Are we geared for the upcoming challenges by nCoV-19 or is it still grim news....?

The novel <u>Co</u>rona <u>Vi</u>rus (nCoV-2019), clouded the entire world during the year 2020; with its emergence in December 2019 from Wuhan, China. The nCoV-19 is a novel variant of the Coronavirus family, with its predecessors been implicated for the pandemics of Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV); that caused flu-like condition and respiratory distress symptoms. The viral strain also intrudes on extra-pulmonary relevance; being involved with deranging immunity as evidenced by lymphopenia and a prolonged prothrombin time; it impacts cardiomyocytes and pancreatic tissue directly. These implications of nCoV-19 does suggest a long-term relevance of the disease profile.

The emergence of nCoV-2019 was quick to gain a pandemic status worldwide. An immense shift in the influx of the type of patients was observed, that imparted a false impression of a reduction in cardiovascular and metabolic patient presentation; formerly that had been the majority engaging the worlds' healthcare facility. But as the world prepares itself for a possible second wave of the n-CoV-19, a prudent approach would be to remind us of the history lessons from the previous corona-led pandemic, such as MERS and SARS. This editorial will emphasize on channeling our focus to nCoV-19 implications on cardiovascular and metabolic disorders.

The pandemics of SARS-CoV during 2002-2003 and MERS-CoV in 2012 highlight the long term relevance of coronavirus to cardiac and metabolic disease pathologies, both during and in the aftermath of these pandemics. The SARS-CoV had demonstrated an increase of cardiovascular problems by 44%, hyperlipidemia by 68% and diabetes mellitus by 60%, in people who had recovered from the viral attack. Likewise, MERS-CoV had also embarked an increase of cardiac disorders by 30% and hypertension by 50% and diabetes mellitus by 50%.

Published research on nCoV-19 has hinted for a similar rising trend of cardiovascular and metabolic complexities. An increase in cardiac troponin level is observed with increased cases of myocarditis and heart failure. A 20% increase in the incidence of diabetes and a 40 % rise in cardiovascular and cerebrovascular diseases is observed with nCoV-19. Little do we comprehend that the involvement of angiotensin converting enzyme 2 (ACE2) receptors could play havoc on endothelium, kidney, intestine, liver and any other organ.

The nCoV-19 has thrown a curveball to the realm of the worldwide health and financial setting. Even with the current economic predicament it does seems prudent to be prepared in advance for the long term consequences of this pandemic. The bigger question would be to, not just direct our efforts at countering the possible second wave of nCoV-19 but also for the possible chaos of cardiovascular and metabolic disease outfall, impacting the world health system.

Muhammad Zuhair Yusuf¹ and Naseer Ahmed¹ Aga Khan University, Karachi, Pak<u>ista</u>n