

Clinical Characteristics of Bangladeshi COVID-19 patients During First Hospital Reporting

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ABSTRACT

Background: Covid-19 is a new disease first originated in Wuhan, China in December 2019. It is now pandemic globally^{1,2}. The disease affected almost all countries of the world.

Aims and objectives: To see different aspects of clinical presentations of COVID-19 in Bangladesh.

Methods: Subjects tested, admitted and treated were included in the study. Total 441 cases were included for the study. Data was collected, compiled and analyzed.

Results: Male: female ratio, n= 441, Ratio= 2.4:1. Nasopharyngeal swab was positive in 59% and 41% oropharyngeal sample was positive. 74% test was positive among 220 patients and 26% negative. Smoking accounts for 65% among predisposing factors. Among the co-morbid conditions Hypertension accounts for 37%, Bronchial asthma 23%, Diabetes mellitus 30%. Clinical symptoms were fever 90%, body ache 95%, cough 80%, and headache were 75%. Other symptoms were less. Symptoms may one or more in the same patient. In our series 30 (07%) cases were had respiratory distress. All of them needed hospital admission. 27 of them were cured by oxygen and medications. Nine patients were transferred to ICU, where they succumbed to death 2%.

Conclusion: In this COVID-19 pandemic no symptom should be neglected. Prompt consultation, appropriate test and early, adequate and aggressive treatment should be instituted according to severity.

Keywords: COVID-19, Bangladesh, Clinical manifestations.

Introduction

Covid-19 is a new disease first originated in Wuhan, China in December 2019. It is now pandemic globally^{1,2}. The disease affected almost all countries of the world. Any age group may be infected by corona virus. Covid-19 presented with clinical features of fever, runny nose, body ache, cough, respiratory distress, ear block, headache, diarrhea, anosmia, anorexia, weakness, voice change, conjunctivitis, malaise, vertigo, bradycardia, anxiety, depression, chest pain etc³⁻⁶. Diagnosis depends on symptoms, contact and investigations. It may be symptomless, mild, moderate, severe to very severe form may need to ICU support⁷

Smoking, habit of having tobacco products, alcohol are predisposing factors in infection by corona virus.

Treatment modalities include home quarantine, hospital admission for oxygen, High Dependency Unit and or ICU as required. Majority of coronavirus diseases are cured by and home quarantine and medications^{8,9}. Death rates are 2 to 3 per cent in old age, co-morbid conditions like asthma, hypertension, diabetes, cardiovascular disease, Chronic Kidney Disease, Chronic Liver Disease and in Intensive Care Unit patients¹⁰.

So far globally 1,87,56,880 persons are infected and total death was 7,05,414 as On 06 August, 2020 due to corona virus. Highest infected and death rate are in the United States of America by the disease. In Bangladesh total infected is 2,44,020 and total death is 3,238 till to date.

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Materials and Methods:

This descriptive study was conducted in Anwer Khan Modern Medical College Hospital, Dhaka, Bangladesh from March 2020 to July 2020. A total of 441 patients who had positive RT-PCR test for COVID-19, attend to outpatient department and admitted to dedicated COVID unit at Anwer Khan Modern Medical College Hospital, were included in this study. Aims and objectives of this study was to see different aspects of clinical presentations of COVID-19 patients at first hospital reporting.

Data was collected on a standard questioner. The data were subjected to statistical analysis according to standard procedure. SPSS version 20 for Windows (SPSS Inc, Chicago, IL, USA) software was used for data recording and analysis. Since it was a descriptive study, percentage and frequencies were determined. Approval for the study was obtained from the ethical committee of the college. Informed written consent was taken from the parents of the patients.

Results:

Total 441 cases were included in the study. Male: female ratio, Ratio= 2.4:1. Male outnumbered female as they have to go out for many reasons. Highest age was 95 in the population and lowest age was 3.5 years. More number of patients were in 5th and above decades. RT-PCR test for COVID-19 was positive in 74% cases among 441 patients and 26% was negative, but they were highly suspected cases according to other supportive findings (Fig-1). Smoking accounts for 65% among predisposing factors. Among the co-morbid conditions' hypertension accounts for 37%, Bronchial asthma 23%, Diabetes mellitus 30%, COPD 20% (Fig-2).

Among clinical feature fever, body ache, cough, respiratory distress, runny nose, ear block, headache, diarrhea, anosmia, anorexia, weakness, voice change, conjunctivitis, malaise, vertigo, bradycardia, anxiety, depression, chest pain. Clinical symptoms were fever 90%, body ache 95%, cough 80%, and headache were 75%. Other symptoms were less. Symptoms may one or more in the same patient. In our series 30 (07%) cases were had respiratory distress. All of them needed hospital admission. 27 of them were cured by oxygen and medications. Nine patients were transferred to ICU, where they succumbed to death 2% (Table-I).

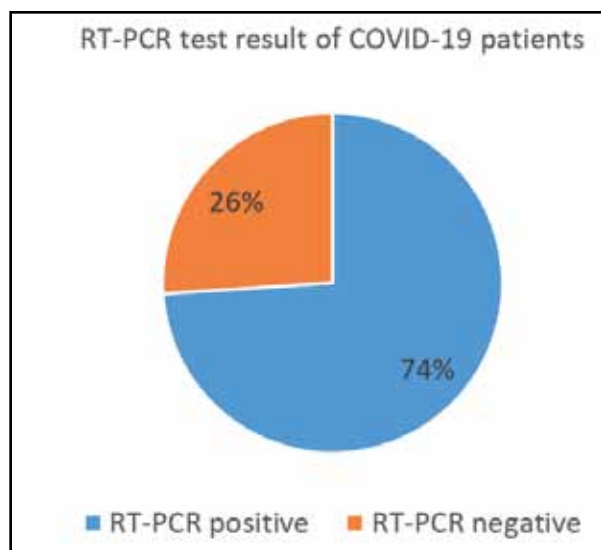


Fig-1: Distribution of patients according to RT-PCR test for COVID-19 (n=441).

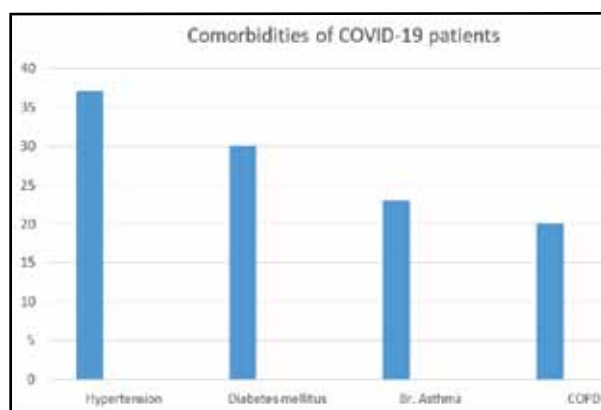


Fig-2: Comorbidities of COVID-19 patients.

Table I: Clinical presentation of the patients

Symptom	number	Percentage
Fever	397	90%
Body ache	419	95%
Cough	353	80%
Respiratory distress	30	07%
Headache	331	75%
Diarrhea	44	10%

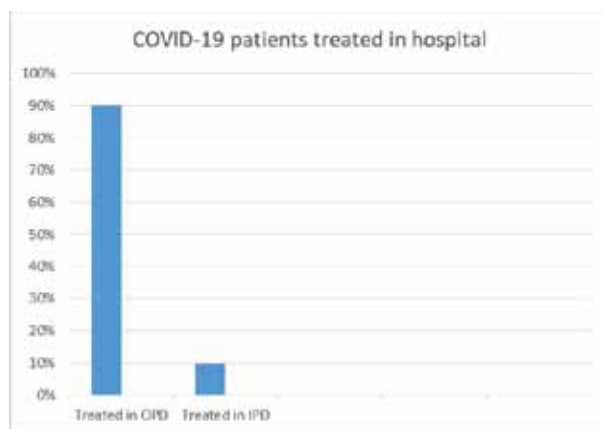


Fig-3: Distribution of COVID-19 patients according to hospital treatment taken (n=441).

In our study, 90% patients had home treatment having mild to moderate symptoms. Ten per cent needed hospital admission for oxygen. Among them nine cases needed High Dependency Unit or Intensive Care Unit (Fig-3).

Discussion:

SARS-CoV-2 virus causing an infection in human is termed as Coronavirus Disease 2019 (COVID-19). COVID-19 Disease and its every clinical presentation have become very significant and also for the people of age above 60. Our study already revealed the severity and majority of every clinical presentation. Here in our study respectively Body ache (95%), Fever (90%), Cough (80%) and Headache (75%) are the mostly found incidences almost in majority of the cases. All of these symptoms need 2 days to 2 weeks to get developed after being exposed of the virus. According to WHO-China Joint report, pyrexia was found in 85% cases, dry cough was found in 67.7% cases, body ache and headache was found in 14.8% cases^{11, 12}.

On some recent other studies otolaryngologists reported sudden anosmia or hyposmia as a concurrent symptom of covid-19 but this olfactory and gustatory complaints are observed more in European patients according to recent studies^{13, 14}. We also have patients with anosmia or hyposmia. Among the co-morbidities, our study showed hypertension (37%), diabetes mellitus (30%), bronchial asthma (23%) are the more remarkable and enhancing factors¹⁵. While some other studies also showed diabetes, coronary artery disease,

hypertension and bronchial asthma being more remarkable as the triggering factors respectively.

Unlike these common symptoms, Covid-19 disease comprise runny nose that was mostly found in the cases with allergic rhinitis, respiratory distress that is the most crucial one which needs urgent hospitalization along with oxygen therapy according to oxygen saturation^{16, 17}. Diarrhea because of viral infection there also occurs gastrointestinal involvement, anosmia due to involvement of olfactory bulb through central nervous system, voice change due to compromised respiratory tract and vocal cord, severe sweating due to fever or feverish temperature or also after cytokine storm (strong monitoring of dehydration needed) also encephalitis and nephritis (specially patients with previously being a patient of CKD or Stroke or other Cerebral disease) and also malaise, vertigo, bradycardia, anxiety, depression, chest pain etc. are rest of the symptoms of COVID-19 disease¹⁸.

Being a pandemic disease and so much versatility in clinical presentations in all over the world and in all patients, some symptoms needed early approach of management, some needed to cure after hospitalization and some can also be cured by home management (depends upon severity). Our studies clearly signify that every symptom and causes along with the rate of incidence of how much the clinical presentations can matter at every state of patient which can lead a physician to a proper management.

Conclusion:

In this COVID-19 pandemic situation no symptoms should be neglected. Timely consultation, appropriate tests must be done for diagnosis. Early, adequate and aggressive treatment should be instituted according to the severity.

Conflict of interest: None.

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