## Case study on health system response to Covid 19 in Sri Lanka

Professor Manuj C Weerasinghe

Faculty of Medicine, University of Colombo & PHM Sri Lanka

## Public health response at the initial phase of the pandemic: Sri Lankan experience

Sri Lanka is in a unique position in this epidemic; being an island with a population of 21 million. Sri Lanka provides free of charge healthcare at the point of delivery to the total population in the state hospitals. Currently, there are 628 state hospitals providing indoor healthcare facilities with the capacity of 83,275 beds. This makes 3.9 hospital beds per 1,000 population. However, the majority of Sri Lankan hospitals provide non-specialised primary care and have very limited facilities and staff to manage conditions at an advanced stage such as severe respiratory distress. The preventive health care system in Sri Lanka is relatively strong with a dedicated field health staff, functioning under 347 Medical Officer of Health [MOH] areas which cover the entire country. Prevention, notification and control action on communicable diseases is one of the key functions of the MOHs. Hence, the ability to rapidly deploy health staff at the community level during an epidemic situation is a positive feature of the Sri Lankan health care system.

Sri Lanka recorded its first case of COVID-19 on the 27th January 2020. The case was a Chinese national who came to Sri Lanka as a tourist. The case was successfully treated and discharged. The second case was detected on 11<sup>th</sup> March 2020, a contact from an European tourist, some six weeks after detection of the first case.

Data from Sri Lanka on COVID-19 shows that it is still within a specific cluster where contact history can be traced; those who contacted the disease from outside the country, their close relatives or those associated with the index case. However, with increasing number of

contacts to a single case, the field level difficulties in tracing each and every contact poses a threat of initiating community transmission. The Sri Lankan government initiated measures to prevent the COVID-19 epidemic even before the first case was detected in January 2020. Those measures were gradually strengthened through mandatory thermal screening at the points of entry to the country, followed by self-quarantine of those returning from designated countries from the beginning of March 2020. Mandatory institutionalized quarantine for arrivals from designated countries started on 10<sup>th</sup> March. This was followed by self-quarantine for all the contacts and all passengers returning from outside the country. Entry points to Sri Lanka for all passengers was closed on 20<sup>th</sup> of March. All schools, Higher Education institutions, and later, all public and private workplaces except those for essential services were closed. An island wide curfew was imposed on 20<sup>th</sup> March to implement strict social distancing. This was relaxed intermittently for a few hours to facilitate access to essential services. These measures are presented in figure 1. Hence, Sri Lankan preparedness and preventive/ control measures for COVID-19 were unique compared with most other countries.

As stated above, Sri Lanka initiated stringent measures even before a community outbreak of COVID-19 was evident. This makes Sri Lanka a unique place to study the behaviour of this epidemic at initial phase. At present Sri Lanka is experiencing the second phase of the pandemic after almost 3 months of no internal cases. This started following detection of cases from a manufacturing plant. It is observed that number of case and the deaths are rising. However, it is too early to comment on the outcome of the public health response in the second phase. The existing strategies may need review based on the transition pattern.

26 Jan	First Interim guidelines were introduced to manage COVID-19 patients
26 Jan	Establishment of National Task Force on COVID-19
27 Jan	First imported COVID-19 case
28 Jan	Screening of all arrivals from China at airport
01 Feb	Students from Wuhan city were sent for Government run mandatory quarantine centres.
01 Mar	Travelers from designated countries were directed for self-quarantine.
10 Mar	Travelers from designated countries were directed for government run quarantine centres.
11 Mar	Second COVID-19 case (First Sri Lankan) was confirmed.
13 Mar	Island-wide school closure
14 Mar	Closure of higher education institutions
14 Mar	Travel ban was imposed to passengers from South Korea, Italy and Iran
17 Mar	Special public holidays to limit public gatherings
20 Mar	All international airports were closed for operation of inward passenger flights
20 Mar	An island-wide curfew was imposed

Figure 1 Control measures to mitigate the spread of COVID-19 in Sri Lanka