

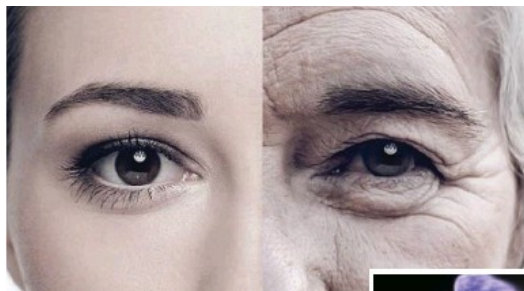
- Virus

The effects of COVID-19 on aging

What happens beyond recovery

Manila Bulletin · 9 Nov 2021 · B-9 · DR. KAYCEE REYES

It has been 20 months since the COVID-19 pandemic began, and as other countries are beginning to accept this to be an endemic, scientists are still learning about the disease, from treatments to long-term effects such as COVID long haulers and antibody response to new variants. Among these studies in particular found a link between COVID-19 and faster biological aging and shortening of telomeres. What is biological aging, telomeres, and how do they affect our health?



This study in particular was by Mongelli et. al (2021), who found that COVID-19 could affect biological aging and telomeres among those who recovered compared to those who never acquired the disease. A group of 117 post-COVID-19 survivors (including those with Persistent Post-COVID Syndrome or PPCS), also known as long COVID) were observed against 144 COVID-19-free (not infected) individuals. It was found that biological age increased much faster than the

COVID-19-free group. Moreover, telomeres also shortened among the post-COVID-19 participants against the COVID-19-free individuals.

So what does this all mean? While the researchers mention that this study has limitations, including the number of individuals tested, it still shows how one's biological age can be affected with a COVID-19 infection.

Biological age means how old one's body is based on physiological factors, whereas chronological age is how long you have been living. Biological age is important to know because it can help determine one's risk for age-related diseases and death.

A telomere, on the other hand, is also an indicator of aging. A telomere shortens whenever cells divide until it can no longer do so and die. A shorter telomere may cause inflammation or disease sooner, especially if you have a predisposition to a particular illness.

Telomeres naturally shorten as we age chronologically, but some individuals have shorter telomeres at a certain age than others. This is why telomere length and telomere health may also be an important indicator of premature aging and longevity.

With the study mentioned above, this tells us about the possible consequences of COVID-19, including telomere shortening and accelerated biological aging that could somehow

affect one's health in the long run.

Keeping ourselves healthy, safe, and protected at all times is our best defense against COVID-19. Remember that even if one has survived from COVID-19, recovering isn't as easy. For those with PPCS, it can be debilitating because symptoms linger for months.

easy. For those with PPCS, it can be debilitating because symptoms linger for months. That's why recovery really is a long battle. But with more and more individuals getting vaccinated, there's hope that the worst is over, and we can all learn from one of the most important lessons of this pandemic.

Let us all keep our health in check now more than ever.

SOURCE: Mongelli, Alessia & Barbi, Veronica & Zamperla, Michela & Atlante, Sandra & Forleo, Luana & Nesta, Marialisa & Massetti, Massimo & Pontecorvi, Alfredo & Nanni, Simona & Farsetti, Antonella & Catalano, Oronzo & Bussotti, Maurizio & Dalla Vecchia, Laura & Bachetti, Tiziana & Martelli, Fabio & Rovere, Maria & Gaetano, Carlo. (2021). Evidence for Biological Age Acceleration and Telomere Shortening in COVID-19 Survivors. *International Journal of Molecular Sciences*. 22. 6151. 10.3390/ijms22116151.