Short Communication

SARS-CoV-2 Hits European/American Countries Harder or Asian/African Countries limited test facility underlying the COVID-19 cases? Myth or Fact

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Abstract

Corona virus disease 2019 (COVID-19) is a highly contagious and associated with severe acute respiratory infection caused by severe acute respiratory syndrome corona virus 2 (SARS-CoV-2). The first outbreak of pneumonia of unknown cause was reported in Wuhan, China, in December 2019 and now enclaps 216 countries in all around the globe. Rapid transmission occurs due droplet transmission and person to be in close contact with someone who has already infected. The clinical presentation and severity ranging from a mild common cold-like illness, to a severe viral pneumonia leading to acute respiratory distress syndrome that is potentially fatal. Though, beginning of SARS-CoV-2 in China, it spread quickly in European countries and American countries. At present United States of America among most affected countries with corona virus, while more European countries are witnessing a surge in cases. The US replaced China as the country with the highest corona virus cases on 26 March, while more than 92% of the global corona virus cases are currently outside China. Now, these days this deadly disease is extending in India. Despite it, the infectivity rate and case fatality rate of SARS-CoV-2 is still seems to be very low in Asian/African and it may be due to less testing and limited resources of medical facility.

The first case of deadly SARS-CoV-2 infection was emerged in Wuhan province, China in December 2019 with unknown etiology and later on confirmed as novel corona virus (nCoV19) [1]. Since the beginning of the first case of SARS-CoV-2 in China, as of April 26, 2020,2 804 796 confirmed cases and 193,710 deaths were reported world-wide [2]. Emergence of a novel pathogen always poses critical clinical and public health questions, especially one that could cause a global pandemic, in relation to the spectrum of illness presentation or severity profile. For the patient and clinician, this affects triage and diagnostic decision-making, especially in settings without ready access to laboratory testing or when surge capacity has been exceeded [3].

The data reported from the European and American countries as of 26th April, 2020 showed that the worlds 86.87% confirmed cases have been reported from the Europe & USA and out of that USA has emerged as high COVID-19 burden country with 32.06% cases. The number of COVID-19 cases after the USA were reported in countries namely; Spain (223759), Italy (195351), France (161488), Germany (157627), United Kingdom (148337), Turkey (107773) and Iran (90481) [4].

In the current situation, manpower, diagnostic facility, modern testing tools, and effective specific preventive or treatment remedies are the keys in handling the SARS-CoV-2 infection. At present there is no specific vaccine or treatment available except few repurposed medicines are being employed in the management. The labs equipped with RT PCR machinery and BSL 2 facility are currently carrying out the diagnosis and there are limited rapid diagnostic tools available. Keeping in view of the above hurdles, a well-educated community, public awareness, avoidance of public transport, self-quarantine, lockdown, and use of preventive appliances i.e. face mask, hand hygiene are the only ways to stop the transmission of COVID-19. In addition, a recent study published by Jason Phua and colleagues in The Lancet Respiratory Medicine, gives an excellent overview of the current issues raised by COVID-19-in particular, the importance of the ICU and good medical facilities in treating COVID 19 patients and decreasing the case fatality rates. The review also highlighted the necessity in following rigorous biosafety guidelines by hospitals and healthcare workers during the process of rapid diagnosis, isolation and clinical management of COVID 19 patients. These steps will further ensure infection prevention in health-care workers and other patients who are at risk from hospital acquired infections [5]. The European countries and the US, are well equipped with trained man power, high end medical infrastructure facilities, high literacy rates and public awareness to combat this COVID 19 pandemic. Apart from that, Commonwealth Fund’s international comparison reports,
presented European countries among top countries having advanced health care facilities with France on top and Italy on second position respectively [6]. Despite the excellent medical facilities access across these countries, they are having high burden of SARS-CoV-2 infection and cases reported compared to low income Asian/African countries where there is a presence of meager medical facilities, illiteracy, poor public awareness, and unhealthy life style. Even with the origin and initial transmission of SARS-CoV-2 in the Asian countries i.e. China, at present Europe and America are attributed on top in terms of SARS-COV-2 confirmed cases and death rate. The main reason for the above indifference in total cases reported are mainly due to the meager testing facilities available leading to decreased case reporting and absence of a stronger coordinated network system among different geographical parts of Asian/African countries like India, Bangladesh, South Africa, Srilanka, Nepal, Bhutan [7]. Under testing and undiagnosed asymptomatic cases, may lead to community transmission increasing the positive cases and mortality rates in near future due to COVID-19 in Asian/African countries.

According to the World Health Organization, a well-functioning healthcare system requires a steady financing mechanism, a properly-trained and adequately-paid workforce, well-maintained facilities, and access to reliable information to base decisions, however in those cases undeveloped countries are well behind [8]. In spite of high reporting of cases, the management of COVID 19 infection among European countries & USA is on high note with most of them flattening the curve. On the other side, in African/Asian countries due to less testing facilities, the actual number of cases are being under estimated and these countries may see a spurt in mortality rates if fail to act swiftly. Thus, policy makers of Asian and African countries need to observe COVID 19 as a wakening call and should improve health infrastructure facilities. Literacy rate is very low in these countries and on other side demand of trained skill manpower is high. This concern should prompt the government bodies to rigorously improve the educational facilities, mandating degree level education for all the citizens. Large population and high density also affects the minimum health facilities available to all the citizens and also population is a heavy burden on the fiscal of a country especially in African/Asian countries. Hence, one child policy or two child policy should be adopted to improve the availability of basic amenities to every citizen. The less testing and undiagnosed asymptomatic cases, may lead to community transmission and it may increase the positive cases and massive number of death may be reported in future due to COVID-19 in such countries.

In current pandemic of SARS-CoV-2, developed and underdeveloped countries may unite under one umbrella to eradicate the SARS-CoV-2 from the globe. The developed countries should extend their support to nations having limited resources and requiring the instant medical help to save the humanity from SARS-CoV-2. A battle should be waged against COVID 19 until every citizen of the globe becomes immunized to it. Until then, countries with limited resources and testing facility should adopt lockdown and as evidenced in heavy densely populated country like India, it seems to be effective.

REFERENCES


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