The Collateral Impacts of Pandemic

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A pandemic that covers the whole world occurs relatively in every 100 years. Thus, it can be said that no expert has ever experienced directly dealing with a global pandemic. In the absence of people who are truly experts who know the problems and impacts of a global pandemic, various studies need to be carried out extensively between fields and across regions in the world. Likewise, the results of the study need to be recorded permanently so that it can still be useful over a long period of time, preferably for more than a hundred years.

In the last pandemic by the corona virus that we are facing right now, the issues against COVID-19 are not just antiviral therapy, vaccines, and health protocols (masks and social distancing). In this pandemic, economic (and of course political) problems are linked to various social problems including trauma and depression in society, changes in household interactions due to shifting regulations from 'work from office' to 'work from home', limitations and subsequently gaps in access to health services, and limited access to treatment for other diseases.[1-3]

Mortality during the COVID-19 pandemic has shown a 20% increase for TB and 10% for HIV.[4] The impact of COVID-19 on TB and HIV patients is not only on causing more deaths, but it seems to be majorly related to the obstructed drug accessibility due to limitations imposed on health services during this pandemic.[3,4] More than 50% of countries in the world have experienced service disruptions for the treatment of hypertension, either totally or partially. Nearly half (49%) diabetes treatments were late, including the management of complications related to diabetes mellitus. Disturbances also occurred in 31% of cardiovascular emergency services and in 42% of cancer or chemotherapy services.[2] It seems clear that the COVID-19 pandemic is not only impacting the individual/community health due to its virulence, but also the health services on other diseases as one of its consequences.

The impact of COVID-19 can be exacerbated to some extent by public health policies, leadership and socioeconomic inequity.[5] Data that reveals seemingly high mortality in men due to COVID-19 in countries with high prevalence in smoking adult male while lacking evidence that smoking may affect mortality of people with COVID-19[6] may suggest that there are several societal conditions that may cause an increase in smoking prevalence and COVID-19 mortality rate in male. One thing that has not yet been discussed about the impact of COVID-19 is the parallel danger due to the pandemic in the form of missed and late diagnosis of COVID-19-like diseases, such as various other viral infections.

The mortality rate of COVID-19 in a country can be related to the severity of the disease or virus variants, but it can also be related to the socio-economic status and economic development of a country.[7] We can imagine that there is a great need for research in the impact of policy interventions on mortality in low, medium and high-income countries; and also the impact of patients' socioeconomic status on their mortality.

Different approaches should be adapted according to the level of a country's economy and resources. Total quarantine policies may not work in low-income countries.[8] The choice of large-scale social restrictions that is not as strict as quarantine was chosen by Indonesia.[9] However, it is must be studied first whether the impact of large-scale social restriction policies is beneficial for a country like Indonesia or rather becoming a source of high casualties or even exacerbates the economic impact due to COVID-19.

Studies of the short-term and long-term impacts of the pandemic on things other than mortality are calling us to be worked upon. It is the time for us to be concerned with the risk assessment of benefits before a decision is taken and its openly scientific reporting. It is necessary to develop strategies to mitigate or avoid dire consequences of a policy. As example, mitigation strategies for establishment of recommended supportive tests policy, for policies regarding referral flow and patient care at home or hospital, and for immunization strategies during quarantine.

Until now, studies of health policy on the vulnerable group seem to be minimally done.[10] It would be wise to encourage more studies to groups that are vulnerable to the impact of a policy.

Mitigation of pandemic disasters that occur repeatedly beyond the average of humans' lifetime requires documentation and analysis that is supported by computational information systems that can be accessed by humans across generations.[11] It is the time to develop artificial intelligence that can work by itself to collect data, analyse and report the result to human policy holders.

A call for various studies related to the collateral impact of a pandemic cannot be ignored. It is clear that the threat of a pandemic to the existence of humanity does not depend solely on the severity of the disease on the mortality, but also on the impact of its collateral. The collateral impacts of the pandemic do not only affect the health services on diseases other than COVID-19, but also includes the collateral impact of humanitarian threats in other fields.[1,3] Management of a global pandemic needs to be carried out comprehensively, both in handling the disease, support for and access to other diseases, as well as collaboration and socioeconomic policies that maintain the pillars of humanity. Lessons must be taken by humans in order to defend their race in the future, including pandemics that occur repeatedly over a span that is longer than the age of three generations.

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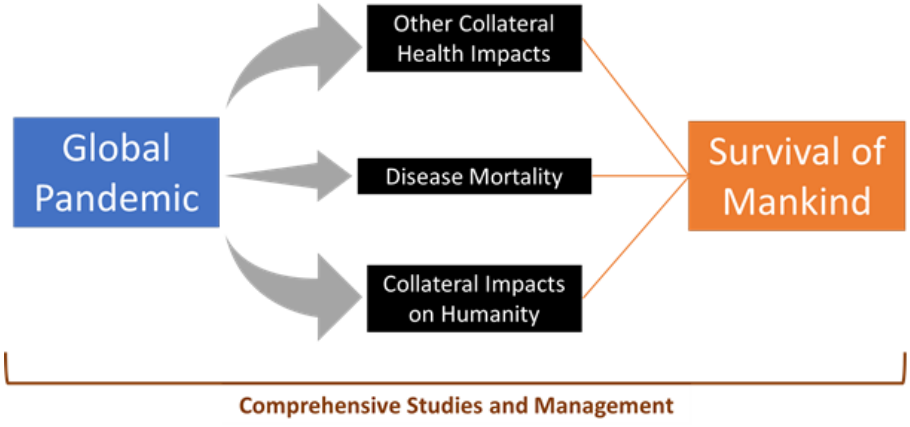

Figure 1. Comprehensive management on pandemic.

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