Public Health and Population Perspective of COVID-19 As A Global Pandemic

Nazneen Akhter, M. Salim Uzzaman*, Amr Ravine'

Abstract:

COVID-19 appeared as an infectious disease of global health emergency and the highest public health concern of 21st century for this world due to its high-speed of spread across the globe. The disease started as one single case to a cluster of cases in Wuhan, China (Dec 2019) and within few months with its continuous upsurge of cases spreading globally which has created enormous threat and tension across the global Public health care field. Most significantly to share the fact that, this disease caused high level of Risk Group mortality, high morbidity, health care services burden, panic anxiety, mental trauma and tension, social and economic insecurity, which also collectively surfaced by diverse range of social reaction and political pressure across the world. Also with the appearance of new and unknown pathogenesis of the disease has created the most and significant attention and concern for the scientific community and political leaders as well. The disease also varies much with its pattern of virus, sign, symptoms, characteristics including its epidemiological and public health response (like prevention strategy, diagnoses, case management, treatment pattern) across the countries. However, this variance is comparatively less rather even more in commonality while it comes to basic public health prevention interventions like frequent hand washing, wearing face mask, maintaining social/physical distancing (2 - 6 meter in between), individual isolation and community quarantine for suspected exposure and lockdown in community areas where cases are identified. These are with the most commonly practiced public health interventions to deal with this disease in majority of the epicenters across countries. Also with the progress of the disease with its diverse categorical appearance of sign symptoms which are uniquely portraying this disease is more of a kind of COVID-19 syndrome than as COVID-19. Moreover, various factors including socio economic status, health status, population dynamics, health system and infrastructure, health behavioral pattern, nutrition and food habit and access to information and knowledge made this viral disease one of the historically counted on expensive disease of the modern world to fight for. Specially to mention here, the case fatality rate distinctively vary with the population dynamics and the health system infrastructure and ability factors which have already created clear evidence as explained in this paper how these factors are uniquely distinguished and different from country to country. Apart from the contextual differences, the various kind of ongoing preventive measures (like prevention, diagnosis and treatment) learnt every day from the emerging characteristics and pattern of this viral disease which are most commonly practiced across countries with a variance. According to the Public health prevention practice and interventions, the total world is connected and learning from each other’s public health experiences to fight for the virus. However, the world communities are eagerly waiting to see the result and outcome of the ongoing therapeutics and vaccine trial initiated in several countries, the people of the world are quite optimistic and hopeful that, global scientific community will be able to invent some miraculous and magic solution in upcoming months which ultimately will free the world from this most terrifying COVID-19 pandemic of 21st century.

Key Words: COVID-19, Risk Group, Syndrome, Community Quarantine, Population dynamics, Social distancing