Covid-19 Pandemic from Pakistan Perspective

Mohammad Noor

On December 31, 2019, in Wuhan, the capital city of Hubei province of China, a few cases of pneumonia of unknown pathogen were reported in the workers & visitors of an open seafood market where live wild animals were also sold.[1] Within a week, a novel coronavirus was isolated from these patients in Wuhan, and within next month World Health Organization (WHO) declared it as "Public Health Emergency of International Concern".[1] World Health Organization named this disease as new coronavirus disease 2019 (COVID-19) on February 11, 2020.[1] On March 11, 2020, WHO declared COVID-19 as a pandemic.[1] As of September 13, 2021 as per WHO it has affected 223,022,538 people & death tally is 4,602,882.[2] Pakistan reported its first case on March 13, 2020 & as of 13th September 2021 there are 1,207,508 cases & 26,787 deaths.[3] The disease affected the health & economic sector badly. According to the world bank, the world economy would get bigger slum than following World War II.[4] For a disease where there is no specific therapy the entire efforts were on preventing spread across the community resulting in school closures, lockdown etc. adding further to the economic hardship in a nation where one third of its population is below the line of poverty.[5] Being a novel virus, mankind was not immune & the scientific community was not aware. Vaccination was the last hope to curb the pandemic.

Department of Medicine,
Khyber Girls Medical College / Hayatabad Medical Complex,
Peshawar, Pakistan

Address for Correspondence:
Professor Mohammad Noor
Department of Medicine,
Khyber Girls Medical College / Hayatabad Medical Complex,
Peshawar, Pakistan.
noorwazir1966@yahoo.com
0333-9108052

Vaccines are a crucial tool in the battle against COVID-19, and there are clear public health and lifesaving benefits to using the tools we already have. WHO took the initiative to start research to make the COVID-19 vaccine in February 2020 after consultations with multiple international scientists and public health experts. The COVID-19 Vaccines Global Access (COVAX) Facility was established by WHO.[6] COVID-19 Vaccines Global Access is bringing nations together, regardless of their income level, to ensure the procurement and equitable distribution of COVID-19 vaccines. Vaccine development is a tedious process & may take decades to be produced. Effective vaccines can take very long to develop – and even longer to ensure that they reach all who need them. Work being carried out on potential COVID-19 vaccines follows the same processes as with other vaccines, but given the urgent need to stop the pandemic, some of the steps are being carried out in parallel to accelerate the process. The COVAX Facility accelerated this timeline by enabling early investments in the development of a variety of vaccine candidates; expanding manufacturing capacity; and accelerating vaccine production ahead of the licensing process so that vaccines can be deployed without delay once they are proven to be safe and effective. Like all vaccines, COVID-19 vaccines go through a rigorous, multi-stage testing process, including large clinical trials that involve tens of thousands of people.[6] These trials are specifically designed to identify any safety concerns. On December 2, 2020, the UK has become the first western country to license a vaccine against COVID-19, opening the way for mass immunization with the Pfizer/BioNTech vaccine.[7] Very soon these vaccines were approved by Food & Drugs Administration (FDA) & other regulatory authorities across the globe.

Despite these positive developments, there is reluctance on the part of vaccination intake globally in general & particularly in Pakistan. The Government of Pakistan launched the Covid-19 vaccination drive early this year initially for healthcare workers and older people.[3] To increase the vaccination rate, the government recently opened the vaccination drive to all adults free of cost. In a country where mobile users are over 70% (as per the

World Bank's statistics), it can be used extensively as mass communication through mobile phones to encourage people to vaccinate and tackle the pandemic.[8] However, the country still needs to adopt more stringent strategic measures to reduce the vaccination hesitancy of locales. In Pakistan as of September 11, 2021, 67,342,288 doses of vaccine have been administered, out of these 21,613,626 are fully vaccinated & 50,803,582 had their first dose.[3] Globally 30% population is fully vaccinated while in Pakistan only 10% population is fully vaccinated.[2] It is not surprising as the literacy rate is very low & Pakistani believe in myths & superstition. Lots of fake information related to vaccines such as monitoring chips, remote control of our behavior by the west, infertility issues are widespread in the community.[9,10] It's normal to have questions about vaccines and want to make the right decision for you and your loved ones. If someone – a friend, family member, or colleague – asks questions or expresses concern about vaccines, listen to them, acknowledge their feelings, and offer correct information if you can. We should be ready to suggest reputable sources of information if they want to learn more.[6] Million people have safely received COVID-19 vaccines. All of the approved COVID-19 vaccines have been carefully tested and continue to be monitored. An external panel of experts convened by WHO analyses the results from clinical trials and recommends whether and how the vaccines should be used. Officials in individual countries decide whether to approve the vaccines for their national use and to develop policies for how to use the vaccines based on WHO recommendations.[6]

One way to fight Covid-19 vaccination hesitancy is to incorporate a nudge behavioral science approach in the government's strategy to increase the vaccination rate. Such an approach calls for "nudges," which simply are processes, adjustments, or structures meant to guide people toward a particular behavioral choice. Such nudges can also include financial or non-financial incentives that can induce people to take the vaccines.[10] For example, the state of Ohio, United States of America, recently enacted a lottery program to boost Covid-19 vaccination rates. According to a story published by The Washington Post highlighting the impact of the program, the state recorded a 28 percent increase in the vaccination rate of those aged 16 and older in the program's first week.[11] Heterogeneity among regions and people will necessitate a contextualized and personalized nudge approach when dealing with Covid-19 vaccination hesitancy. In Pakistan, the government should also employ its unique nudge approach by awarding cash and non-cash benefits conditional upon people's sign-up for the Covid-19 vaccination.

Cash benefits could be integrated into the existing social safety net programs, for instance, Benazir Income Support Program (BISP) and the Ehsaas Cash Program.[10] The government can encourage those who are availing benefits under such cash programs to earn additional cash if they complete their vaccination certificate. Further, relatively economical non-cash programs can also work. Under one such intervention program implemented in India by the MIT's Abdul Latif Jameel Poverty Action Lab, Noble Laureates Banerjee and Duflo demonstrated that free provision of 1 kg of lentils to people who vaccinated their children led to significant improvement in local healthcare outcomes.[12] In Pakistan, similar policies of providing incentives will particularly increase the vaccination rate among less-educated, ill-informed poor people, who are generally more prone to rumors and conspiracy theories than the educated upper and middle classes.

Similarly, by employing the nudge approach, the Government of Pakistan should further strengthen its existing mass communication strategy by including slogans that appeal to people's self-interest and altruism. For instance, instead of "vaccinate for your life," a revised slogan could be "vaccinate for your life and your loved ones' life."[10]

In addition, this nudge approach should be complemented with proper legislation mandating workplaces to give breaks to their employees for completing the vaccination period. Likewise, the city government units should approach the administration of colleges and universities, ensuring that students show vaccination proof to be allowed entry to the premises of their institute. Similarly, all visiting health care facilities should show proof of vaccination certificate.

Lastly, the government should involve other vital stakeholders, such as non-governmental organizations, health professionals, community leaders, and Ulemas (religious scholars) to spread awareness about vaccination. Particularly, in a country where Ulemas are revered and looked up to guidance, they should be engaged in squashing all the rumors around the vaccine and spreading the importance of disease prevention. They should mention the narration in which the Prophet Muhammad

(PBUH) advised to prevent the spread of contagious diseases.[10] Thus, they should remind and educate the public that prevention in the form of vaccination is obligatory for all. No vaccination program will be successful unless there is community participation.

There is growing concern that the efficacy of vaccine will be less for the variants of SARS CoV-2.[6] We must not put off getting vaccinated because we are concerned about new variants, and we must proceed with vaccination even if the vaccines may be somewhat less effective against some of the COVID-19 virus variants. We need to use the tools we have in hand even while we continue to improve those tools. We are all safe only if everyone is safe.

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