

A Brief Look at Omicron Condition in Bangladesh Dealing with another Variant

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ABSTRACT

In Bangladesh, the surge of cases due to the emergence of Omicron had initially been a cause of worry for experts. With time, there have been many changes brought to structures in Bangladesh to cope with and work around COVID-19. However, with coronavirus cases rising over and over again, some changes have become permanent. The aim of this paper is to find out what measures have been taken in Bangladesh to keep the cases under control from Omicron and compare it to other South Asian countries.

Keywords

Omicron, Bangladesh, Preparation, Variants, Precaution.

Introduction

From the start of 2022, Omicron had been the significant variant of Coronavirus in Bangladesh. According to recent statistics, Omicron accounted for nearly 80% of the entire caseload. From the start of January to the 24th of the same month, a total of 69 patients had been detected with the latest variant of Coronavirus.

During the initial stages, the cases had been detected at icddr, which is a Dhaka-based virology lab. The detection was made possible by scientists after they looked carefully at the genetic material. This genetic material had been obtained from the testing of patients. Of course, the first case of Omicron was reported on 11th December, of the last year by two cricketers playing for the Bangladesh Women's Cricket Team at that time. The team made

their way to Zimbabwe for the World Cup Qualifying stage.

Zimbabwe is located in the deeper parts of Southern Africa, a place with a highly transmissible variant of the SARS-CoV-2. There is also a belief that it is the origin point of Omicron [1].

In the outskirts of Dhaka, while Coronavirus still exists, there happens to be another version of the Omicron variant. The name given to that version is "Stealth Omicron" owing to the variant's ability to escape any lab detection. As such, it has taken the place of the first version of the Omicron variant.

During the month of February, the Institute of Disease Control, Epidemiology, and Research took on the responsibility of conducting a study. The result of the study was that the original version of the Omicron Variant was only detected inside of Dhaka with 74 samples obtained from a period of 1st February to 22nd [2].

In order to keep a lid on Omicron, the government of Bangladesh came up with an 11-point restriction and put it into action on 13th January. This notice was issued by the Cabinet Division on 10th January. A review committee had been set for assessing the COVID-19 situation and based on their observations of the Omicron variant situation, the decision had been taken.

There was nothing new in the restrictions, with the usual message being spread to use masks at all times when people stepped outside their homes. While public gatherings had not been banned, it was advised that everyone must wear a mask, and if anyone was found without one, then they would have to face legal consequences. Other than that, the usual rule of showing COVID-19 vaccine certificates before entering restaurants or to stay at a hotel.

Public transport facilities such as buses, trains, and launches had been instructed to carry passengers no more than half of the capacity. The drivers of these public transports along with their helpers, had been instructed to receive their vaccine shots before resuming work. In addition, the Imams at mosques had been instructed to advise incoming people about the risks of not wearing masks in mosques as well as describing the health and safety guidelines [3].

The government also came to the realization that vaccination programs have to be carried out with a bit more haste. As such, the Ministry of Health and Family Welfare had been tasked with taking substantial publicity and related measures to accelerate the vaccination program as well as the booster dose inoculation. The Ministry of Information and Broadcasting was instructed to collaborate on this issue with the Ministry of Health and Family Welfare.

It is important to note that all educational institutions had been shut down from the end of March, 2020. After a period of 543 days in lockdown, the schools had finally been reopened in September, 2021. This news was welcomed by the teachers as well as their students and the parents at the same time. However, the sense of relief did not last very long due to the surge in Omicron variant cases.

At first, the shutdown of schools was announced for a period of two weeks lasting up to 6th February 2022. However, the closure was extended further by the Ministry of Education in hopes of keeping children safe. This decision had not been met with kindness by the majority of the people.

The displeasure surrounding the decision stemmed from the fact that the government still permitted the continuation of business events such as the trade fair, which always lasts a month. Visitors were going to the trade fair by the thousands on a daily basis, and the general consensus was that there had been a disregard for health and safety guidelines.

This prompted many experts to comment on the issue, with some pointing out that the lack in consistency is devoid of any logic. In addition, experts believed that allowing the trade fair to be carried as usual undermined the pandemic precautions.

With there being no instructions from the government to shut down recreational centers as well as community centers, the decision was met with further confusion. It was the opinion of some experts that the government contradicted itself in this regard. In their opinion, educational institutions hold more value than a recreational center or a trade fair.

Facts about Omicron Variant

- There was growing concern about the Omicron variant since it could spread faster than the previous variants.
- The Omicron variant has the ability to infect a large number of individuals in a short period.
- Symptoms of the new variant happen to be milder than previous variants.

Symptoms of Omicron variant

Not all of the symptoms of the Omicron variant are mild; some of them are actually moderate in people affected by the virus. Despite the rate at which Omicron is spreading, the death, as well as the rate of hospitalization, is on the slower side. Even then, the medical experts have suggested that it is no light issue at all. This is mainly due to the fact that Coronavirus still exists because of the spread of Omicron, and as a matter of fact, it is becoming sustainable. So, there is always a possibility of a deadlier variant emerging from somewhere in no time at all.

There is a considerable difference between the previous variants and Omicron. A study was conducted not long ago, which revealed the information that Omicron has assumed certain genetic traits from a common cold outside the genus of Coronavirus. Every person may know that the virus does not possess any fatal effect, but the symptoms should still be known to everyone.

Tiredness

Just as in the previous variants, Omicron can make the infected individual feel fatigued and experience a lack of energy [4]. This will urge them to take a rest, disrupting the routine activities of everyday life. Of course, common cold and fever can create the same impact on a person's body. As such, it is vital to get the test done so that one can be sure whether they are infected with Omicron or not.

Soreness of Throat

One of the newer and unusual symptoms of Omicron is soreness. The previous variants had affected the human body with immense pain before but not soreness.

Mild Fever

Fever can either be mild or moderate in a Covid-19 infected person, and that has been the case from the very early days. While the

earlier variants would induce a long-term impact of fever on the patients, Omicron differentiates itself by bringing forth a lighter temperature and then going away by itself.

Body Ache and Sweating

A symptom of the Omicron variant is night sweat. According to multiple reports, sweating may occur in the body of a patient even if they sleep in a cool environment. This will lead to the clothes and bed getting wet from the sweating.

Congestion: In the past month, when the wave of Omicron hit, many of the patients experienced a runny nose. With that said, it is not easy to fully confirm if the runny nose is a symptom of Omicron since the flu season was also in effect during that time. The best way to be sure is for the affected individual to get a Covid test done and wait for the result. Other than that, patients suffering from Omicron are also likely to experience dry cough. This is similar to the previous strains of Coronavirus.

Difference between Delta variant

While the Delta and Omicron are both variants of Coronavirus, there are some dissimilarities. There are several reports confirming joint pain, fatigue, headache, and chills as the four symptoms differentiating Omicron from the Delta variant. In addition, some patients suffering from the Omicron variant are also experiencing a lack of taste and smell, which are synonymous with the Delta variant [5].

There have been no cases so far of Omicron posing a threat as severe as the Delta variant. Even then, it can reach the lungs and infect them. However, the infection is less likely to have major implications like it does in the case of Delta [6].

The high rate at which the virus spreads is still a significant cause of concern. In fact, Omicron has been infecting more people than the Delta variant has [7]. With that said, once the Omicron variant infects a person, it does not lead to a drop in the oxygen level of the victim straight away. Furthermore, the time period of incubation differs for both variants. For instance, the incubation period for the Delta variant is 4 days, whereas it is only 3 days for the Omicron variant. This information was obtained by the Center for Disease Control after conducting a small study.

Condition in South Asian Countries

The condition in South Asian countries from the spread of the COVID-19 pandemic is anything but positive. One of the countries that are suffering badly is China. In the country, Omicron has been able to breach tightened defenses. On that note, countries such as Vietnam, South Korea, and Hong Kong have experienced a surge in the number of patients suffering from COVID-19. The natural response has been to set up a stricter set of measures and to ensure that majority of the people are tested for COVID-19.

Among the South Asian countries, the one country that is suffering more than others is South Korea.

There has been an explosion in the number of Omicron-related cases, and the country had set a new record of infected people cases during the start of March.

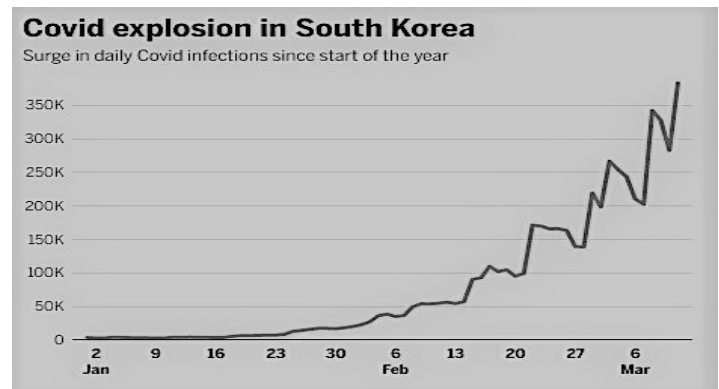


Figure 1: Condition of Omicron case detection in South Korea sourced from Times of India.

Since there have been so many cases linked with Omicron in the country, it has led to a rise in the number of deaths in South Korea. The condition of South Korea drastically changed in a matter of few months. South Korea reached the first 1 million cases of COVID-19 infections in a span of two years. After that, it took a little over two weeks to get the next one million cases of COVID-19 infections. This news was followed soon by the news of the third, fourth, and even fifth cases of one million COVID-19 infected people within six, four, and five days. To say that things are not looking positive for South Korea would be an understatement. Over at Vietnam, the country has been struggling to cope with the tidal wave of COVID-19 infections brought on by the appearance of the Omicron variant. On 9th March, 2022, it was brought to light that the number of daily infections rose to a record high of 2.65 lac. The number of infections remained at a high spot throughout the entire week.

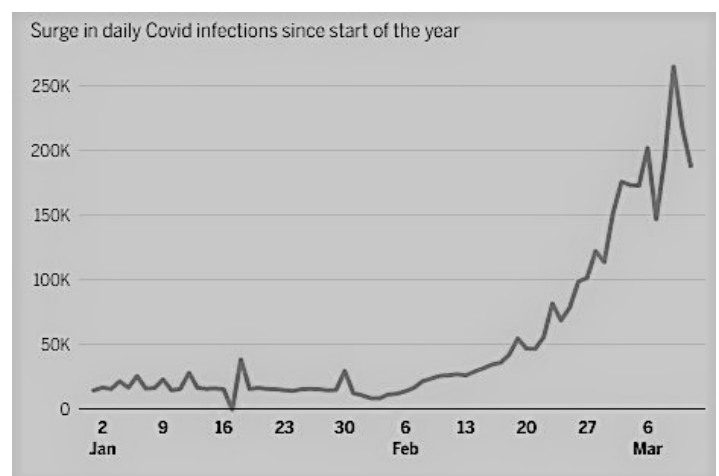


Figure 2: Daily infection cases of Omicron in Vietnam sourced from Times of India.

So, it can be said that Vietnam has been the second worst-hit nation behind South Korea. To make it clear, Vietnam

experienced a near 63% rise in infections from Omicron on a week-on-week basis.

In China, the condition is comparatively better than in the above-mentioned countries. However, the country has undertaken a COVID-zero approach. As such, even the slightest of the spike in infections can create a panic situation in the entire country.

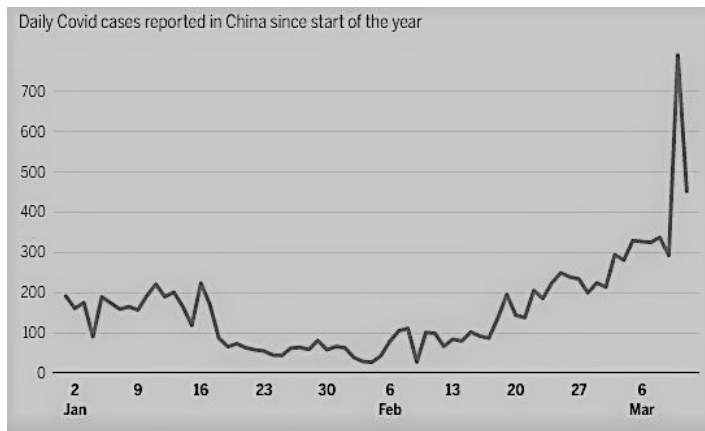


Figure 3: Day-to-day cases of infection in China from the start of 2022 sourced from Times of India.

Due to the rise in cases to 700, the country is rethinking certain plans. This has been the highest number of infected cases since the start of 2020. As such, a lot of group events had been canceled, with mass testing soon starting in rounds. In addition, the decision had been made to cut in-person classes at schools.

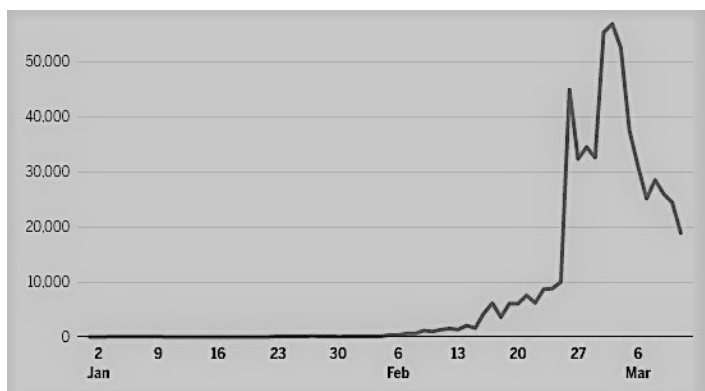


Figure 4: Condition of Omicron cases in Hong Kong sourced from Times of India.

As for Hong Kong, the rise in cases has made the overall situation grim. With the increase of cases as well as hospital admissions, it has been an uphill task for the health authorities to bring any balance to the situation. Some of the citizens have responded negatively to the efforts made by the health authorities. One such citizen opined that she felt as though she and her family had been left to die after not hearing from health authorities for two weeks despite the fact that three of her family members fell victim to the virus.

The major area of concern has not just been the high rate of cases but also the number of people meeting their demise in such an important financial zone. In addition, the country reports the death rate in proportion to the population to be at the top of the list. With 23.8 people per 100,000 people meeting their demise, it truly is unsettling and a major cause for concern [8].

In this situation, there is no alternative to tackle the situation than booster doses and vaccines. The problem so far has been the long delay for South Asian countries to obtain the first batch of vaccines in 2021. Many accused richer countries of hoarding much of the early vaccine doses for their own population. As of 28th February 2022, countries of Southeast Asia have been lagging behind the comparatively richer countries when it comes to booster coverage. The statistic reveals that Southeast Asian countries have covered only 9-42 percent of the entire population in comparison with the 52-55 percent coverage of countries in the European Union [9].

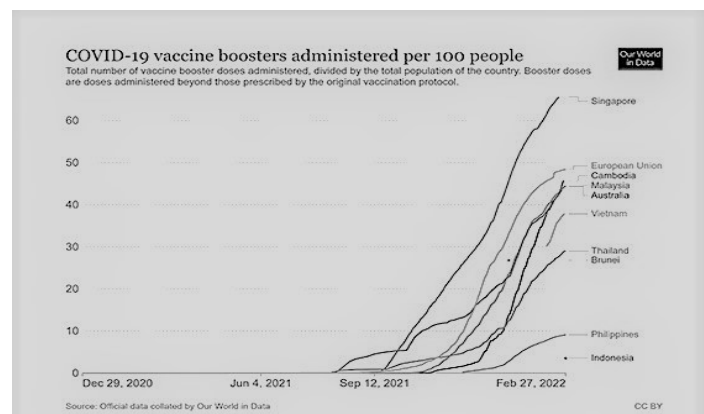


Figure 5: Condition of COVID-19 vaccine booster provided per 100 individuals sourced from Official data collated by Our World in Data.

Since the first priority is being given to improving the rate of vaccination, few the countries, such as Singapore, Thailand, Brunei, etc., have come up with their own privatized scheme. Despite this effort, it is difficult to fulfill this objective. One of the primary causes for that is the backlog of vaccines. This can happen since the big vaccine producers choose to focus on supplying the vaccines to public hospitals over private ones. In addition, it is quite common for private hospitals to prioritize high-paying patients most of the time, which only adds to the income inequality. So this results in the privatization of the vaccine.

Another glaring issue that the majority of South Asian countries are facing is the lack of meaningful domestic manufacturing of vaccines. While there had initially been some talk regarding the local production of vaccines in countries like Thailand, Singapore as well as Vietnam in 2021, there was no plan made, nor was a framework developed. Even to this day, the majority of the vaccines being provided to the people in these regions have been produced overseas and then imported.

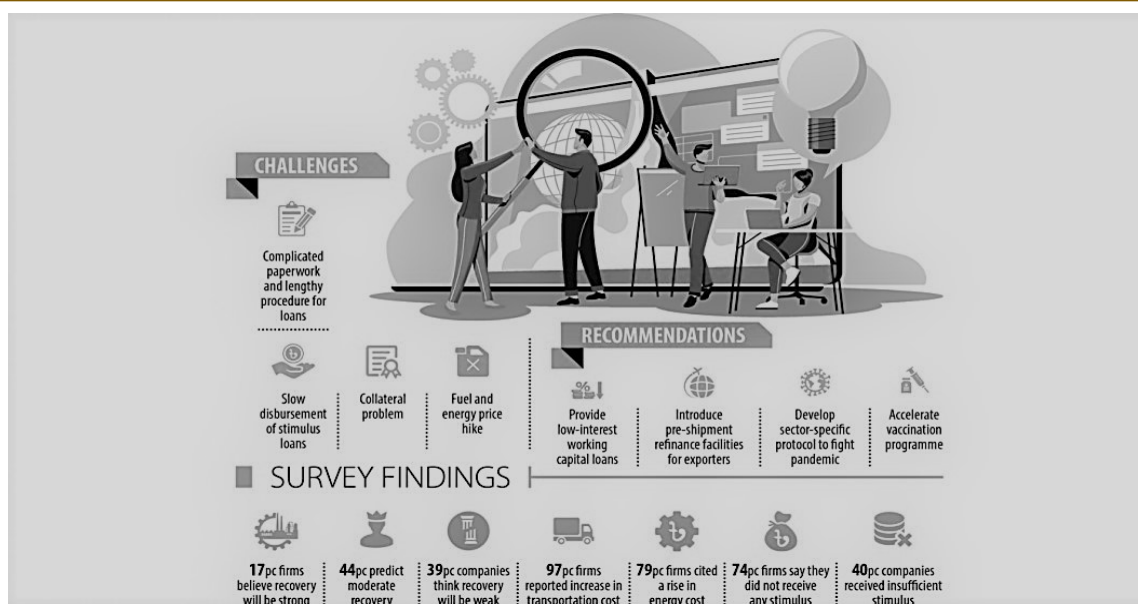


Figure 6: Survey on the economic condition and expected recovery in Bangladesh sourced from Star Business Report.

Taking the fight to Omicron is not just about the use of science and vaccines. Since the start of the pandemic over two years ago, the people of Southeast Asia have been looking to carry on with their daily lives. There has been a clear dent made in the economy of these countries. In order to make a full economic as well as social recovery, there has to be the presence of proper political choices being made coupled with proper scientific choices as it stands, the leaders of the aforementioned South Asian countries have made the shift from “preserving lives first” to “making economic recovery first”. The question of whether this is being done intentionally or unintentionally is yet to be answered. However, in this regard, there are a lot of similarities between Bangladesh and the rest of the South Asian countries.

Economic Impact of Omicron in Bangladesh

According to many experts in the prominent sectors of Bangladesh, the economic recovery in the country is unlikely to be as strong as they once thought it could be. The major cause for it is the adverse impact that Omicron created out of the blue. In addition, the price of fuel has rapidly increased, making it hard to do business while still earning profit.

At the start of the year, the South Asian Network for Economic Model (Sanem) conducted a survey in which this mindset of the experts was revealed. According to the survey, a total of 17 percent of firms have faith in a full economic recovery of the country while around 44 percent expect a moderate recovery, and both of these are down from the 21 percent and 52 percent when the same question had been asked around October 2021.

At the start of February, a total of 71 percent of the firms revealed the information that there had been a decline in export orders due to the existence of the Omicron variant. Moreover, 79 percent of firms confirmed that there have additional health measures taken,

and there has been a rise in their associated cost. On that note, 82 percent of the firms have confirmed that they are experiencing a spike when it comes to input costs.

There is a threat looming in the background that there will be a reduction in the number of experts. This has been confirmed by 89 percent of the firms. To add to that, 94 percent of the firms claim that there are risks of a spike in the transportation cost. With that said, the firms had been successful in recovering 60.6 percent of the business around the October-December period of 2021. It was a major upgrade from the 56.8 percent during the previous quarter.

There has been a noticeable improvement in multiple sub-indicators. The recovery rate is on the faster side for the garment, textile, restaurant, as well as pharmaceutical sectors. When compared with small, micro, and medium firms (54-55 percent), the large firms (57 percent), as well as the exporter firms (56 percent), have expressed a higher level of business confidence [10].

One of the problems that still has not been addressed with the economic recovery of firms in Bangladesh is the absence of a stimulus package. According to Professor Raihan, the process of providing the stimulus package needs to be completed faster. Access to the package needs to be made easier. He has also expressed his concern regarding the corruption in the business environment, ultimately affecting the performance of many firms in Bangladesh. Since there has been a drop in the flow of remittance, the study conducted also suggests that there is a need of evaluation of the remittance flow as well as the rise in cash incentives which was 2.5 percent at one point and is now 3 percent [11].

Social Impact of Omicron in Bangladesh

In many countries across several continents, the lockdown has once again been reinstated to protect lives at all costs. This

decision has raised eyebrows, with many questioning the current pace of vaccination programs and their effectiveness in curbing the spread of Omicron. From the start of the year 2022, Bangladesh had once again been experiencing an increase in the number of COVID-19 positive cases. Whether the situation was inevitable or not, the government took big strides with mass vaccination. As a result, around 70 percent of the population had received at least the first dose. Now, the government is taking steps to ensure that the entire population receives both of the doses along with the booster dose by the time 2022 ends.

The first wave of COVID-19 had a severe impact on the urban poor. To get a clear idea about the impact, World Bank conducted three household surveys over the telephone. The duration of the survey was eight months and the communities selected were in the cities of Cumilla and Sirajganj.

This survey was conducted over three rounds, with 500 households being the concentrated group. All of these households had been beneficiaries of the Low-Income Community Housing Support Project (LICHSP) which is run by the World Bank. The project ran between July to August of 2020 and then in January and February of 2021 as well.

As for the survey that was conducted, the findings were anything but pleasant. According to the survey, there is unrest among the urban population, with many experiencing mental health problems such as high levels of stress coupled with depression and anxiety as well. All of it has been linked to [12]. With Omicron, the severity had been on the lower side since the start of February 2022, but the number of infected cases was still high, and that is enough to create stress in the minds of people. There is no exact record of the number of children who had to start working from the time that the pandemic started. However, the attendance figures of twenty schools throughout the country had been collated by TIME. From the start of the lockdown in March, 2020 to November, 2021 these twenty schools underwent many dropouts, out of which 59% were boys. This is of course, an imbalance of gender that was confirmed with the help of data obtained from BRAC, a non-profit organization operating in Bangladesh. As the crisis grew, the authorities in the country were left with no choice but to ratify the ILO's Convention 138 regarding child labor. A declaration came that children below the age of 14 cannot be employed by any company in any industry. Moreover, the authorities made a promise to take control of and eradicate child labor completely from Bangladesh within a period of three years. From the start of the lockdown in March, 2020 the conditions of countless households across the country drastically changed in terms of income. The income of households took a hit by 23% on average over a period of 18 months. Many parents admitted that if their son did not go to work, their own siblings would not get food to eat.

At the time of the pandemic hitting Bangladesh for the first time, the major area of concern was girls of rural families and urban poor families being married. This is due to the fact that these struggling families found it hard to earn enough money to feed all of the

mouths in the family and looked for ways to reduce the number of mouths to feed. So, a concern remained that families would be willing to marry their daughters off to men twice their age.

In order to find out the actual number of cases of underaged marriages, a non-profit organization called Manusher Jonno Foundation initiated a survey. The organization was able to record nearly 14,000 underaged marriages over a six-month period from the start of the lockdown. This happened across 1/3rd of the entire country, and half of these girls were aged between 13-15. Marrying girls at a young age revolves around the fact that secondary education is not free in the country, and the cost of living can be unbearable. On average, the tuition fees are 3,000tk (\$35) on a yearly basis. However, in Bangladesh, 1 in 5 individuals had to survive on \$1.90 or less on a daily basis. So, to add the expense of stationery, textbooks, etc., on them would take a financial toll. While the government has been taking steps to make the tuition fees for girls more affordable by providing a tuition subsidy of 3,500tk (\$40) on a yearly basis for some time now, the sheer number of girls who need it can be too much for the government to keep up with. This is obviously done as a means of protecting girls from underage marriage with that said, the same solution has not been applied to adolescent boys. Seeing no other way to keep food on the table, many families had been forced to give their boys up to manual labor. As a result, the number of dropouts from boys has been higher than girls [13].

Current Situation in Bangladesh

Bangladesh has been experiencing a sustained downfall when it comes to day-to-day infection of the virus. According to emerging scientist Bijon Kumar Sil, the downfall in infection rate had been achieved due to herd immunity. In his opinion, some people achieved herd immunity due to vaccination and also due to natural infection. This natural infection is, of course, a direct result of the arrival of Omicron in Bangladesh.

While the WHO raised concerns about Omicron due to its ability to be transmitted from the slightest of interactions between people, Bangladesh is not having such a hard time as expected. Even though the later versions of the Coronavirus have been more suited to avoid immunity, nothing serious has happened in the country so far.

The transmission of the Omicron variant is expected to subside in a short span of time, and when it does, the experts believe that the immunity level is going to be on the higher side. In fact, the Omicron variant and its infection rate may have helped several countries achieve the highly talked about herd immunity.

According to Dr. Bijon, a little over 40 percent of the worldwide population has achieved natural antibodies and that is before the emergence of the Omicron variant. Since the infection rate is unusually high due to the Omicron variant, there is hardly going to be anyone in the world devoid of a natural antibody. As such, Dr. Bijon estimates that any new variant that rears its head in the future will not have the same strong effect as the previous variants.

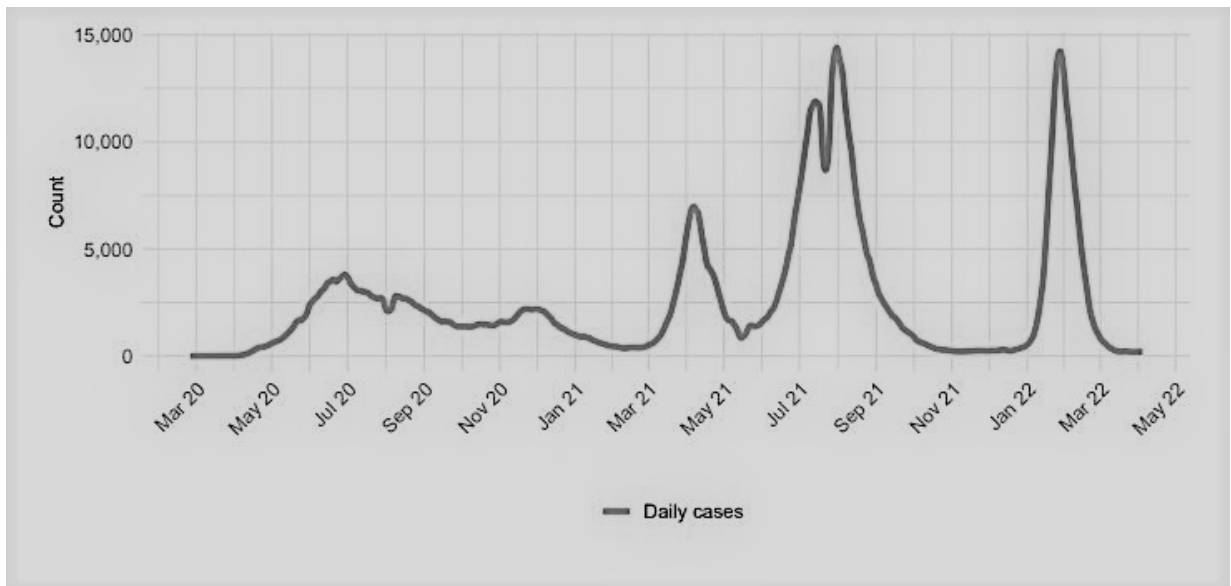


Figure 7: Reported day-to-day COVID-19 cases sourced from covid19healthdata.org

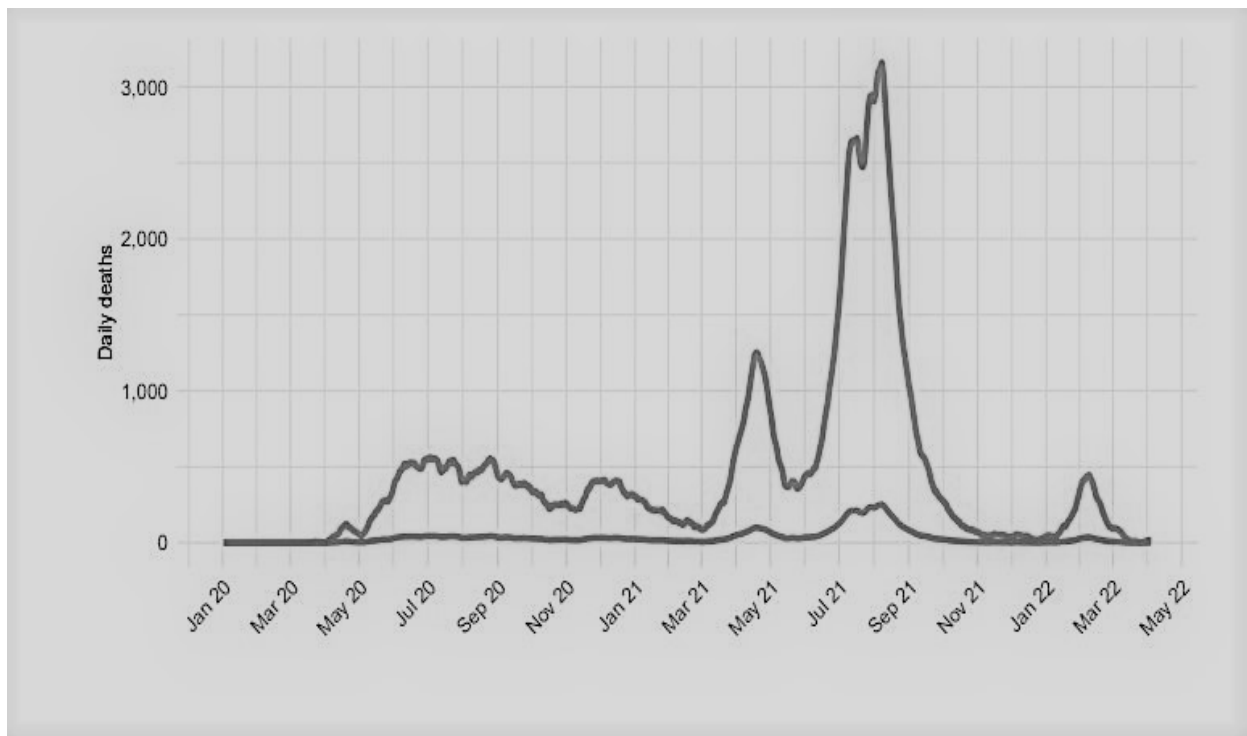


Figure 8: The estimate of reported day-to-day Covid-19 deaths (blue) and total day-to-day deaths from COVID-19 (orange) sourced from covid19healthdata.org.

The efforts of the government were made in an attempt to keep the children safe from the virus. This is because the kids cannot be vaccinated. However, the recent surge in Omicron cases could be an indication of herd immunity being achieved slowly but surely.

This image [14] indicates much of what Dr. Bijon hopes for. According to Dr. Benazir Ahmed, the former director of Communicable Disease Control at DGHS, a virus that is transmitted at a fast pace is more than likely to end at a quick rate. The former director firmly believes that the same is occurring when it comes

to Omicron cases. He further added that if things remain the same, then the transmission of the Omicron virus at the community level is going to cease soon enough.

Despite the positivity of tone from Dr. Benazir, it is not possible to say with a hundred percent certainty how long the antibody is going to prevent any further disaster from happening. In fact, there is no way to predict if any such variant will come along that is capable of evading this newly created antibody and affecting millions.

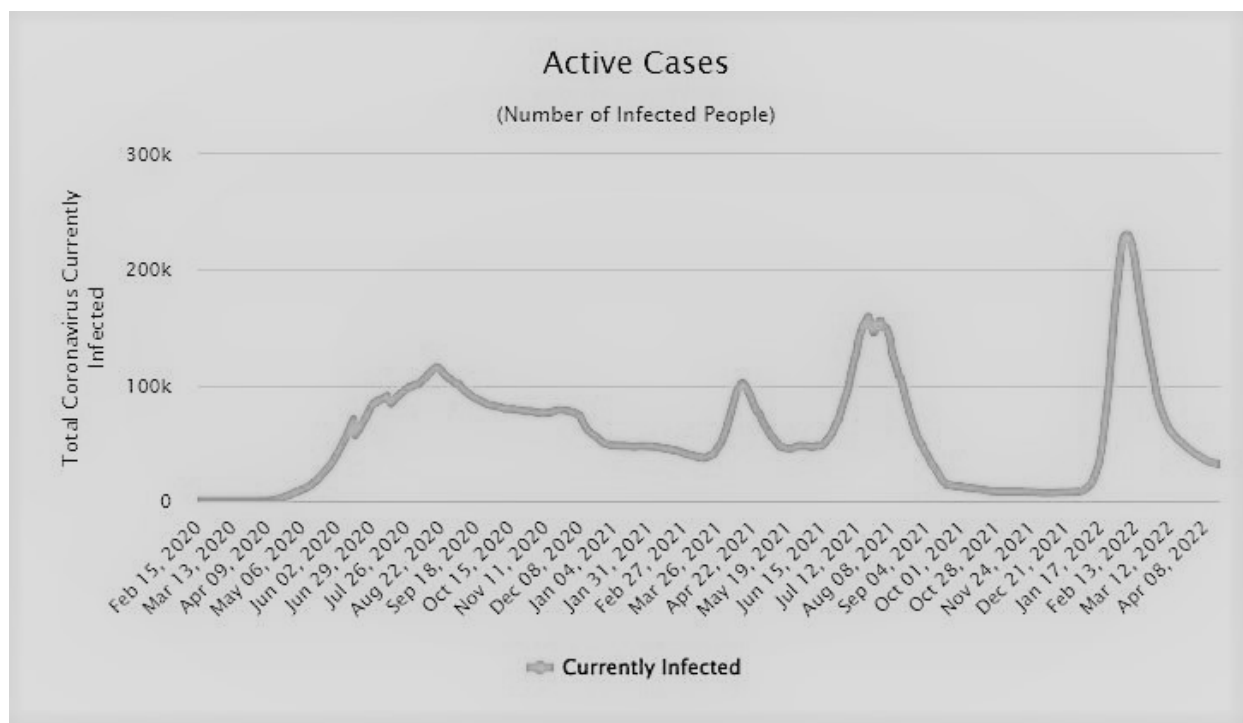


Figure 9: Currently Active Cases of Covid-19 in Bangladesh sourced from covid19healthdata.org

This image clearly depicts what expert Dr. Bijon has stated time and again. When it comes to the number of infected patients on a daily basis of Omicron and making a direct comparison with Delta, the rate of fatality has been a lot lower than initially feared.

Effectiveness of Vaccines against Omicron

There is no precise way to answer whether the vaccines are going to be highly effective against Omicron or not. This is due to the fact that it is accountable for over 30 mutations on the spike's protein. As such, it allows the spike protein to dot the exterior of Coronavirus. Due to this fact, the cells can be invaded. With that said, it is also unlikely that Omicron can fully dodge the protection from the vaccine entirely. So, how does the vaccine work? In simple words, when the vaccine enters the human body, it can neutralize the virus and destroy it as well before the virus can multiply inside the human body [15]. Let's not forget that our body has an immune system of its own that is capable of fighting the virus for a time. So, the task of vaccines is to assist the human body when it comes to tackling infections regarding the effectiveness of the vaccines, Dr. Bijon believes that they will indeed work. According to his estimation, it may not even be 60% effective, but it will definitely be 40% effective, if not more. Many experts have opined that it is good enough for an infected person not to get admitted to a hospital. In fact, if the infected person is already vaccinated, then there is no chance of them experiencing anything severe.

Possible Impacts in the Future

A number of variants have infected people worldwide over the course of two and half years. Of them, some have affected people in several countries across different continents, while others have faded away in a short time. In the case of Omicron, it has already been established that the virus is highly transmissible while the

severity is on the lower side [16].

According to the findings of a cell-culture-based study, many of the therapeutic antibodies in our bodies are at risk of losing their protective attributes when going up against the Omicron variant. This is why the Omicron variant will be able to infect a high number of people than once expected [17].

Hence, the immunity from the SARS-CoV-2 would be on a global scale, with the immunity gained from the vaccination coupled with the immunity gained from the infection [18]. With that said, there is no indication that COVID-19 will be completely eradicated from the world [19].

Recommendations for the Future

Given the likelihood that COVID-19 is going to persist around the world and in Bangladesh, the citizens need to maintain standard safety protocols. In addition, there need to be behavioral changes to cope with the existence of COVID-19.

Conclusion

While the current rate of infection seems to a stable condition, there is really no way to predict the outcome in the following 12 months. So, it is imperative for Bangladesh to carry on the research for the development of diagnostic tests. In addition, it is high time for the country to manufacture vaccines of their own. As we have already witnessed, every country that can manufacture a vaccine will vaccinate its own people at first and then look to help its neighboring countries. Hence, Bangladesh has to put a lot of emphasis on researching and developing the vaccine for their own people.

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