co-occur with cognitive impairment and can affect on life expectancy and HALE during COVID-19 pandemic and during post-COVID-19 infection and reinfection.

### Bibliography

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