

What might delay the end of the pandemic?

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Short Communication

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ABSTRACT

Sudden and massive outbreak and a very rapid rise in patients with COVID-19, a condition that never existed before has led to many issues in terms of treatment, prevention, and transmission, socio-economic impact being a major impact. The objective of the study was to evaluate the factors that might delay the on-going efforts to end the pandemic. The case of Covid-19 is an iterative learning process and warrants the critical gaps to be filled. Author has made an attempt to address the public health and policy-focus on pandemic COVID-19 disease. The study is based on the literature study and an online survey to identify the challenges and barriers in COVID-19 on going clinical research and therapy. The policy makers need to be vigilant to factors such the political aspect, heterogeneity, the allocation, re-transmission, access to vaccine, and minimal impact on transmission, control measures, vaccine hesitancy and other strategies of protection of the entire world from the pandemic. Science, market and government being the key actors in medical research and innovation has to face the challenge in several ways. A comprehensive governance framework that works on gaps in clinical research and therapy for COVID-19 is needed to end the pandemic.

INTRODUCTION

Global suffering caused by the pandemic COVID-19 is increasing day to day. Emergency efforts are underway to find optimum medical products/clinical interventions to fight COVID-19 pandemic. Sudden and massive outbreak and a very rapid rise in patients with COVID-19, a condition that never existed before has led to many issues in terms of treatment, prevention, and transmission, socio-economic impact being a major impact. Preparedness is a crucial investment and cost of financing gap for preparedness, is estimated to be more than that compared with estimated

pandemic costs. The capacity to produce sufficient quantities of a future vaccine that will turn out to be effective needs a governance framework that works at the global level. The objective of the study was to evaluate the factors that might delay the ongoing efforts to end the pandemic. Currently, more than 180 vaccines for COVID-19 are in various stages of development and expected to enter the market in 2020 end, however, the traditional method took years (up to 15 years) to develop vaccine¹. However, this pandemic speed leaves many open questions to satisfy the global demand for SARS-CoV-2 vaccine^{1 [1]}.

DESCRIPTION

The current study was undertaken to evaluate the factors and critical gaps affecting the ongoing progress to address the public health and policy-focus on pandemic COVID-19 disease. The study is based on the literature search and an online survey of the stakeholders involved in clinical research in context with COVID-19 pandemic. An online survey was conducted in July, 2020 using Google Doc Form (with set of questionnaire on challenges and barriers associated experienced by them on clinical interventions to fight COVID-19 pandemic). The results were compiled according to theme to analyse the challenges and barriers currently, they facing in clinical interventions for COVID-19.

Trust and suspicion: A large number people around the world are not willing to be inoculated with the vaccine due to distrust arising from the dangerous rush for vaccine and the suspicion on the pharmaceutical industry. Trust and suspicion lesson need to be learnt from the past experience with other vaccines during past decades. The vaccine confidence is to be taken seriously ^[2].

Political concern: The United States, President Donald Trump wants the vaccine before presidential election, November 2020 and has put pressure on regulators to approve a vaccine without adequate data on its effectiveness and safety. Similar is case with vaccines for clinical use in Russia. A dangerous rush for vaccines has begun as the chasm between science and politics continues to grow, exemplified by a recent announcement of “Sputnik” vaccine for COVID-19 which is heading for a quick approval by regulatory agencies to win the race and putting the millions of lives in danger.

Confidentiality on clinical trial: While a clinical trial is ongoing, protocol for the trial needs transparency so that the public confidence is built simultaneously for vaccine acceptance. To release actual clinical trial results at the very initial stage of vaccine develop, however, may create a number of controversies too. This needs an independent evaluation by policy makers to open the trial protocol and results to scrutiny.

Pressure on Scientists and drug companies: A multi-country clinical trial of AstraZeneca and the University of Oxford, UK which was paused on 6 September because of an adverse reaction in a participant. This has put pressure on the scientists who are under to test this vaccine rapidly. Though this vaccine is on hold in the United States, its trial is resumed in Brazil, South Africa and the United Kingdom ^[3].

Racial disproportionality: Finding effective therapies across the spectrum of clinical disease states due to variations in clinically different populations also affects the outcomes of the clinical trials processes⁶. Racial

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disproportionality in COVID clinical trials is due to lack of diversity in clinical trials that may be due to long standing medical distrust on the part of minority communities. The policy makers must address the underrepresentation of minority groups in clinical trials for COVID-19.

Social determinants: Though physical distancing measures are necessary to prevent the spread of COVID-19, however, it is substantially more difficult for those with adverse social determinants and might contribute to both short term and long term morbidity.

Limited Knowledge: Making decisions to mitigate COVID-19 with limited knowledge may affect directly the level of the public health response or clinical management. Patients should not be given drugs of unknown efficacy, however, for patients with life-threatening infections, off-label or compassionate use of drugs should be considered ethical⁹. Summarizes the results of a primary survey done in India in July, 2020 on the challenges and barriers to ongoing Covid-19 clinical interventions ^[4].

Health inequity: Massive increase in older population and ageing people has led to unprecedented challenges in the field of health care, infrastructure support and quality of life. Unprecedented growth in the elderly population is a matter of concern for policy makers, researchers and civil society for a more effective and sustainable care and support for senior citizens. As per WHO, people with age > 60 years or with health conditions like lung or heart disease, diabetes etc. are more prone to COVID infection. It is important to tackle health inequity in the current COVID-19 pandemic as an urgent basis with social and scientific evidence ^[5].

CONCLUSIONS

Bottle-necks of the vaccine development and delivery to protect overall public health in response to Covid-19 needs an independent evaluation by researchers, publishers, regulators, and drug manufactures to overcome the vaccine-hesitancy movement. The study is of primary importance to address the public health and policy-focus on pandemic COVID-19 disease. Findings of this study may also help the stakeholders in taking decision of growth of their activities.

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