

Research Article

Due To the Covid-19 Situation, the Death Rate in Bangladesh Has Decreased From July-December 2021

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Received: 25 June, 2022**Accepted: 25 July, 2022****Published: 28 July 2022****Abstract:**

COVID-19 is the extreme smash of the present-day century that emaciated fitness, financial system, and ordinary life. This research assessed the condition and relation of tests, infections, recoveries, and deaths of SARS-CoV-2 from July to December 2021. The research plan was carried out from July 1 to December 31, 2021 (N=184 days) to state the position of Bangladesh towards widespread COVID-19. The total number of COVID-19 tests, infections, recoveries, and deaths from July to December 2021 was 4850322, 672707, 732460, and 13577, respectively. The maximum COVID-19 tests were performed at 55284.00 while the lowest was 11486.00 from July to December 2021. The maximum COVID-19 infestations were performed at 16230.00 while the lowest was 122.00 from July to December 2021. The maximum COVID-19 recovered was 16627.00 while the lowest was 122.00 from July to December 2021. The maximum COVID-19 death was 264.00 while the lowest was 0 from July to December 2021. In the 0.01 level of the two-tailed Spearman, the relationship was positive to moderate to strong, and the total number was n=184. The mean Spearman correlation for tests was 0.823 (range 0.861 to 0.758), for infested was 0.91 (range 0.948 to 0.861), for recovered was 0.90 (range 0.948 to 0.822), for death was 0.87 (range 0.929 to 0.785). This research additionally showed a moderate to the strong relationship between tests, infections, recoveries, and deaths of SARS-CoV-2. COVID-19 has spread out unexpectedly to 64 districts in Bangladesh. The persevering with the occurrence of COVID-19 infections has emphasized the significance of the short and accurate and advanced 118 laboratory diagnoses to restriction it unfolds. It is safer now because the vaccine controlled the infestation and death rate of COVID-19 in Bangladesh.

Keywords: SARS-CoV-2, COVID-19, Tests, Infections, Recoveries, Deaths, and Bangladesh**Introduction**

Bangladesh is a developing country that will become a middle-income country in 2026. Dealing with coronavirus was one of the most challenging issues for Bangladesh. This was a challenging issue that was well managed by the present Awami League government. The corona vaccine is ensuring the people of the country as well as the overall development of the country even though its cost was a little higher in South Asia. The government's policy to control the coronavirus was to keep the general public away from public places through lockdowns, curb market activity, and tight security at schools, colleges, universities, and places of worship, such as mosques with a small number of worshippers or madrasa-based institutions. Ensuring the corona vaccine in a short time of these measures has reduced corona mortality as well as controlled the rate of infection. Corona incentives were also included in the country's budget which helped the poor financially. The alternative system was voted on January 26, 2021, but the vaccine from that campaign. The working people of the countries of the world, the elderly people over the age of 50, individuals are given priority. Subsequent mass vaccinations are provided to help control the virus.

Human infections with extreme acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus that causes the radical Coronavirus disorder (COVID-19), turned into first detected in China in December 2019 [1]. It belongs to the circle of relatives of coronaviridae taxonomic group Sarbecovirus, genus Betacoronavirus, and order Noroviruses. Coronaviruses (CoVs) are multi-species, single-stranded RNA viruses, which may infect humans, mammals, birds as well as livestock, providing a public-health, veterinary, and economic danger. Coronavirus infections mostly cause respiratory and gastrointestinal disorders in people and animals [2]. It is a gram-superb RNA virus ordering starting from twenty-six to thirty- KB lengthy, crown-form oldsters with eighty-one hundred sixty nM in length, and next-era sequencing and biological technique examination of the ordering uncovered COVID-19 [3]. Coronaviruses, like "HCoV-229E and HCoV-OC43", are present in the community, and these together with the more recently discovered as "HCoV-NL63 and HCoV-HKU1", can be responsible for typically mild respiratory infections. "SARS-CoV, MERS-CoV, and SARS-CoV-2" [4] are very dangerous viruses that have only recently emerged in people. It became fairly same 88 % to 2 bat-derived SARS-

like coronaviruses, and additional distance from SARS-CoV 79%, and MERS-CoV 50% [5]. The coronavirus spike (S) protein binds to cellular entrance receptors, “which have been found for various coronaviruses and include human aminopeptidase N (APN; HCoV-229E), angiotensin-converting enzyme 2 (ACE2; HCoV-NL63, SARS-CoV and SARS-CoV-2) and dipeptidyl peptidase 4 (DPP4; MERS-CoV)”, results are pathogenicity by a virus [6]. It's far an infectious pandemic that currently inflamed greater than two hundred international locations around the globe. It has unfolded to alternative international locations mentioned as a global pandemic inside the global [7]. The COVID-19 effect in the agricultural sectors [8-9] and many agricultural fruits, and plants used against COVID-19 as treatment [10].

Coronavirus is now largely controlled. The current government's policy and the corona vaccine on control can be evaluated. A seven-day lockdown was instituted on June 1, which was extended to deal with the problem. The present study describes the status of tests, infections, recoveries, and fatalities in Bangladesh from July to December 2021. We assessed the present condition of Bangladesh and the status of tests, infections, recoveries, and deaths of COVID-19 in Bangladesh from July to December 2021.

Methods

Study design and period

COVID-19 was confirmed in Bangladesh on March 8, 2020. We collected publicly shared daily data from the websites DGHS (11) and IEDCR (12). The data collection period was from July to December 2021 (N=184 days).

Tests of COVID-19

There are two types of tests: a) Diagnostic (virus) test on bronchial samples (nasal samples). It remains to be seen whether a human has COVID-19 at the moment. b) Antibody tests: in the past, COVID-19 was tested to determine if it was present.

Data Retrieval

This study included patients with tests, infections, recoveries, and deaths of COVID-19 based on a positive result of the SARS-CoV-2 test by official websites of IEDCR, DGHS, and MoHFW. Data were acquired from various medical units in Bangladesh states, including 59 different institutions that comprise the Bangladesh health system.

Code of Ethics

All the data are real, and those data collected from governmental websites, local newspapers, internet news sites, and social networks were cross-checked (13-14).

Statistical Analysis

All obtained data were double-checked, coded, and entered into a database with Microsoft Excel 2016. In May and June 2021, the regression connection was calculated. The Spearman rank correlation compared the correlation of two variables, and statistical significance was accepted at p values of 0.01,

0.05, and 0.1. SPSS version 25.0 (USA) was used to perform all statistical analyses.

Results and Discussion

The coronavirus update in Bangladesh from May to June 2021

On March 8, 2020, three people in Bangladesh were verified to have COVID-19. Since then, tests, infections, and deaths have steadily increased. Figure 1 depicts the overall number of infections, recoveries, and deaths. The overall number of COVID-19 tests, infections, recoveries, and deaths in July-December 2021 was 4850322, 672707, 732460, and 13577, respectively. Similar also observed in a study and the results were the total cases, infections, recoveries, and deaths were 1,100,361, 149,576, 136,159, and 2,864, respectively (Khan et al. 15).

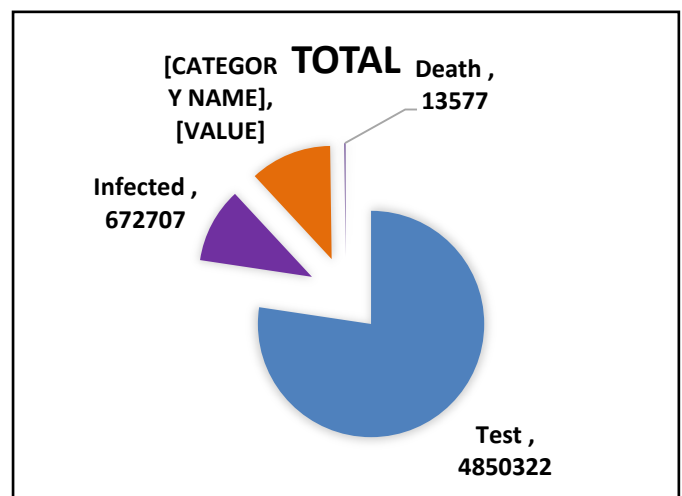


Figure 1. Total number of coronavirus tests, infections, recoveries, and deaths from July to December 2021 in Bangladesh

The total number of COVID-19 tests, infections, recoveries, and deaths are included in Figure 2. The total number of COVID-19 tests, infections, recoveries, and deaths in July 2021 was 1094072, 336545, 26962, and 6182, respectively. The total number of COVID-19 tests, infections, recoveries, and deaths in August 2021 was 1182451, 251134, 347770, and 5510, respectively. The total number of COVID-19 tests, infections, recoveries, and deaths in September 2021 was 812638, 55303, 89965, and 1315, respectively. The total number of COVID-19 tests, infections, recoveries, and deaths in October 2021 was 602317, 13517, 16909, and 360, respectively. The total number of COVID-19 tests, infections, recoveries, and deaths in November 2021 was 538881, 6742, 7542, and 113, respectively. The total number of COVID-19 tests, infections, recoveries, and deaths in December 2021 was 584064, 8743, 7746, and 89, respectively. Similar also observed in a study and the results the total number of COVID-19 tests, infections, recoveries, and deaths was 439,111, 36,858, 49,147, and 975, respectively in May and in June 2021, the total number of COVID-19 tests, infections, recoveries, and deaths was 661,250, 112,718, 87,012, and 1,889, respectively (15).

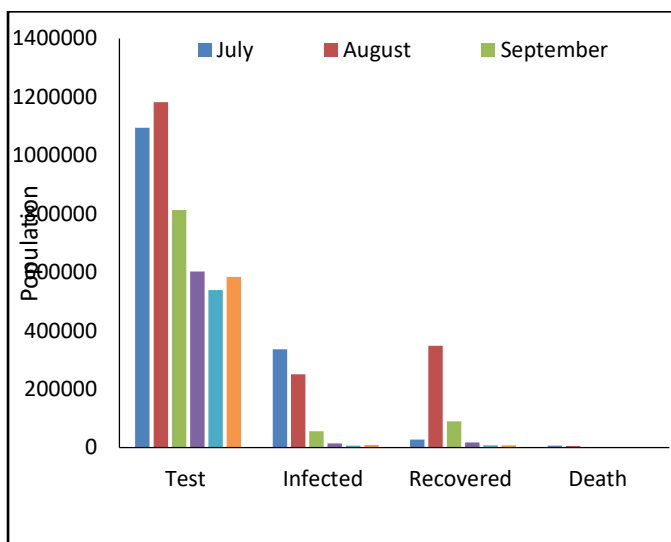


Figure 2. The total number of coronavirus tests, infections, recoveries, and deaths from July to November 2021 in Bangladesh

The maximum COVID-19 tests were performed at 55284.00 while the lowest was 11486.00 from July to December 2021. The mean stander error and stander deviation were 739.54074 and 10031.61869, respectively in tests of COVID-19 from

July to December 2021 in Bangladesh. The maximum COVID-19 infestations were performed at 16230.00 while the lowest was 122.00 from July to December 2021. The mean stander error and stander deviation were 348.19686 and 4723.17204, respectively in infestations of COVID-19 from July to December 2021 in Bangladesh. The maximum COVID-19 recovered was performed as 16627.00 while the lowest was 122.00 from July to December 2021. The mean stander error and stander deviation were 348.19686 and 4834.13505, respectively in the recovered COVID-19 from July to December 2021 in Bangladesh. The maximum COVID-19 death was performed as 264.00 while the lowest 0 was from July to December 2021. The mean stander error and stander deviation were 6.52483 and 88.50713, respectively in the death of COVID-19 from July to December 2021 in Bangladesh (Table 1). Similar results were found in Bangladesh and the results were 49492 and 1653 as the most and lowest COVID-19 tests in 2022. On January 22, the most COVID-19 infestations were performed at 16033 while the lowest was 1653 on 5 May 2022. On February 13, the most COVID-19 recovered were performed as 13853 while the lowest was 1653 on 9 May 2022. On February 8, the most COVID-19 death was performed as 13853 where the lowest 0 in several days in 2022 (16).

Table 1. The Descriptive statistics of coronavirus update in Bangladesh from January to May 2022

Descriptive Statistics							
	N	Range	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Test	184	43798.00	11486.00	55284.00	26360.4457	739.54074	10031.61869
Infected		16108.00	122.00	16230.00	3656.0163	348.19686	4723.17204
Recovered		16505.00	122.00	16627.00	3980.7609	356.37716	4834.13505
Death		264.00	0.00	264.00	73.7880	6.52483	88.50713

Spearman's rho correlation analysis among tests, infections, recoveries, and deaths of COVID-19

Spearman's rank-order correlation investigated the association between variables (tests, infections, recoveries, and deaths) in Bangladesh. Variables were determined to have statistically significant correlations. At the 0.01 level in two-tailed analysis, the results demonstrated a positive, moderate to strong correlation between the variables (Table 2).

Tests: The results revealed a moderate relationship between tests and infections ($r_s=0.861$), recoveries ($r_s=0.822$), and deaths ($r_s=0.785$) of COVID-19.

Infections: The results revealed a moderate to strong relationship between infections and tests ($r_s=0.861$), recoveries ($r_s=0.948$), and deaths ($r_s=0.916$) of COVID-19.

Recoveries: The results revealed a moderate to a strong relationship between recoveries and tests ($r_s=0.822$), infections ($r_s=0.948$), and deaths ($r_s=0.929$) of COVID-19.

Deaths: The results revealed a moderate to a strong relationship between deaths and tests ($r_s=0.785$), infections ($r_s=0.916$), and recoveries ($r_s=0.929$) of COVID-19. Before calculating r_s , a visual inspection of the scatterplot of tests, infections, recoveries, and deaths confirmed that the relationship between these variables was non-linear and monotonic. Similar results were observed by the Spearman correlation. The case study and mortality were rated 0.20 and 0.35 (17). Another study also found similar results, and the mean results of Spearman correlation for tests, infections, recoveries, and deaths were 0.31, 0.35, 0.796, and 0.808 in Bangladesh in April (18). Similar results were observed in a study, and the results showed a positive correlation between infections and recoveries and a negative relationship between tests and deaths by COVID-19 in Bangladesh in April 2021 (19). Similar findings were observed in the positive correlation between infections and recoveries and deaths in 2020 (20). The virus is significantly transmissible, suggesting that the second wave will become even more dispersed in Bangladesh in 2020 and 2021. The total tests (722, 848), infections (128, 555), recoveries (150,816), and deaths (2237) were counted in April 2021 (21-22).

Table 2. Spearman's rho correlation analysis among tests, infections, recoveries, and deaths of COVID-19 in Bangladesh

Spearman's rho Correlations					
		Test	Infected	Recovered	Death
Test	Correlation Coefficient	1.000	0.861**	0.822**	0.785**
	Sig. (2-tailed)	-	0.000	0.000	0.000
	N	184			
Infected	Correlation Coefficient	0.861**	1.000	0.948**	0.916**
	Sig. (2-tailed)	0.000	-	0.000	0.000
	N	184			
Recovered	Correlation Coefficient	0.822**	0.948**	1.000	0.929**
	Sig. (2-tailed)	0.000	0.000	-	0.000
	N	184			
Death	Correlation Coefficient	0.785**	0.916**	0.929**	1.000
	Sig. (2-tailed)	0.000	0.000	0.000	-
	N	184			

** . Correlation is significant at the 0.01 level (2-tailed).

Conclusion

In Bangladesh, COVID-19 has affected sixty-four districts. The continuing COVID-19 contamination outbreak has underlined the want for early and advanced 118 laboratory diagnoses to restrict the unfolding of the ailment and efficaciously deal with infected people. In this situation, people should keep away from traveling to public places. It'd be unacceptable to leave the house unless there's an urgent want. In case you must move, achieve this upon getting appropriate masks and coming home as soon as viable once the venture is over. To preserve Coronavirus beneath control, the authorities should set up new megaprojects to assist the negative.

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