



PERSPECTIVE OF COVID 19 IMPACT ON PUBLIC HEALTH IN DEVELOPING COUNTRIES

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ABSTRACT

Covid 19 impact on global economy and health has been devastating. This socioeconomic and health effects has been more detrimental in developing and underdeveloped countries. The pandemic has worsened the health crisis in the developing and underdeveloped nations and the disease burden of COVID 19 will definitely further hamper the effective health care delivery due to already existing shortage of trained medical personnel's (doctors, nurses and paramedics) apart from lack of supply of adequate medicines, personal protective equipment's and ventilators. This may eventually lead to more number of patients dying as well as chances of health personnel being infected. The above background gave us an impetus to explore the COVID-19 impact on socio-economy and public health in developing countries of Asia and Africa.

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INTRODUCTION

The socio-economic impact of COVID-19 is visible globally. If economy is affected, it will affect the health care delivery as there would not be enough finance to support the health sector. The economy of any nation depends on finance generated by agriculture sector, manufacturing industries, small and big business enterprises, petroleum industries pharmaceuticals, railways, aviation etc. The announcement of lockdown globally in 2020 had halted the functioning of the revenue generating establishments leading to economic downturn and financial crisis whose effects are visible even in 2021 (Sohrabi, 2020; Zouari, 2020). The shutting down of business in view of lockdown had moved millions into unemployment status and poverty. The International Labour Organization Chief pointed out that unemployment in January 2020 before COVID 19; was already around 190 million and predicted that further 25 million jobs were at risk of loss with COVID 19 Pandemic.

The complete or partial lockdown has affected 2.7 billion workers globally and that is four in five of the world's work force (<https://news.un.org/en/story/2020/04/1061322>). The lack of money with peoples will make them hesitate or spend any money towards purchase of medicines or perhaps neglect self health care. This pandemic has lead to a health crisis worse than the influenza pandemic of 1918-19. This Spanish influenza pandemic led to around 20-50 million deaths worldwide. COVID 19 impact on mortality and morbidity in 2020-2021 may be challenging too (Morens, 2007; Simonsen, 2013). These facts gave us an impetus to further explore literature like various scientific index journals, WHO website, UN website and world scientific forums for reviewing the Covid-19 impact on socio-economic and health status of developing and under developing nations of Africa & Asia. We planned to explore the probable long term socioeconomic and health implications of COVID 19 and suggest measures which may help in preventing a deep impact on economy and health in developing and underdeveloped countries in the Africa and South East Asia.

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African Healthcare System: Facing this magnitude of COVID-19 health manifestations among the vast population especially in the developing countries like India &

underdeveloped countries in Asia and Africa and worldwide has been a great challenge in view of requirement of large number of health personnel's including doctors, nurses and paramedics to cater to the diagnosed medical cases. Poor countries among Asia and Africa have frail healthcare system lacking in manpower, equipments, medications and funding. At the beginning of April 2020, nearly forty one countries have only about two thousand ventilators and around ten countries have no ventilators. United Nations have pointed out that around 74 million test kits and 30,000 ventilators are minimum requirement to be met for 1.3 billion people of Africa in view of COVID 19 pandemic.^{6,7} Asian countries too face shortage of manpower in low income countries. Most of the South Asian Countries have skewed distribution of health workers in context of work location as most of them work in urban area and acute shortage exist till date in rural, hilly and tribal area in these countries.⁸ The overall health services mainly in Africa and even Asian countries are still fragmented and diverse but there is need of better health informatics, maintenance of patients registry and records, data analytics and sharing as well as of empowering of primary health care workers to manage chronic illnesses (Gilbert, 2020; Churnrurtai Kanchanachitra, 2011).

Human Development Index: Poverty will affect health and thereby the human development (McGillivray, 1991). Nevertheless the social impact has been equally deleterious as already poverty stricken situations in developing and under developed nations have affected the human development index (HDI) in these nations. The HDI is the achievement measurement in dimension of health status (which is determined by healthy life and available health care facilities), educational standards and standard of living of humans of the counties.^{11,12} The countries having low Human Development Index in Africa are Comoros, Nigeria, Tanzania, Uganda, Benin, Togo, Sudan, Ethiopia, Gambia, Sierra, Leona, Mali, Chad, Niger etc and in Asia include Syria, Afghanistan, Yemen and Papua New Guinea while a few medium Human development index countries include India, Bhutan, Bangladesh, Myanmar, Cambodia and Nepal (McGillivray, 1991; Alexander, 2020).

Loss of Employment: The poor labourers who are working on daily wages earn and spend on a day to day basis. These poverty stricken work forces are now facing unemployment and this has added to their financial woes. Moreover they are also not having any proper home to stay, or safe water to drink apart from lack of food and adequate clothing which they are being facing in this unprecedented COVID 19 pandemic. The lack of adequate health care facilities in view of lock down & travel restrictions in 2020-2021 has affected their physical and mental wellbeing. The apathy of people residing in rural areas, tribal areas, shelters homes, prisons and beggars for whom the road side has been a home for years is unimaginable.

Economic and Health Crisis in Asia and Africa: The devastating effect of COVID-19 on social, economic and health crisis is threatening human development especially in nations having low Human Development Index and High Poverty Index in Africa. The effect of financial losses is reverberating across societies affecting education, supply of food, increase incidences of domestic violence, social security and shelter to public which is otherwise the basic human right of citizens under the respective country's social security system & national development program (Alexander, 2020;

Gilbert, 2020). Many preventive measures are in force in various countries in Africa and Asia which includes travel restrictions, school closures, and border closures. The health experts are confident that their experience managing EBOLA will help them to prepare and combat COVID-19 pandemic (Gilbert, 2020). The second wave of pandemic which has commenced in India in April 2021 is devastating with people struggling to get hospitalized and moreover lack of oxygen and medicine supply are also leading to increase number of deaths in India (Vikas Pandey & Shadab Nazmi, 2021).

Social Isolation, Domestic Violence and Suicide: The social isolation has also affected the psychological well-being of the individuals and has led to increase suicidal tendencies in public. The incidences of domestic violence have also increased globally. Moreover employment loss of temporary workers & financial stressors may lead to increase suicidal tendencies during COVID-19 pandemic (Ya, 2020; [http://www.undp.org/content/undp/en/home/news-center/news/2020/COVID19 crisis in developing countries threatens devastates economies. Html](http://www.undp.org/content/undp/en/home/news-center/news/2020/COVID19%20crisis%20in%20developing%20countries%20threatens%20devastates%20economies.html)).

COVID-19 Pandemic: The corona virus disease 2019 is also named as Covid-19 because of its identified outbreak in December 2019. The causative agent of COVID-19 has been identified as Severe Acute Respiratory Syndrome Corona Virus 2 (SARS COV 2). This infection was declared as pandemic on March 11th 2020 by the World Health Organization.¹⁶ The common symptom observed in COVID-19 are fever and dry cough mainly while other associated symptoms may include sore throat, headache, shortness of health, loss of taste and smell sensations, fatigue, vomiting, diarrhea etc. The patients may develop complications like Acute Respiratory Distress Syndrome (ARDS), Pneumonia, Septic Shock and Multiple Organ Failure (Casella, 2020; John; John, 2020). The severity of pneumonia can be ascertained by signs of dyspnoea (SPO₂ <90%) and tachpnea (>30 breaths per minute) (Casella, 2020). Though most of the patients infected with COVID 19 develop a milder course a few may land up with complications. The management presently is symptomatic and is centered towards adequate hydration and supportive treatment for manifested symptoms. Moreover patients with progressive dyspnoea may require oxygen therapy or ventilator support.^{17,18} The scientific researchers and pharmaceuticals worldwide are devotedly working towards development of a vaccine for COVID-19, but with the known tendency of mutation of Corona Virus; the task is challenging and awaits further stages of clinical trials and official endorsement by health regulatory bodies regarding the safety and efficacy of the vaccine being used. The various safety measures in practice for preventing COVID 19 infection are use of face mask by all, social distancing, frequent hand washing, cleaning of doors, latches, tables, objects with sodium hypochlorite which is a known disinfectant or a bleaching agent. The principle of social isolation after coming in contact will COVID-19 positive patients will present spread of infection. The health personnel are even carrying contact tracing of COVID-19 positive patient and recommend isolation and quarantine for the contacts (Casella, 2020).

Health impact of COVID 19: The COVID 19 lockdown had restricted free movement across the regions. The vulnerable population such as those in geriatric age group or those suffering from chronic diseases is finding it difficult to visit hospitals due to travel restrictions and this has led to

deleterious effect on the health of these populations: Hypertension and diabetes are commonly associated illnesses in geriatric age group (Verma, 2018). It is recommended that regular blood pressure monitoring in hypertensive, Complete Blood Count, Kidney Function Test, Retinal exam for retinopathy and Nerve Conduction Studies and Reaction time analysis in geriatric diabetic patient is recommended for optimum health (Verma, 2018; Umadevi, 2014). If these geriatric patients having uncontrolled hypertension or diabetes contract COVID 19 infection these patient will have critical outcome and mortality. It is already well known that developing countries and under developed countries face huge crisis of shortage of trained manpower, medicine supply, shortage of instruments and equipment and eventually in such a global pandemic it affects the health care delivery system in these countries. Poverty, lack of access to health care and unavailability of social security system in the underdeveloped countries especially may lead to incidences of malnutrition and nutritional disorders. Those in poverty; and living on streets or crowded hutments may not be able to maintain social distancing and this may lead to spread of COVID-19 infections apart from spread of communicable diseases such as tuberculosis. The social isolation & social distancing as well as staying back at home may lead to psychological illnesses such as depression, anxiety or even suicidal behaviors apart from obesity, hypertension and diabetes risk due to physical inactivity or over eating in a few cases (Ya, 2020; Cascella, 2020). The emerging infectious diseases in East and South-East Asia countries are also a cause of great concern. The Long term impact of COVID-19 on health shall prevail in the society till medication and a vaccine for management of COVID-19 is available; hence all nations should plan for telemedicine services for patient care, health education and so also practice preventive measures against COVID-19 spread to down play its impact (Cascella, 2020; John, 2020).

The looming economic crisis may lead to a recession for a few coming years and thus warrants the need for building up a sustainable health care system capacity, social safety nets (welfare and unemployment supports), financial and technical support of agencies like the WHO and International Monetary Fund to underdeveloped and developing nations in Africa. All countries should adapt to urgent measures for revamping their public financial systems by allocating adequate fund for spending on safety net and public health services (Zouari, 2020).

Suggestions

-) It is very important for all Governments across the countries to develop locally matched appropriate policy regulations and provide financial packages for public health as well as financial support to important sectors like agriculture, aviation industry, all small & large scale industries, pharmaceutical industries etc. apart from financial support to all laid off temporary employers, laborers, destitute population, people of shelter homes etc.
-) Health education to the public regarding safety measures for prevention of COVID-19 spread in community is advocated.
-) Apart from Government support, the World Health Organization and United Nations under UNDP program should support the developing & developed nations of

Africa & Asia with health care & technical support to combat the unprecedented COVID 19 pandemic.

-) Opening of lockdown with strict guidelines for social distancing and isolation in case of coming in contact with COVID 19 positive cases and starting of economy; may lower the economic losses of the pandemic and eventually favor a better health care delivery.

Conclusion

The health and socioeconomic impact of COVID-19 has been devastating for the developing and under developed countries of Africa and Asia. The looming crisis may last for a few years and may have further deleterious effect over the human development index in these countries. All measures to prevent COVID-19 spread and mitigation of the economic damage to society, industrial establishments and country's by the World Bank and International Monetary Fund Agency is the need of the hour. The valuable support of World health Organization and United Nation Development Program by providing guidelines and support for health care management for preventing spread of COVID-19 infection & social protection to vulnerable population shall be of great help to combat COVID 19 situation. Planned efforts by Governments towards financial management by granting adequate financial package for public health management and social security of masses will also go a long ways to help override the present crisis. COVID 19 has spread and affected over 200 countries/territories/areas around the world and the outbreak is continuing to infect more globally. Hence, sharing information about risk assessment and epidemic control in all endemic areas is also very important.

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