

## **COVID-19 Pandemic: Lessons from Italy**



Italy was hit hard by COVID-19. As of April 1, 2020, the country has 110574 documented cases and 13155 documented deaths related to the coronavirus. In order for other countries to learn from Italy, it is important to understand why death rates were so high in the first place and to identify the contributing factors.

First, there are demographic and background factors to consider. Italy has the most elderly population in Europe and the second most elderly population in the world (after Japan). As has already been observed, age is an important factor if you look at the trends of COVID-19 infections. In Italy, the median age of people infected with the virus has been 80 years, and those requiring critical care support has been 67 years. COVID-19 mortality and morbidity are dependent on the presence of concomitant diseases. In Italy, the proportion of patients with a history of smoking, COPD, and ischaemic heart disease is quite high.

At the same time, it is important to look at the healthcare system and the preparedness of the ICUs. The age structure and chronic disease of the population that a particular health care system is catering to plays a role in how well such a crisis can be handled. It Italy's case, the burden of cases that presented to the healthcare system was high because of its population demographics. In many areas, healthcare systems were overwhelmed. Also, it must be mentioned that during the early stages, social distancing measures weren't as strict, and the adoption of standard hygienic measures were being highlighted but not aggressively followed.

Also, the standard capacity of the health care system is an important issue. There is no doubt that Italy has a competent state-run system, but nobody is prepared for such a thing. Italy had a modest number of ICU beds and few subintensive care beds (5090 ICU beds and 2601 beds in coronary care units). This virus was new, and not much was known about it. Some strategic mistakes were unavoidable and even understandable. In Italy, the average occupancy during the flu season is 87%, so by the time patients with severe COVID symptoms started to arrive, the healthcare system already had limited reserves.

Hospital overcrowding is also one of the reasons why so many healthcare professionals got infected. As of March 30, 2020, 8920 medical personnel were infected in Italy. This further resulted in a strain on the healthcare system. Early infection of medical personnel led to the further spread of the infection among patients. In Lombardy, SARS-CoV-2 became a nosocomial infection. Approximately 9% of infections in Italy occurred among healthcare workers.

These are not normal times, and COVID-19 was not something anybody could predict. Italy is a decentralised country; hence its preparedness and containment may not have been the best. But again, this crisis was unexpected. Other countries can learn from Italy. They must ensure that they do not bring patients with SARS-CoV-2 infection to the hospital unless they require hospital care. They must maintain strict hygienic procedures in the hospital environment, and they must act swiftly in case of exposure to healthcare providers.

There is limited data available, and therefore it is difficult to predict the effects of public health measures such as social distancing. We still don't know that when these lockdown measures are removed, will a second wave emerge? There are also many questions related to the panic and stress this has created. Will it lead to a major disruption? Will it make the elderly and frail more susceptible? Countries like South Korea and Taiwan have successfully contained the virus with aggressive contact tracing and extensive laboratory testing. But in Italy, both contact tracing and laboratory testing were limited. One has to wonder why countries are still ignoring these facts and using lockdown as a blind measure of desperation.

Other countries can learn from Italy. They can understand the relative burden of disease from COVID-19, and they can also better allocate resources during a time when healthcare systems are already overburdened.

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