

Case Report

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Is COVID-19 spreading and curing silently: an observation of three family clusters in Bangladesh

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Abstract

Objectives: The number of coronavirus disease (COVID-19) cases is increasing in Bangladesh. Many people have suffered from symptoms like COVID-19 during this pandemic, and some people have cured without taking any treatment or taking minor pharmacological and non-pharmacological treatments. However, they might be spreading their infections among their family members and perhaps in the community. It is unsure that individuals with COVID-19-like symptoms are positive with COVID-19, but our concern is, during this pandemic, any types of symptoms such as flu-like symptoms should have been taken seriously. This study was observed in the cases from three families with COVID-19 like symptoms.

Case presentation: This observational study was done between May 20 and Jun 2, 2020, in Bangladesh. The members of the inspected families shared COVID-19 like symptoms that were lasted for 3–10 days.

Conclusions: COVID-19 might be spread and cured silently in Bangladesh, which recommends that awareness is needed throughout the country to prevent the spreading of the disease.

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Introduction

The year 2020 has unwelcomed the world with a pathogenic virus named Severe Acute Respiratory Syndrome Coronavirus-2 (SARS CoV-2), which is responsible for coronavirus disease (COVID-19) [1, 2]. The virus spreads human to human mainly through respiratory droplets from sneezing or coughing of COVID-19 infected person [1]. To date, typical clinical symptoms of people affected by SARS CoV-2 are fever, fatigue, cough, shortness of breath, chest pain, headache, loss of taste or smell, congestion or runny nose, muscle ache, sore throat, diarrhea, nausea and vomiting [3]. On Mar 8, 2020, the first case of COVID-19 has been detected in Bangladesh [4]. The Institute of Epidemiology, Disease Control and Research (IEDCR) is liable for updating COVID-19 confirmed cases and numbers of death on an everyday basis in Bangladesh. Over 50,000 confirmed cases with 709 deaths were recorded until Jun 2, 2020 [5]; however, there is a lack of data on who had infected and cured of the disease silently.

Asymptomatic cases and cases with mild symptoms could be the spreader of the disease [6]. Though it is difficult to identify and isolate mild symptomatic and asymptomatic cases, effective detection and isolation of such individuals are essential to reduce the severity of COVID-19 [7]. It was observed that the spread of COVID-19 contained barely by lockdown or social distancing in many countries [8], along with these frontline measures like social distancing and lockdown, institutional isolation is essential to reduce community and household transmission of SARS-CoV-2 [9].

This study observed cases from three families with COVID-19 like symptoms, and the aim and objective of this observational study were to share this phenomenon with the public health authority in Bangladesh and around the world. The observations and recommendations of the study were enlisted based on the inspection was made on three families for the last 14 days from May 20 to Jun 2, 2020. Each

family was communicated through video conference to collect and confirm the information observed in the study. Verbal consent of the individuals was taken during the interview. This study was supported by the planning and development committee of the Department of Pharmacy, IUC (Pharm./P&D/138/13-'19).

Case presentation

Family 1

This family consisted of four members: husband, wife, husband's mother, and a child. The husband was the head of the family. He and his mother had some clinical symptoms of COVID-19. However, the rest of the family members were free from the symptoms.

Case 1: This case was the head of family 1, who was a 43-year older man. He had travel history and visited outside of Chittagong before symptoms onset. He had a fever, runny nose, dry cough, and these symptoms lasted for seven days before recovered. He used moderately hot water for gargling and often took tea as non-pharmacological actions. He also received antibiotic (azithromycin) and paracetamol to avoid these symptoms.

Case 2: She was the mother of case 1, who was a 78-year older woman. She did not travel anywhere before symptoms appeared. The symptoms were fever, runny nose, dry cough, and shortness of breath. She took different citrus fruits and tea with ginger. She also took doctors prescribed medicines such as antibiotics (azithromycin, ciprofloxacin), paracetamol, and antihistamine (montelukast sodium INN) for recovery.

Family 2

This family consisted of five members: husband, wife and their three children. The husband was the head of the family and lived with his wife and children. All five members had COVID-19 symptoms.

Case 1: The case was the head of family 2, who was a 45-year older man. He lived in the same building of family 1 and had also travel history within Chittagong. He had a fever, sore throat, and dry cough that lasted for 10 days. He often took citrus fruits, tea with ginger and used lukewarm water for gargling during this period. He also consumed

antibiotic (azithromycin) and paracetamol as pharmacological treatment.

Case 2: The wife of case 1, a 32-year older woman without any travel history. She had the same symptoms as her husband (fever, sore throat, and dry cough). The duration of the symptoms was approximately eight days. As a non-pharmacological approach, she used warm water for gargling and drink tea. Additionally, she took paracetamol during this period as a pharmacological intervention.

Case 3: This case was about a 12-year old child who had no travel history. She also had a fever, a sore throat, and a dry cough that lasted for seven days in her case. The same non-pharmacological treatment was approached as her parents during this period. Paracetamol and antihistamine (fexofenadine hydrochloride) were used for recovery.

Case 4: This case represents a nine-year old child who had no travel history. She had dry cough and fever for approximately 3–4 days. Paracetamol and antihistamine (fexofenadine hydrochloride) were given as a remedy.

Case 5: It was the case of a six-year old who had no travel history but had only a fever for three days. Paracetamol and antihistamine (fexofenadine hydrochloride) were administered as a medicament.

Family 3

This family consisted of six members who lived in the same flat: the husband (head of the family), wife, and their four children. Three members had COVID-19 like symptoms, but the rest of the members had no symptoms.

Case 1: It was the case of the head of the family, who was a 60-year old male. He had no travel history within Chittagong but had a history of contact with members from family 1 and family 2. He had a fever, runny nose, sore throat, loss of taste, body pain, diarrhea, and a dry cough that lasted for seven days. He often took citrus fruits, tea with ginger, water vapor therapy and used lukewarm water for gargling during this period. He also consumed paracetamol for reducing fever and pain.

Case 2: This case represents a 27-year old male who was the son of case 1, family 3. However, he had no travel history but had a history of contact with members from family 1 and family 2. He had symptoms like fever, body pain, sore throat, nasal congestion, conjunctivitis, and dry cough.

The duration of the symptoms was approximately seven days. He used warm water for gargling, took tea, water vapor therapy and citrus fruits. Besides, antibiotic (azithromycin), antihistamines (fexofenadine hydrochloride), and paracetamol were used during this period as pharmacological treatment.

Case 3: The case was the daughter of case 1 of family 3, who was a 21-year old female. She had no travel history but had a history of contact with members from family 1 and family 2. She had symptoms like fever, runny nose, pain in the body, and dry cough. The duration of the symptoms was approximately seven days. She used warm water for gargling, took tea and citrus fruits. In addition, antibiotic (azithromycin), antihistamine (fexofenadine hydrochloride), and paracetamol were administered during this period as pharmacological treatment. The symptoms and recovery options of cases are portrayed in Table 1.

Discussion

In the study, it was observed that each family had either a travel or contact histories and similar types of symptoms

appeared in each case, and almost all the symptoms are related to COVID-19 [10]. A combination of pharmacological and non-pharmacological actions was taken to get cured of symptoms. Individuals were taken prescription drugs such as antibiotics in most cases without doctor's consultation, and no one among the cases did any diagnostic tests for COVID-19. It might be due to mild symptoms, to avoid social stigmatization or lack testing capability in Bangladesh [11, 12]. In addition, cases were not self-isolated from other family members since most of the members were infected. Every case was recovered within approximately 3–10 days. The study was limited to some vital information, and we did not have enough data to conclude that it was a COVID-19 infection or not. As flu-like symptoms were seen among the cases in this pandemic situation, we thought it is important to share with the public health researcher and policymakers of the country. There was a possibility of some recall bias that the interview was taken after cases recovered though we observed the cases symptoms and confirmed the visible symptoms of cases by other family members.

This study recommends people that they should follow self-isolation practice if they have COVID-19 symptoms [9]. Without a self-isolation strategy, the rest of the family members could also become affected; however, some

Table 1: Cases with their symptoms and recovery treatment options.

Family	Case	Symptoms	Non-pharmacological treatment	Pharmacological treatment
Family 1	Case 1	Fever, dry cough which lasted for seven days	Moderately hot water for gargling and often took tea	Antibiotic (azithromycin) and paracetamol
	Case 2	Fever and dry cough	Different citrus fruits, tea with ginger	Antibiotics (azithromycin, ciprofloxacin), antihistamine (montelukast sodium INN), and paracetamol.
Family 2	Case 1	Fever, sore throat, and dry cough and lasted for 10 days	Citrus fruits, tea with ginger and use lukewarm water for gargling.	Antibiotic (azithromycin) and paracetamol.
	Case 2	Fever, sore throat and dry cough around for eight days	Warm water for gargling and took tea	Paracetamol.
	Case 3	Fever, sore throat, and dry cough and symptoms lasted for seven days	Took citrus fruits, tea with ginger and used warm water for gargling	Paracetamol, antihistamine (fexofenadine hydrochloride)
	Case 4	Dry cough and fever for approximately 3–4 days		Paracetamol and antihistamine (fexofenadine hydrochloride)
	Case 5	Had only a fever for three days		Paracetamol and antihistamine (fexofenadine hydrochloride)
Family 3	Case 1	Fever, sore throat, loss of taste, runny nose, body pain, diarrhea and dry cough and lasted for seven days	Citrus fruits, tea with ginger, water vapor therapy and use lukewarm water for gargling.	Paracetamol for reducing fever and pain
	Case 2	Fever, body pain, sore throat, conjunctivitis, congestion and dry cough and symptoms have lasted for approximately seven days	Warm water for gargling, took tea, water vapor therapy and citrus fruits	Antibiotic (azithromycin), antihistamine (fexofenadine hydrochloride), and paracetamol
	Case 3	Fever, pain in the body runny nose and dry cough. The duration of symptoms was approximately seven days	Warm water for gargling; took tea and citrus fruits	Antibiotic (azithromycin), antihistamine (fexofenadine hydrochloride) and paracetamol

members of the observed families did not have any symptoms. Additionally, cases with unknown COVID-19 status might spread the disease in the community.

Conclusions

Based on the situation, more awareness strategy should be taken immediately by policymakers to make people concern about COVID-19. In addition, a more in-depth study is required to detect the disease was COVID-19 or not, and a cross-sectional study could be conducted to estimate knowledge, attitude, and practice on COVID-19 in Bangladesh.

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