

Decreased Life Expectancy among Older People during the COVID-19 Pandemic: A Public Health Issue

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Abstract

Decreased life expectancy is considered as a key indicator of human development. Obviously, the increase in mortality, especially in vulnerable groups such as older people, leads to a major disruption in the human development of countries. On the other hand, the destructive social and economic effects of COVID-19 on human life further reduce their life expectancy. Social and economic effects are associated with declining incomes, poverty, and consequently reduced life expectancy, especially among older people, who are the poorer sections of society in terms of income. Therefore, it is suggested that policymakers and health managers make appropriate decisions such as timely vaccination of older people, future treatment measures, and appropriate behavioral changes to control the disease and improve life expectancy among older people during the COVID-19 pandemic.

Keywords: Life Expectancy [[MeSH](#)], Aged [[MeSH](#)], COVID-19 [[MeSH](#)], Public Health [[MeSH](#)]

Highlights

- Based on previous experience, epidemics such as the flu (1918) and Ebola (2014) reduced life expectancy by 11.8 years and 1.6 to 5.6 years in the United States and Liberia, respectively. Thus, the COVID-19 pandemic can lead to reduced life expectancy, especially in severely affected countries.

Statement

Since December 2019, COVID-19 has led to unprecedented morbidity and mortality worldwide. Previous evidence has shown that the disease can affect various organ systems of the body via long-term and subacute effects (1-5). According to the World Health Organization, a total of 265,194,191 confirmed cases of COVID-19 had been identified worldwide by December 6, 2021, out of which 5,254,116 died (6). On the other hand, there is strong evidence that aging is associated with a higher mortality rate among COVID-19 patients (7-9). A systematic review and meta-analysis showed that age over 65 is a strong predictor of mortality among COVID-19 patients (10). Therefore, it is very important to pay attention to older people as a high-risk group against the incidence and mortality of this disease.

Meanwhile, life expectancy is one of the common criteria of community health that is usually measured from birth. On the other hand, high mortality due to COVID-19 can significantly affect life expectancy. Based on previous experience, epidemics such as the flu (1918) and Ebola (2014) reduced life expectancy by 11.8 years and 1.6 to 5.6 years in the United States (11) and Liberia (12), respectively. Thus, the COVID-19 pandemic can lead to reduced life expectancy, especially in severely affected countries. Also, it is obvious that life expectancy is more affected in older people due to higher mortality and weak immune system. One study estimated that with a 50% prevalence of COVID-19, life expectancy would decline by 3-9 years in North America and Europe, 3-8 years in

Latin America and the Caribbean, 2-7 years in Southwest Asia, and 1-4 years in South Africa. However, if the prevalence of COVID-19 remains less than 1 or 2%, it will not have a significant impact on life expectancy (13). On the other hand, the destructive social and economic effects of COVID-19 on human life further reduce their life expectancy (14). In Indonesia, these effects were associated with declining incomes, poverty, and consequently reduced life expectancy, especially among older people, who are the poorer sections of society in terms of income (15). On the other hand, high levels of poverty in society can be associated with low levels of health in society. Therefore, appropriate behavioral changes to control COVID-19 can help improve the social and economic status and life expectancy of older people during the COVID-19 pandemic (16).

Conclusion

In sum, decreased life expectancy is considered as a key indicator of human development. Obviously, the increase in mortality, especially in vulnerable groups such as older people, leads to a major disruption in the human development of countries. On the other hand, the destructive social and economic effects of COVID-19 on human life further reduce their life expectancy. Therefore, it is suggested that policymakers and health managers make appropriate decisions such as timely vaccination of older people, future treatment measures, and appropriate behavioral changes to control the disease and improve life expectancy among older people during the COVID-19 pandemic.

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Declaration of Conflicting Interests

The Author(s) declare(s) that there is no conflict of interest

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