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# THE COVID-19 PANDEMIC AND ACCESS TO VACCINATION IN BANGLADESH: A CRITICAL REVIEW

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**Abstract:** *This paper delineates the diverse perspectives of the vicious COVID-19 pandemic and access to vaccination in Bangladesh. It also depicts the discrepancies as to access to vaccine and vaccination campaign aside from assorted socio-economic impacts and challenges in Bangladesh with plausible way-outs. The fight for combating the demonized coronavirus is laudable amid the country's limited resources, vulnerable healthcare system and vaccine hesitation. But the estimated cost of vaccination is under criticism because the country has received a substantial amount of vaccines as gift or free of cost donation from rich countries especially from the United States. Due to the pandemic, the socio-economic loss sustained by the country has created extra burden for the economy. No doubt, the coronavirus has taken an acid test of the global healthcare system. Even the economically advanced countries with sophisticated healthcare facilities have experienced the horrific fatality of the pandemic for a long time. But during the pandemic, the world has witnessed further polarization of the countries with major political and economic power dynamics in the name of coordinated fighting of the persisting crisis. Together with the financial constraints of low-income countries in Africa and Asia, the vaccine crisis and monopoly caused by the profit-driven attitude of most multinational pharma companies and geopolitical interests of some high income countries have galvanized the global vaccine inequity undermining the notion of distributive justice with a few exceptions. But the contagious coronavirus taught that people's safety of a particular country is not possible without safety of other countries. Most existing papers on the COVID-19 pandemic linking Bangladesh depict its various detrimental impacts from health science and socio-economic aspects. But this paper critically reviews the chronological aspects of the COVID-19 pandemic in Bangladesh starting from influx of the virus to its all-out combating measures highlighting human casualty, advent of vaccine, vaccine inequity, access to vaccination, vaccine diplomacy, campaign, hesitation and rerated constraints along with prevailing as well as post COVID-19 socio-economic impacts.*

**Keywords:** COVID-19 Pandemic, Adverse Impacts, Access to Vaccine, Vaccination Campaign, Vaccine Hesitancy, Diplomacy, Challenges and Opportunities.

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**Introduction.** The deadly COVID-19 pandemic has stunned the entire world with devastating effects and Bangladesh is not an exception (Khan, 2020). It has drastically plummeted the vibrancy of people's life (Joseph and Dore, 2021). Like rest of the world, the outbreak of this lethal virus posed a serious threat not only to the healthcare sector but also to the socio-economic landscape of the tiny country overburdened with around 165 million population (Anwar et al., 2020). Prior to emergence of corona vaccine, the compliance of the COVID-19 guidelines as envisaged by the World Health Organization (WHO) generated some sort of respite for all countries including this South Asian delta. With the advent of the COVID-19 vaccine, Bangladesh started accessing and administering vaccinations to its people to contain the virus following global trends. The country launched the COVID-19 vaccination on 27 January 2021 but the mass vaccination campaign commenced on 7 February 2021 after the first case reported on March 8, 2000 (Faruk and Quddus, 2021).

Initially, access to COVID-19 vaccine was a big challenge for all countries especially for those with middle and low income background due to scarcity of production, monopoly, aggressive nationalism and other geopolitical issues of some high income countries. But adhering to multilateralism in lieu of bilateralism helped Bangladesh to receive vaccines of diverse brands from various sources either as a cost-free gift or part of procurement. The world community unstintingly supported this nation in availing vaccines expressing solidarity and as a part of global pledge towards human rights, vaccine equity and distributive justice (Haque, 2022). This paper succinctly attempts to review the discourse concerning the COVID-19 pandemic and access to vaccination in Bangladesh shedding lights on the human casualty, vaccine diplomacy, vaccine hesitancy, as well as current and post COVID-19 socio-economic impacts coupled with some suggested steps to ease the crisis.

**Literature review.** The world will remember the devastating effects of the coronavirus for a long time. Despite widespread global fatality, the COVID-19 pandemic may be treated as a wake-up call for the healthcare system of the world. Nevertheless, the world has been successful in the race of development of COVID-19 vaccines within the quickest possible time in the history (Glassman et el., 2022). But the access to vaccine and vaccination drive are not as quick as invention of such vaccines especially for middle and low income countries. Like other countries, Bangladesh also has faced the hurdles to deal with the COVID-19 pandemic ranging from the access to vaccines and vaccination campaign (Ahamad et el., 2021). A research found that around 80 percent vaccines are taken by rich countries while low income countries struggle for access to vaccines and vaccination drive is yet to end for the targeted population as set by the WHO (Turner and Upton, 2021). Previous pandemic battling experiences as to access to vaccines and vaccination were almost similar for low income countries. There is a clear reflection of Amartya Sen's capability theory in access to vaccines and vaccination across the world (Sen, 1985). The donation of free vaccines to low income countries by high income countries and some organizations under a common platform is a big step forward for distributive justice but the process has to go a long way. The COVAX facility was launched with the aim of more equitable access to vaccines and it played a significant role in facilitating multilateral cooperation for procurement and distribution of vaccines equitably in all countries worldwide (Puyvallee and Storeng, 2022). Amid the ongoing coronavirus catastrophe, there was demand for vaccine waiver by a number of developing countries under the TRIPS agreement but the demand ended in dashed hope. Even there are several voices for adopting a pandemic treaty for coordinated fight against any future pandemic like the coronavirus but no headway to the discourse amid fight between statism and globalism (Wenham et el., 2022). The dominant prevalence of vaccine monopoly and nationalism whereby rich countries adopted policies in prioritizing their own necessity as to public healthcare at the cost of other low income countries. There is little research conducted on access to vaccines and vaccination in Bangladesh. So, this research will be a substantial addition to this field.

**Methodology and research methods.** In conducting this research, a qualitative approach has been applied. As it is mostly a theoretical paper, it espouses the doctrinal as well as comparative research methods all over the paper. This research paper is grounded mostly on secondary sources. While conducting this research a succinct analysis on the relevant international and national human rights legal instruments is added. On the other hand, relevant doctrines and theories accompanied with scholarly academic research works including text books, journals articles, case materials, and electronic resources have been interpreted in the article. However, for the purpose of supporting the research, this article is substantially based on qualitative analysis of non-numerical sources.

**Results.** Access to vaccines and worldwide vaccination drive have given a respite from the surge of the COVID-19 pandemic. The efforts of quick access to vaccines and speedy vaccination against the coronavirus by industrialized countries have given a little advantage to them. Despite all-out efforts, the rich and developed countries could not escape from the curse of the coronavirus in tackling the death toll and other human casualties. The pandemic has increased interdependence of countries in fighting the devastating impacts. The contagious virus has often changed its nature in many times but quickly. The sustained loss of Bangladesh due to COVID-19 outbreak is enormous and it will take a long time to recover from its upsetting impacts. But the fight against spreading of the virus is praiseworthy. In the same way, access to vaccines and vaccination campaign in Bangladesh have been largely successful in comparison to similar income or even developed countries. Again, the collaboration of the world community is worth remembering both in accessing the COVID-19 vaccines and the vaccination drive in Bangladesh. But the socio-economic challenges which are persisting and looming large ahead due to the demonized coronavirus pandemic will be a mammoth barrier for the country to overcome now and in the long run. So, the result is like a mixed bag of success and failure to deal with the COVID-19.

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Influx of COVID-19 Pandemic. In December 2019, the first outbreak of the novel coronavirus popularly known as the COVID-19 was reported in Wuhan, capital of Hubei province, China and subsequently the highly infectious and transmittable viral flu blowout in other countries (Zhu et el., 2020). On the contrary, China alleged that the first case of the coronavirus is in November 2022 in Italy but the claim was not taken for granted. (Hui et el., 2020). By the end of January to early February 2020, it was reported in Europe, North America, Latin America, Africa, Asia, Oceania and other destinations. The WHO declared it as a pandemic on March 11, 2020 following over 118,000 cases and 4,000 deaths in 110 countries with immense trends of of further escalation (Schneider, 2022). In South Asia, the coronavirus case was detected in Nepal on 23 January, in Sri Lanka on 27 January, in India on 30 January in 2020. In Bangladesh it was firstly identified on 8 March but the first death was reported on 19 March, 2020 (Islam et al., 2020). In the wake of the coronavirus, the foreign minister of Bangladesh in a public speech opined that the coronavirus is nothing more than a traditional flu which is accompanied with cold and fever and he urged people not to be worried. Alike other countries across the continents, Bangladesh also encountered many variants of the coronavirus such as the Alpha variant well known as the UK variant, the Beta variant popular as the South Africa variant, Gamma variant branded as the Brazilian variant, the Delta variant known as the Indian variant and the Omicron variant. The total world has bitterly experienced a series of waves surging from first to fourth of the disastrous COVID-19 pandemic. Even though this viral disease predominantly affects the lungs casing death for respiratory failure in most cases, it also affects other organs including kidney, brain, heart together with other tissues, organs and organ systems. The COVID-19 patients with pre-existing complications such as hypertension, diabetes, heart diseases, asthma and other respiratory hitches embraced more deaths (Flaherty et el., 2020).

COVID-19 Cases, Recovery and Deaths. According to Worldometer (2022), the COVID-19 pandemic has unleashed its fatality in 223 countries and territories in all over the world. As per its data as of 29 July 2022, around 579 million cases are reported and 549 million people have recovered successfully but 64 million people died of coronavirus worldwide. The United State of America (USA), India and Brazil are in the first, second and third position in number of infections and deaths. In Bangladesh, over 20 million cases were reported and among them 1.94 million affected people recovered successfully while 29,284 people died of the COVID-19 as of 29 July 2022 (Worldometer, 2022a). But the WHO estimates five times more deaths in Bangladesh (The Business Standard, 2022) than the country's official data while in India the death toll is 10 times higher than the government records of deaths (Biswas, 2022). The death toll in some Asian, Latin American and Africa countries is also allegedly kept secret by the governments to portray their success in tackling of the pandemic. However, there are some malpractices in the name of the COVID-19 test by some private hospitals and clinics in the country. On 19 July 2022, a Dhaka court punished eight people including the owner of JKG Healthcare with 11 years of imprisonment for producing fake results to about 16,000 people resorting to fraud and forgery in 2020, though the convicts may go to the Supreme Court of Bangladesh against the verdict (The Straits Times 2022). On the other hand, the Western world suspected the credibility of the data bearing death toll of China but the country refuted the allegation. However, Bangladesh shows a good gesture in containing the fatal virus. The government is complacent as it has ranked 5$^{th}$ out of 121 countries across the world as per the Nikkei's COVID-19 recovery index published on 5 May 2022 (The Financial Express, 2022a).

Advent of COVID-19 Vaccine. Soon after the declaration of the coronavirus as a pandemic by the WHO, the major multinational pharmaceutical companies on 19 March 2020 announced a greater commitment to address the infectious disease throughout the world effectively. The race for development of vaccine as an efficacious antidote started. In less than a year, multiple COVID-19 vaccines were developed with the brilliance of medical science and cutting-edge innovative technology. China developed the *CanSino* vaccine and approved it for limited use for its military personnel on 24 June 2020 and simultaneously, two other inactivated virus vaccines were used by the Chinese government for the people of high-risk occupations. The WHO supported the China's emergency use of experimental vaccines (Pinghui, 2020). Russia pronounced the approval of its vaccine *Sputnik V* on 11 August 2020. The Pfizer-BioNTech was given emergency use authorization (EUA) by the US Food and Drug Administration (FDA) on 10 December 2020. The WHO on 31 December listed Pfizer-BioNTech vaccine for emergency use stressing the need for equitable worldwide access. Similarly, the Moderna vaccine was permitted the EUA on 17 December. The Oxford-AstraZeneca's COVID-19 vaccine was developed in collaboration with Oxford University and it received approval of the Medicines and Healthcare Products Regulatory Agency (MHRA) of the United Kingdom (UK) on 30 December for emergency use. The background of the development of other vaccines is almost similar. The development of the COVID-19 vaccine is the fastest ever in the history of immunization in the wake of a pandemic. The vaccine development process for a previous pandemic took 10-15 years. According to WHO,

at least 17 COVID-19 vaccines are in most use out of 40 approved ones to fight the COVID-19 pandemic (World Health Organisation, 2021). Bangladesh has approved nine vaccines but used AstraZeneca, Pfizer, Moderna, Sinopharm, Sinovac and Janseen.

Access to COVID-19 Vaccine. Access to vaccine is a basic human rights for all people irrespective of their origin, nationality, ethnicity and having identity crisis. A Harvard professor opines that human rights are central to the coronavirus crisis (Sikkink et el., 2020). The WHO preamble has articulated the right to health as a fundamental human rights in its 1946 charter. In the wake of the COVID-19 pandemic, the access to equitably sufficient vaccine became an integral part of the right to health regardless of boundary. Article 25(1) of the Universal Declaration of Human Rights (UDHR) 1948 recognizes the right to health and medical care for all. Under article 12 of the International Covenant of Economic, Social and Cultural Rights (ICESCR) 1966, and six other core international human rights instruments, the right to health is well recognized (Right to Health, n.d.). Article 12(2) (c) of the ICESCR envisages responsibility of state parties in attaining physical and mental health of their citizens along with initiatives for prevention of an endemic or pandemic. The United Nations (UN) Secretary General says, "We are combating COVID-19 to protect the lives of all human beings and the right to health is inherent to the right to life. The COVID-19 is testing all countries ability to protect the right to health" (UNDP, 2021). Hence, the equitable access to the lifesaving COVID-19 vaccine as a part of right to health is a universal human rights. Bangladesh constitution 1972 in broader sense under the preamble (third para) and articles 11, 15, 31, and 32 supports the concepts of human rights, rule of law, social justice, right to life and right to vaccine. But the accessibility of vaccine was a massive challenge in Bangladesh like other middle and low-income countries. In addition to underfunding and the COVID-19 vaccine scarcity, the excessive nationalism and monopoly of some rich countries and multinational corporations have caused unbearable sufferings in the vaccination drive of low and middle income countries in achieving the target of global herd immunity by the middle of 2022 ignoring global health equity. The unbent attitude of the rich countries for not letting the temporary waiver of the Trade Related Aspects of Intellectual Property Rights (TRIPS) to some developing countries including India and South Africa provokes numerous questions. The one size fits all approach of the TRIPS to remove the patent barriers to developing countries is a sheer constraint in vaccine justice. However, the limitations in producing such complex vaccines cannot be ignored amid little change of return from the investment (Erfani et al., 2021). But the WHO says that 120 pharma companies across Asia, Latin America and Africa that are capable in producing the COVID-19 vaccines as produced by the US, British, Chinese and Russian companies, subject to providing required technology and technical know-how plus waiving patient under the TRIPS agreement. The proposal of India and South Africa requesting waiver of the TRIPS agreement was supported by more than 100 members of the World Trade Organization (WTO) but no headway is seen in that regard (Islam and Zaman, 2021). Moreover, apart from profitable vaccine business, vaccine apartheid, and geoeconomic as well as geopolitical issues of some high income countries have created vaccine divide in the polarised world (Haque, 2021a). Having targeted the COVID-19 pandemic free world and in a bid to achieve herd immunity or mass immunity, the WHO projected the need of 11 billion doses of vaccines for an earmarked population of 5.5 billion covering 70 percent of entire global population for inoculation (Haque, 2021). According to the US International COVID-19 Vaccine Donations Trackers Bangladesh has received 68.4 million COVID-19 vaccines as of July 27, 2022 from the country as a free of charge gift reflecting the idea of distributive justice (KFF, 2022). Like the US, other countries including Canada, UK, France, Poland, Norway, Sweden, Switzerland, Japan, Saudi Arabia and India donated vaccines to Bangladesh. The total number of vaccines received by the country so far are more than 300 million doses either under COVAX facilities or through commercial purchase.

Vaccine Diplomacy and Bangladesh. Sadly, the coronavirus vaccine has turned into a tool of global diplomacy. Most high-income countries have utilized their preferred models of vaccine diplomacy both in the process of collection of the COVID-19 vaccines and free distributing to middle and low income countries meeting their own needs. The power struggle among the USA, EU, China and Russia is evident in the guise of vaccine diplomacy. The vehement use of soft power diplomacy observing geopolitical and geoeconomic interests in the landscape of international relation of the divided world, the big power countries favoured their close allies in vaccine donation (As-Sazid, 2022). The future power dynamics is a big factor in the vaccine donation scheme. Whether a country support Ukraine or Russia in between their war is even closely monitored by the donors. For example, after allocation of 4.4 million vaccines as a part of free of charge donation to Bangladesh, Lithuania refused to send them accusing to abstain voting against Russia in the UN condemning Russia's invasion of Ukraine. The multilateral diplomacy prevails over bilateral diplomacy in getting vaccines. Bangladesh has learnt from the mistake of its deal with the Serum Institute of India (SII) on 13 December 2020 to buy 30 million AstraZeneca vaccines paying TK 13 billion. The deal ended in dashed hope

for Bangladesh when the SII after supplying only 7 million jabs could not supply the rest of the amount on the excuse of government ban. However, at the early stage of mass vaccination, Bangladesh was lagging behind in collecting the required jabs but the extension of cooperation from development partners and donor countries eased the process in getting vaccines. The global vaccine diplomacy was in favour of the country imbibed with the diplomatic motto "friendship to all and malice towards none" and having prior mass vaccination experience. The country also bought vaccines from India, China and USA. The cost of excessive vaccine diplomacy put the economic and health experts in doubt that most low-income countries may not fulfill the mass vaccination target before 2023 or 2024 (Kavanagh and Sundar, 2021). A shocking data of maximizing profit by the COVID-19 vaccine companies can stun the whole world. The Peoples Vaccine Alliance reveal that two leading COVID-19 vaccine producers like Pfizer, BioNTech and Moderna are cashing combined profits of US $1000 in every second or US $65,000 in every minute (The Economic Times, 2021). In supporting the roll-out of vaccines to all countries including middle and low income countries, a platform of the COVID-19 vaccines global access or COVAX was set up in April 2020. The COVAX as a pioneering global collaboration led by UNICEF with partners including Coalition for Epidemic Preparedness Innovation, Gavi, the Vaccine Alliance, and the WHO played a significant role in producing and sharing of vaccines equitably. The UNICEF so far has delivered more than 190 million jabs to Bangladesh via the COVAX.

Vaccination Campaign and Bangladesh. Besides compliance of the WHO guidelines, the necessity of mass immunization came to forefront considering severity of the pandemic along with its casualty in increasing morbidity and mortality. The mass vaccination drive against the COVID-19 commenced in developed countries in December 2020 while the same vaccination campaign in poor and low income countries started in January 2021. As a lower-middle-income country, Bangladesh was able to begin its first vaccination on 27 January but the mass immunization started in 7 February 2021 (Islam et el., 2021). The awareness drive adopted by the government and non-government actors for the vaccination campaign works positively. The strategy of showing vaccination certificates to pursue the services of government and non-government offices works as a meaningful pressure. Media professionals and social media users played a key role to this end. The vaccination was free of cost having treated the campaign as a welfare approach of the government. But the allegation of corruption in the vaccine deals as raised by various quarters including Transparency International of Bangladesh (TIB), an anti-corruption civil society organisation (CSO) of the Berlin-based Transparency International (TI) cannot be refuted. The government claimed the cost of vaccine procurement and jabbing management is worth TK 400 billion (US $4 billion) but TIB's estimation is maximum of TK 1.67 billion (US $1.67 billion). Lack of transparency and accountability in the financial dealings of Bangladesh government whether at home or in abroad is an age old problem and so the COVID-19 vaccination deals with many countries including India are not out of question. According to a data, as of 27 July 2022, 76.13 percent people have received first dose of vaccination and 70.67 percent attained second dose (around 115 million people) while only 32.44 percent people have taken third dose as a booster (DGHS, 2022). Now, people above 18 and above can receive booster dose after 4-month of the second dose. But people are reluctant to receive booster doses. However, the credibility of the vaccination drive is questioned with the belated start of vaccination drive in the country's Rohingya camps in August 2021.

In fact, the universal vaccine access and mass vaccination is a major challenge. As of May 2022, about one billion people in lower-income countries are still unvaccinated while only 57 countries have been able to vaccinate 70 percent of their population and in fact, most of them are high-income countries except a few (Klobucista, 2022). There are two sets of realities of the coronavirus pandemic between high and low income countries. Most high income countries including the US, UK, Germany, France and some others are giving their populations third and fourth doses while the low income countries in Africa and Asia are struggling to inject first and second dose. Regarding more doses, a Harvard faculty of epidemiology, William Hanage noted "doses matter- four shots are better than three, and three better than two" (Harvard HSPH, 2022). But the lesson learnt from the COVID-19 catastrophe as said by the president of the European Commission that "a global pandemic requires a world effort to end it ─ none of us be safe until everyone is safe" (Ghebreyesus and von der Leyen, 2020). This idea is limited only in academic and social discussion with little exceptions.

Vaccine Hesitancy and Bangladesh. In Bangladesh, a significant rate of the COVID-19 vaccination hesitancy, reluctance and refusal has been seen. The people belonging to under privileged group, ethnic minority and religious orthodox beliefs are mostly hesitant in accepting vaccination. The backward section of people in the rural and slum-dwelling areas with poor literacy rates, less trust in the healthcare system, and low adherence to health safety policies are mostly hesitant for vaccination. The ongoing app-based registration for vaccination is also a cause of indecision and hesitancy among them. Like some African and Asian countries, they suspect that the vaccines either received as free donation or gift and procured by people's fund

are of sub-standard quality, unsafe and unnecessary. The people opposing the COVID-19 vaccines for themselves claim that they have enough immunity and self-confidence to combat any virus including the coronavirus. In some cases, the complacency of the government in claiming success in handling the coronavirus and lack of convenience also instigate vaccine indecision. The visibility of some side effects of vaccination has triggered vaccine skepticism. A study shows 32.5 percent vaccine hesitance in Bangladesh (Ali and Hossain, 2021). Social stigma and fake messages on social media that only the rich and corrupts will be victims of the COVID-19 and rumour like the vaccinated people may lose sexual power and contact life-threatening disorders has escalated the vaccine skepticism. In case of Western countries, black people are lagging behind than white people in vaccine hesitancy. A few conscious and well-educated people also expressed antipathy in the immunization of such vaccines. When vaccination started, some religious preachers mostly with Madrasa based education in the country publicized against the COVID-19 vaccines and vaccination drive. Notably, with the increasing trends of receiving vaccines by most people, a portion of the people with vaccine hesitance are lured to take jabs.

Compliance of WHO Guidelines. In tackling the outbreak of diverse variants of coronavirus, the WHO has envisaged certain guidelines for all countries to comply with (The Dhaka Tribune, 2020). Like most countries, Bangladesh government has accepted the WHO guidelines which include physical distancing, social distancing, wearing of face masks, frequent hand sanitization and imposition of lockdown. The government also adopted a clinical management of the COVID-19 with the support of clinicians and public health specialists to restrict community transmission. The law enforcing agencies and military personnel played a noteworthy role in ensuring compliance of the guidelines despite reluctance from some people. Even the government set up mobile courts to punish those violating the guidelines. The WHO also instructed to immunize 70 percent of total population of all countries by mid-2022 to generate herd immunity or population immunity and so far, Bangladesh has been able to comply with this immunization requirements. But the failures of the government cannot be ignored as to increase of the insufficient intensive care unit (ICU) beds with ventilators facilities, general beds for other patients, isolation units, oxygen concentrators, supply of quality personal protective equipments (PPEs) for healthcare professionals, inadequate quality of testing kits, modern lab facilities for testing and other medical equipments including special gloves and googles plus lack of enough funding for the health sector. In addition, the spread of disinformation, misinformation and stigmatization of patients affected by the COVID-19 aside from their families amid social exclusions in the age of infodemic was tough for the government to control despite the presence of the draconian Digital Security Act 2018 which restricts freedom of expression through creating a culture of fear (Riaz, 2021). In the time of the coronavirus, individual freedom is treated as subservient for the safety and protection of a greater number of people and for larger social good (Guruswamy, 2022). Most people in Bangladesh have welcomed both the compliance of WHO guidelines and vaccination. There is no invocation of such suit like India where the Indian Supreme Court in *Evara Foundation v Union of India and Others*, in the Writ Petition (s) (Civil) 580/2021, decided on 25 January 2022) held that no vaccination can be conducted against the will and consent of a person. But the Supreme Court of Bangladesh has directed the government for the vaccination drive as to conceived women and students.

Socio-economic Impact and Bangladesh. When the advanced economic countries sustained significant loss owing to the COVID-19, the position of Bangladesh was worse. The pandemic triggered substantial socio-economic disruption throughout the country because of long time lockdown, stay at home compulsion, community quarantines, travel restrictions and temporary closure of industries and production houses. Before the coronavirus, Bangladesh economy was booming at a rate of 7 percent and above. The country being the 7$^{th}$ most populated nation in the world with more than 165 million populations is in severe economic crisis aggravated by the COVID-19. The middle and low income people are the worst sufferers. Even the elites struggled for their luxurious goods and services for national and international supply chains interruption. The rate of unemployment, job loss, shortfall of readymade garments (RMG) exports and waning flow of remittance hit the economy. Nearly 20 million workers lost their jobs from the informal sector (Gautam, 2022). More than half a billion people in the world have been thrown into poverty by the pandemic and the number is likely to rise by a quarter billion if no bailout package is taken by 2030. It is predicted that the economic recovery from the meltdown occurred by the pandemic may take a decade to an era or even more time. According to Bangladesh Bureau of Statistics (BBS), the gross domestic product of the country in 2020 edged down to 3.51 percent which was 30-year low. The coronavirus has triggered US $17 billion losses in the economy in the fiscal years of 2019-2020 and 2020-2021 (The Dhaka Tribune, 2021). Another US $8-10 billion loss may occur in 2022-2023. The country's economy is in pressure with lower exports and higher imports. As a densely populated country, it is also largely dependent on foreign remittance from around 14

million migrants' workers in around 162 countries (Ahmad, 2022). During the pandemic the flow of foreign direct investment (FDI) also declined. In spite of the quietened squalls of the COVID-19 pandemic, Bangladesh economy is battling with new headwinds amid escalation of poverty, inflation rate, trade imbalance, downward trend of central Bank reserve and disrupting economic growth.

According to a report, 35 percent people were found to be under the poverty line as per all three survey rounds conducted between June 2020 and August 2020. The report estimated that around 21 percent low income people fell in the new poor category resonating that the coronavirus pandemic has worsened the economy (Rahman et el., 2022). The closure of schools in Bangladesh affecting 37 million children for 73 weeks (which is second in South Asia next to Nepal where schools remain closed for 82 weeks) during the COVID-19 pandemic in the last two and half years has led the GDP to witness 3.1 percent decline. Women and girls are encountering more domestic violence whereas child marriage has increased in the pastoral areas as an aftermath of school closure. The country's judiciary faced a new challenge during the coronavirus pandemic because of lockdown. In person judicial set up turned to a virtual set up shrinking access to justice and rule of law. The impact of coronavirus exposed the overall shackles of the health sector and aggravated the psych-mental disorders (Das et el., 2021). In 2020, the world economy lost 3.4 percent of its GDP which is equivalent to US $84.54 trillion (Szmigiera, 2022). The coronavirus has thrown the global economy to the brink of recession. The International Monetary Fund (IMF) estimates the global economy to slow further to 3.2 percent in 2022 and 2.9 percent in 2023. Earlier in 2021, the IMF projects around US $22 trillion loss of the global economy from 2020 to 2025 due to the impacts of the pandemic (The New Indian Express, 2021).

Post COVID-19 Challenges and Opportunities. The gusts of the novel coronavirus pandemic have started declining but there may no instant respite from the socio-economic burden in the post COVID-19 period. Like other South Asian countries, it may take a long time for Bangladesh to recover the loss incurred (Barai, 2021). The price hike of essential commodities has been a new challenge. Because of Russia's imposed war on Ukraine, the global landscape of food markets and energy supply has extended the vulnerability of many countries including Bangladesh. Declining flow of remittance and foreign exports of RMG goods which are known as two pillars of the country's foreign currency earnings (RMG earned US $35.81 and remittance flow was US $22 billion in 2021) expose new challenges. Moreover, the flood in 18 districts including in Sylhet in the mid of 2022 costs around US $8 billion economic loss (The Financial Express, 2022b). Once, the poverty stricken country was designated as a basket case by Henry Kissinger. The income of the vulnerable groups has declined to a drastic level and the poverty rate has increased. Lack of adequate social protection measures by the government is another concern for the poor and marginalized section of people. Like previous years, the loan dependent budget (loan is around 40 percent out of US $76.18 billion total budget) for the fiscal year 2022-2023 has no good news for mitigating the socio-economic impacts. Also, implementing of foreign loan dependent couple of large-scale projects of the country may be halted. The predicted violence as a result of political impasse ahead of the scheduled national election in December 2023 can plunge the economy into a new danger. After the graduation from the least development country (LDC) status by the year 2026, Bangladesh will have to confront a new bundle of challenges. Side by side, the country may be facing a tougher challenge to implement the sustainable development goals (SDGs) by 2030. Notably, Bangladesh government has initiated stimulus packages amounting US $22.1 billion in the wake of the pandemic but the corruption free implementation of the stimulus package is a big challenge leading to social justice (The Financial Express, 2021a). The allocation is even not sufficient considering the socio-economic loss sustained. The government has recently taken austerity measures to heal from the economic wounds.

There are less opportunities than challenges but history speaks that every disaster creates an opportunity to think and to face the challenge. There is no option than to create opportunity. As Bangladesh has received free of cost vaccines from many countries, it may vie for free economic donation and long term loan from World Bank and other financial institutions with less interest burden to adopt measures to recuperate the economic loss. It should be mindful in administering booster doses and remain visible so that no recurrence of the COVID-19 happens. The country should ensure that no new large-scale project to be taken until the end of all existing large-scale projects. Also, there is a huge scope for improving transparency and accountability in public expenditure of taxpayers' funds (Taiyeb, 2022). The austerity measures taken by the government may be extended. The adoption of common by differentiated responsibility involving wealthy section of people in mitigating the crisis of poverty-stricken people is needed. The public private partnership may be rejuvenated in the pursuit of building more resilient and sustainable Bangladesh. Truly, there is opportunity for all nations to reach a consensus to declare vaccine as common good to contain the COVID-19 and any other future pandemic (Yunus, 2020). The scope to improve the national health sector may be made an election manifesto for its overhaul. The last but not the least the world community may extend further cooperation in

the recovery from the COVID-19 hit economy and as they have a soft corner for the country for hosting 1.4 million Rohingya refugees. But Bangladesh should be cautious on the global politics and diplomacy in the post pandemic world (Ullah and Ferdous, 2022). Ultimately, the country has to find its own road to recovery from the sustained loss setting a master plan, policy and measures within its limited resources.

**Conclusions.** The COVID-19 has unleased the global public health crisis. The crisis is now under control and on the wane around the world including Bangladesh. The fastest-ever vaccine development in the history has shown the rays of hope amid the darkest clouds of the coronavirus pandemic. But access to vaccine and vaccination drive in some low income countries due to commoditizing and commercializing of the COVID-19 vaccines is still a global concern. Under these circumstances, the expedition of solidarity oriented approach is more desired from affluent countries for the global vaccine equity, human rights and distributive justice. Bangladesh is fortunate enough to receive desired vaccines as cost-free gift from donor countries especially from the US, harvesting the geopolitical dividends apart from buying the rest. The vaccination campaign of the country has mostly fulfilled the target of the WHO with a view to generating herd immunity. But the administering the booster doses is still a big challenge because of little response from people who are the recipients of two jabs. Despite the vulnerable health sector of country, the coronavirus pandemic management is praiseworthy but the need for overhaul of the healthcare sector cannot be overlooked. However, the socio-economic consequences of the pandemic over the last two and half years has debilitated the economy extensively putting a lot of challenges ahead. Mitigation these challenges may be an extra-burden for the country overloaded with 165 million population. The government has already taken some austerity measures and stimulus packages with the support of development partners to recover from the challenges but the transition may take a decade or even a long time and if there is no further arrival of similar demon like the coronavirus or a natural disaster. In adopting and implementing of the government plan and policies, the participatory approach involving public-private partnership is apparently essential to recover from the losses.

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**Пандемія Covid-19 і доступ до вакцинації в Бангладеш: критичний огляд**

У статті досліджені різні аспекти пандемії Covid-19 та підняте питання доступності вакцинації в Бангладеші. Автор описує розбіжності в доступі до вакцини та кампанії вакцинації. Для Бангладешу боротьба з коронавірусом здійснюється на тлі обмежених ресурсів країни, вразливої системи охорони здоров'я та небажання населення вакцинуватися. При цьому оціночна вартість вакцинації піддається критиці, оскільки країна отримала значну кількість вакцин у подарунок або безкоштовно від багатих країн. Через пандемію соціально-економічні втрати, яких зазнала країна, створили додатковий тягар для економіки. Безсумнівно, коронавірус пройшов випробування глобальної системи охорони здоров'я. Навіть економічно розвинені країни впродовж тривалого часу відчували жахливі наслідки пандемії. Під час пандемії світ став свідком подальшої поляризації країн із значною політичною та економічною динамікою в ім'я скоординованої боротьби з триваючою кризою. Разом із фінансовими обмеженнями країн з низьким рівнем доходу в Африці та Азії, вакцинна криза та монополія, спричинена орієнтованістю на прибуток більшості транснаціональних фармацевтичних компаній та геополітичними інтересами деяких країн з високим рівнем доходу, спричинили глобальну несправедливість щодо вакцин, підриваючи уявлення про справедливість розподілу за кількома винятками. Проте коронавірус навчив, що безпека людей окремої країни неможлива без безпеки інших країн. Більшість наявних документів про пандемію Covid-19, у яких досліджують Бангладеш, описують її різні згубні наслідки з точки зору науки про здоров'я та соціально-економічних аспектів. У цій статті критично розглядають хронологічні аспекти пандемії Covid-19 у Бангладеші, починаючи від напливу вірусу до всебічних заходів боротьби з ним відповідно до глобальних перспектив, наголошуючи на людських жертвах, появі вакцини, несправедливості щодо вакцин, доступі до вакцинації та переоцінені обмеження разом із переважаючими, а також соціально-економічними наслідками після COVID-19.

**Ключові слова**: пандемія Covid-19, несприятливі наслідки, доступ до вакцини, кампанія вакцинації, коливання щодо вакцинації, дипломатія, виклики та можливості.