# The Epidemiological Situation and Clinical Characteristic Aspect Cause by COVID-19 in Suspected Cases in Albania

Oltiana Petri[1,2]* , Erjona Abazaj[3] , Albana Daka[1], Gentian Huti[1] , Edmond Puca[1] , Blerta Brati[3]

[1]Infection Diseases and American Laboratory Network, American Hospital, Tirana, Albania; [2]Department of Bioscience and Human Discipline, Sports University of Tirana, Albania; [3]National Reference Laboratories, Institute of Public Health, Tirana, Albania

## Abstract

**BACKGROUND:** Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has forcefully entered our lives and profoundly changed the perception and habits of the world population since the December 2019.

**AIM:** The aims of this study were to presents the epidemiology data and clinical characteristic aspect of patients suspected with COVID-19 and analyzed in the American laboratory in Tirana, Albania from August 2020 to March 2021.

**METHODS:** This study includes 1205 suspected cases for SARS COVID-19. Professionally trained health workers collected the samples from suspected patients by using synthetic fiber swabs. Double specimens from nasopharyngeal and pharyngeal swabs were collected from each of person. A standard questionnaire about the demographic and clinical data was filled for each person. The software SPSS version 22.0 was used for analyzing all data and also the examination findings.

**RESULTS:** The prevalence of SARS COVID-19 resulted to be 31.1%. The average age resulted 42.17 ± 18.6. The most predominant positive age resulted the age groups 31–40 years old and 41–50 years old with positivity 17.3% and 16.3%, respectively, with significant association p = 0.01. Male were the most analyzed and affected persons (61.6%) in this study with a strong significant association p = 0.0004. It turned out that more than half of patients refereed at least two symptoms in the same time of analyze and about 1/3 refereed more than three symptoms. We found an association for presence of all typical symptoms with positivity except the temperature. We identified that for all of these symptoms, the p value resulted less than 0.05.

**CONCLUSION:** SARS COVID-19 in the early stages of the disease is highly contagious. For this reason, the screening of people with symptoms is recommended to determine who should be quarantined and be tested. In this manner, we can decrease the rate of infection and protect healthy people from infection.

## Introduction

A new virus affected the lower respiratory tract of patients with pneumonia in Wuhan, China, on 29 December 2019 [1], [2], [3]. In early January of 2020, the WHO announced the official name of the 2019 novel coronavirus (COVID-19) and the current reference name for the virus is severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

After this announcement, the novel coronavirus (SARS-CoV-2; 2019-nCoV; COVID-19) caused a pandemic global crisis [4]. Coronaviruses (CoVs) represent a major group of viruses mostly affecting human beings through zoonotic transmission [5].

The COVID-19 virus infects people of all ages, however, evidence to date suggests that two groups of people are at a higher risk of getting severe COVID-19 disease, in the first group are included older people and in the second group those with underlying medical conditions [6]. Nowadays, this disease is not in it's early stages, but we still need to know more about different strains of this virus that circulates worldwide.

The coronavirus belongs to a family of viruses that may cause clinical spectrum ranging from asymptomatic infection to mild upper respiratory tract illness, severe viral pneumonia, respiratory failure, or death [7].

Although classically this virus causes fever, cough, breathing difficulty, shortness of breath, lung infection [8], and more evidence suggests that the atypical manifestations of gastrointestinal symptoms such as nausea and diarrhea, the loss of smell and taste, and thromboembolic events, among others, are becoming clearly and were be the main presentation of COVID-19 during the first months of pandemic [9], [10], [11].

Affirming these large ranges of symptoms, it is crucial for clinicians to be aware of these typical and atypical presentations to appropriately identified, isolated, and treated these patients, while properly protecting other people from exposure.

This article presented the epidemiology data and clinical characteristic aspect of patients suspected with COVID-19 and analyzed in the American laboratory in Tirana, Albania, from August 2020 to March 2021.

**Table 1 : Distribution of characteristics of severe acute respiratory syndrome coronavirus 2 analyzed cases**

| Demographic variables | Total number of cases (n = 1205; 100%), n (%) | Positive cases (n = 375; 100%), n (%) | Negative cases (n = 830; 100%), n (%) | p |
|---|---|---|---|---|
| Gender | | | | |
| Female | 526 (43.65) | 144 (38.4) | 382 (46.02) | 0.01 |
| Male | 679 (56.35) | 231 (61.6) | 448 (53.98) | |
| Age groups (age) | | | | |
| 1–10 | 31 (2.6) | 5 (1.33) | 26 (3.13) | 0.004 |
| 11–20 | 89 (7.4) | 19 (5.06) | 70 (8.4) | |
| 21–30 | 267 (22.2) | 43 (11.5) | 224 (27) | |
| 31–40 | 197 (16.3) | 65 (17.3) | 132 (15.9) | |
| 41–50 | 169 (14) | 61 (16.3) | 108 (13) | |
| 51–60 | 186 (15.4) | 53 (14.1) | 133 (16) | |
| 61–70 | 143 (11.9) | 64 (17) | 79 (9.5) | |
| ≥71 | 123 (10.2) | 65 (17.3) | 58 (7) | |
| Residence area | | | | |
| Rural area | 116 (9.6) | 51 (13.6) | 65 (7.8) | 0.0014 |
| Urban area | 1089 (90.4) | 324 (86.4) | 779 (92.2) | |
| Health professional workers | | | | |
| Yes | 193 (16.01) | 87 (23.2) | 106 (12.77) | 0.0001 |
| No | 1012 (83.99) | 288 (76.8) | 724 (87.23) | |
| Type of care | | | | |
| Hospitalized patients | 146 (12.1) | 121 (32.26) | 25 (3.01) | 0.0001 |
| Outpatients | 1059 (87.9) | 254 (67.74) | 805 (96.99) | |
| Comorbidities | | | | |
| Yes | 536 (44.48) | 174 (46.4) | 362 (43.6) | 0.3 |
| No | 669 (55.52) | 201 (53.6) | 468 (56.4) | |
| Travel history | | | | |
| No | 907 (75.3) | 261 (69.6) | 646 (77.8) | 0.001 |
| Local | 245 (20.3) | 85 (22.6) | 170 (20.4) | |
| International | 53 (4.4) | 29 (7.8) | 24 (2.8) | |

# Methods

This article presented a cross-sectional observation study and included 1205 suspected cases analyzed in American Hospital during the periods August, 2020 until to March, 2021. Sample collection, transportation, and analysis were performed according to the WHO guidelines for identifying and reporting suspect COVID-19 cases [12]. Trained health workers collected the samples from suspected COVID-19 by using synthetic fiber swabs. Double specimens from nasopharyngeal and pharyngeal swabs were collected from each of person and transported aseptically in viral transport media to the nearest American hospital laboratory for COVID-19 while maintaining a temperature range of 2°C–4°C. Formally, all samples were analyzed for SARS-CoV-2 using reverse transcription polymerase chain reaction (RT-PCR). The apparatus used for the analysis of suspected samples was SLAN 96 PI which detected ORF1ab and N genes, and the kit used belongs to the company Sansure Biotech, approved by FDA, which has received urgent authorization from the US Food and Drug Administration on March 26, 2020. The data from each patient about the demographic and clinical symptoms and diagnosis were collected based on a standard questionnaire approved from Albania Ministry of Health and Social Protection. We also used all record files from the patients who were treated and hospitalized in "American Hospital 3" in Albania.

Almost 97% of cases were presented in one of the American laboratories network throughout Albania cities, and only 3% requested in-house sampling assistance. In 85.1% (1025/1205) of the patients, anamnesis was reported at least 1 symptoms of SARS VOV-19 and other 14.9% (180/1205) of patients sought to be analyzed for fear of being infected or having been in close contact with a person resulted as positive cases for COVID-19.

As case negative is seen, any samples that have not appeared a positive signal after 40 cycles. If a positive signal is seen between 38 and 40 cycles, these samples were considered suspicious and the test should be repeated. On the other hand, if a positive signal is seen below 38 test cycles, it is positive. The result is marked only positive or negative. Confirmations were performed with the GeneXpert Xpress System (Tablet and Hub Configurations) which detected Genes N2 and E.

The software SPSS version 22.0 was used for analyzing demographic, clinical, and symptoms of suspected cases and also the examination findings, and other encounter-specific data, the analysis considered multiple encounters with the same patient to be separate encounters.

# Results

Over all 1205 suspected cases for SARS COV-19, the prevalence resulted to be 31.1% (375/1205 cases) (Figure 1).

The average age resulted 42.17 ± 18.6 Stdv with min 1-year old and max 93 age old. The vast majority of predominant age group that has been required to test for SARS COV-19 were 21–30 years old in 22.2% of total cases and after that were 31–40 years old, 41–50 years old, 51–60 years old, and 61–70 years old with analyzed cases 16.3%, 14%, 15.4%, and 11.9%, respectively. We scientifically proved that the most predominant positive age resulted the age groups 31–40 years old and 41–50 years old with
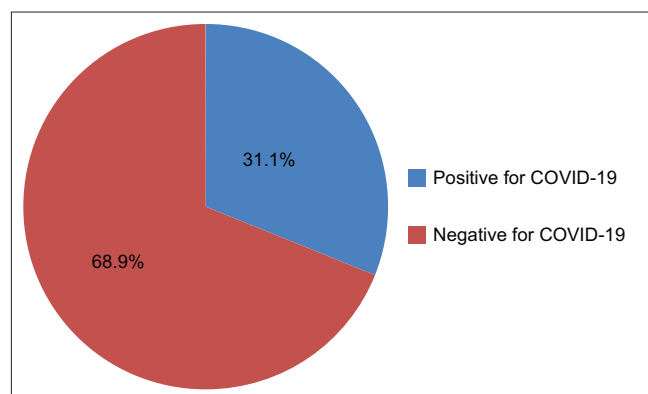
*Figure 1: Prevalence of SARS COV-19 among suspected analyzed cases*

positivity 17.3% and 16.3%, respectively. A significant association was found between the positivity of cases and age groups for CI 95% p-value resulted to be = 0.01.

After numerous analyzes, it turned out that males were the most affected persons in this study if we compared with female. Positive values for male resulted 61.6% (231/375) and for female 38.4% (144/375). According to distribution of gender male vs. female and positivity of cases we have found a strong significant association for CI 95% p value resulted = 0.0004.

The same strong association we have found even on the distribution of living area (residence) of our suspected and confirmed cases with SARS COV-19. Total were analyzed 9.6% of cases that had declared that living in rural area and 90.4% living in urban area. Basically, living in urban areas resulted 86.4% positive (324/375) and for them in rural areas, the positivity resulted 13.6% (51/375).

During the pandemic situation, a part of health professional staff is contaminated throughout they contact with positive patients. In our laboratory are tested 16.01% (146/1205) health professional workers and positivity of SARS COV-19 among this category resulted 23.2% (87/375). A significance association has found for health professional workers for CI 95% p value resulted 0.0001.

The American Hospital has hospitalized and treated a considerable number of cases with COVID-19 since the beginning of the pandemic situation. From all these cases, we have analyzed only 12.1% (146/1205) patients that belonging to our study period. The positivity in hospitalized patients resulted 32.26 (121/375). We have found a significance association for type of care (hospitalized/outpatients) for CI 95% p value resulted 0.0001.

Comorbidities play a significant role in severity of diseases. Apparently, 44.48% (536/1205) of our patients referred in their anamnesis that has comorbidities which aggravate the virus. The positivity in these persons resulted 46.4%. we have not found an association between the presence of comorbidities and positivity p value resulted 0.3.

In our state, the international traveling was very restricted which means that no one was allowed to leave country without emergency reasons. Some of airline companies operate in our country, and for lot of countries as well, the traveling from Albania was canceled. Hence, a small people can be moved internationally only for the emergency or medical reasons. Regarding traveling locally was not so restricted. According to the regulation, after the summer of 2020, all Albanian citizens could move in any place without any problem. On the other hand, the fear that involved each of us to protect ourselves and our family members stopped us to move only for work or necessity. In our study, 75.3% of cases have not referred a travel history and 20.3% referred a locally traveling and only 4.4% have an international history. We have found a significance association for traveling history and positivity for 95% CI p value resulted 0.001 (Table 1).

As we mentioned before, the clinical spectrum ranges of this virus vary from asymptomatic infection to mild upper respiratory tract illness, severe viral pneumonia, respiratory failure, or death. In our study, most of cases were presented with mild, moderate, and severe clinical symptoms and the positive results were higher in these cases.

Positive as asymptomatic resulted 5.86% of cases; for mild cases, the positivity resulted 24.5%; for moderate cases, 39.2% resulted as positive. 20% of positive cases were presented with severe symptoms and only 10.4% of positive cases have the critical symptoms and were hospitalized in hospital for un specialize treatment. We have found a strong association between the severe and critical symptoms for positive cases. In both cases, the p value resulted less than 0.0001.

Evidently, more than half of patients referred at least two symptoms in the same time of analyze

**Table 2: Clinical characteristics aspect of cases**

| Symptoms and clinical aspect of cases | Total number analyzed | Positive cases | Negative cases | p |
|---|---|---|---|---|
| Range of symptoms | | | | |
| Asymptomatic | 112 | 22 | 90 | 0.64 |
| Mild | 374 | 92 | 282 | 0.27 |
| Moderate | 502 | 147 | 355 | 0.04 |
| Severe | 152 | 75 | 77 | <0.0001 |
| Critical | 65 | 39 | 26 | <0.0001 |
| Typical symptoms | | | | |
| Temperature | 691 | 516 | 175 | 0.19 |
| Fever | 994 | 211 | 783 | 0.0001 |
| Tiredness | 718 | 487 | 231 | 0.0001 |
| Dry cough | 764 | 441 | 323 | 0.003 |
| Headache | 863 | 342 | 521 | 0.01 |
| Sore throat | 915 | 290 | 625 | 0.0001 |
| Muscle pain | 894 | 329 | 565 | 0.0001 |
| Atypical symptoms | | | | |
| Nausea | 79 | 45 | 34 | 0.04 |
| Abdominal pain | 96 | 37 | 59 | 0.91 |
| Loss of taste or smell | 219 | 148 | 71 | 0.003 |
| Diarrhea | 64 | 25 | 39 | 0.12 |
| Serious symptoms | | | | |
| Difficulty breathing or shortness of breath | 221 | 98 | 123 | 0.0001 |
| Chest pain or pressure | 136 | 78 | 58 | 0.23 |
| Severe viral pneumonia | 157 | 115 | 42 | 0.54 |
| Respiratory failure | 67 | 45 | 22 | 0.001 |
| Time of symptoms (days) | | | | |
| 3–5 | 525 | 397 | 128 | 0.002 |
| 5–10 | 298 | 165 | 133 | 0.0001 |
| >10 | 205 | 41 | 164 | 0.45 |

and about 1/3 referred more than three symptoms. In Table 2, we have presented the clinical characteristics aspect of all suspected cases. From typical symptoms, the most predominant symptoms were temperature, dry cough, tiredness, headaches, and muscle pain.

We found an association for the presence of all typical symptoms with positivity except the temperature. For all these symptoms, the p value resulted less than 0.05.

There are about 38% of patients that referred the atypical symptoms such as nausea, diarrhea, or abdominal pain and loss of taste or smell. From atypical symptoms, the most predominant was the loss of taste or smell ore both of them. Nausea, abdominal pain, and diarrhea were being referred to less than others. We found a strong association between the loss of taste or smell and positivity for confidence interval (CI) 95% p value resulted 0.003.

Some of patients presented serious symptoms such as breathing difficulty or shortness of breath, severe viral pneumonia and respiratory failure and most of them (146 patients) were hospitalized in hospital for more than 10 days.

Another main question was the time when the clinical symptoms were start. Most of positive analyzed cases had referred in their anamnesis that the clinical symptoms had been start 3–5 days (397/525 cases), in second place were the patients that referred the started symptoms for 5–10 days (165/298) not patients that referred those symptoms were started more than 10 days before that comes to be tested were 41/205 cases.

## Discussion

This virus affected Albania in the early stages of its emergence before the WHO declared it a global pandemic. The first case confirmed for SARS-COV-19 in Albania was in March 8, 2020, and for about 3 months, all our country, especially the capital city of Albania, was lockdown. After the period of lockdown, the vast majority of people wanted to return to a normal life and start their work as usual. Consequently, the number of cases in our country increased as a result of the large exposure that people had. At this time, people were more panicked by what was surrounding them and so the necessity for RT-PCR testing of suspected SARS-COV-19 cases were very high, so, for those reasons, the American Hospital Laboratory was allowed to perform the RT-PCR test in the diagnosis of SARS COV-19 only in August 2020.

The prevalence of SARS COV-19 in 1205 suspected patients resulted 31.1%. The WHO suggests that the virus spreads mainly between the people who are in close contact with each other, typically within 1 m [13]. Hence, based to the WHO guideline, our public health authorities recommend that people need to practice social distancing, especially for the persons that presented symptoms of coronavirus disease (COVID-19). The social distancing varies with age, so this recommendation was much needed for older people because they are more at risk for serious illness if they become infected. Furthermore, if we compared the old patients (aged ≥60 years) and the young patients (≤ 50 years), the older patients had much more severe disease and a higher rate of respiratory failure and needed more prolonged treatment and about the treatment the older patients showed poorer response than the younger age group [14].

In our study, the average age resulted 42.17±18.6 years old. STDV with min 1 years old and max 93 age old. The most predominant positivity among the age group resulted the age groups 31–40 years old and 41–50 years old with positivity 17.3% and 16.3%, respectively. A significant association were being found between the positivity of cases and age groups for CI 95% p value resulted to be = 0.01. These age groups are the most active age which for work and/or socioeconomic reasons was forced to go outside the house and consequently to come in contact with people who may have been or were infected with COVID-19 [15].

Our findings are similar with another study present by Goujon *et al*. In their paper, they showed that the cumulative number of diagnosed positive cases is particularly large among the population between 35 and 65 years of age.

This group which consists mostly of a population of working-age represents 50% of confirmed positive cases, indicating that the infection does not only affect the elderly (75+ age-group is 20 percent of all cases) [16].

If we compared the positivity between men and women in our study, we see a difference. 56.35% of all tested cases were male and 43.65% were female. The positivity of male was very high compared to female 61.6% and 38.4%, respectively. Men were 1.36 times in risk to contaminate and consequently be positive for COVID-19. A strong association was found for CI 95% [1.06 to 1.75] p value resulted 0.013.

Based to other study, this predominance of positive men compared to female is associated sociocultural and physiological factor and combination of genetic. The same result was reported by Elimian *et al*. (2020) and de Lusignan *et al*. (2020) [17], [18].

85.1% (1025/1205) of the patients anamnesis were reported at least 1 symptom of SARS VOV-19 and other 14.9% (180/1205) of patients sought to be analyzed for fear of being infected or having been in close contact with a person resulted as positive cases for COV-19.

Clinical manifestations of COVID-19 are very complicated because the initial symptoms of the disease are usually nonspecific for consequence the diagnosis of this virus is too difficult. Some studies have explained that the wide spectrum of clinical symptoms, research on biomarkers, and clinical criteria predicting prognosis have high priority to enable differentiating cases that require further interventions in the early phase of the disease [19] [20], [21]. A large number of our cases have been presented to our laboratory with mild common cold symptoms such as temperature and fever, sore throat, tiredness, dry cough, headaches or body aches. However, some of cases presented to the emergency unit in America Hospital have the clinical manifestations that were worsen after some days after the first symptoms start.

## Conclusion

The COVID-19 pandemic turned out to be a major global challenge for humanity and the medical community in particular. This situation brought to our attention that the communicable diseases must never be underestimated. Furthermore, SARS COV-19 in the early stages of the disease is a lot contagious, for this reason, the screening of people with symptoms is recommended to determine who should be quarantined and be tested. In this manner, we can decrease the rate of infection and protect healthy people from the risk of infection.

### *Limitation*

In detail, our scientific study presents several limitations. The clinical diagnosis of COVID-19 for outpatients is notoriously hard as the symptoms are variable and overlap with many other similar conditions. All patients in this study were not tested for other potential viral pathogens. For this reason, we have considered symptomatic all patients that during the anamnesis, have referred at least one symptom of COVID-19. Despite the statements, we cannot be sure if the clinical symptoms referred by outpatients were real or not. Due to panic of the immediate lockdown, the paralysis of a normal life brought much fear to most people. This situation pushed them toward to test for SARS-COV-19 and presenting various signs like headache or general tiredness and muscle pains.

In the hospitalized patients, this situation was very clear because we have an illustration of the clinical aspect confirmed by medical staff.

## Acknowledgments

## References

1. Li Q, Guan X, Wu P, Wang X, Zhou L, Tong Y, *et al*. Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. N Engl J Med. 2020;382:1199-207. https://doi.org/10.1056/NEJMoa2001316.3.

2. Centers for Disease Control and Prevention. CDC 2019 Novel Coronavirus, Wuhan, China. Atlanta, Georgia: Centers for Disease Control and Prevention; 2020. Available from: https://www.cdc.gov/coronavirus/2019-nCoV/summary.html [Last accessed on 2020 Feb 01].

3. World Health Organization. Novel Coronavirus-China. Geneva: World Health Organization; 2020. Available from: https://www.who.int/csr/don/12-january-2020-novel-coronavirus-china/en [Last accessed on 2020 Feb 01].

4. Nicks BA, Wong O. Coronavirus Disease 2019 (COVID-19): A Global Crisis. Available from: https://www.medscape.com/slideshow/2019-novel-coronavirus-6012559 [Last accessed on 2020 Apr 02].

5. Chatterjee P, Nagi N, Agarwal A, Das B, Banerjee S, Sarkar S, *et al*. The 2019 novel coronavirus disease (COVID-19) pandemic: A review of the current evidence. Indian J Med Res. 2020;151(2-3):147-59. https://doi.org/10.4103/ijmr.ijmr_519_20
   PMid:32362642

6. Singhal T. A review of coronavirus disease-2019 (COVID-19). Indian J Pediatr. 2020;87:281-6. https://doi.org/10.1007/s12098-020-03263-6
   PMid:32166607

7. World Health Organization. Corona-virus Disease (COVID-19) Outbreak. Geneva: World Health Organization. Available from: https://www.who.int/[Last accessed on 2021 Feb 16].

8. World Health Organization. Novel Coronavirus (2019-nCoV) Situation Report-12. Geneva: World Health Organization; 2020. p. 7.

9. Wong SH, Lui RN, Sung JJ. COVID-19 and the digestive system. J Gastroenterol Hepatol. 2020;35:744-8.

10. Yan CH, Faraji F, Prajapati DP, Boone EC, DeConde AS. Association of chemosensory dysfunction and COVID-19 in patients presenting with influenza-like symptoms. Int Forum Allergy Rhinol. 2020;10(7):806-13. https://doi.org/10.1002/alr.22579
    PMid:32279441

11. Oxley TJ, Mocco J, Majidi S, Kellner CP, Shoirah H, Singh IP, *et al*. Large-vessel stroke as a presenting feature of COVID-19 in the young. N Engl J Med. 2020;382(20):e60.

12. World Health Organization. Laboratory Testing For Coronavirus Disease (Covid-19) in Suspected Human Cases: Interim Guidance, 19 March 2020. Geneva: World Health Organization.

2020. p. 7. Available from: https://www.who.int/publications-detail/laboratory-testing-for-2019-novel-coronavirus-in-suspected-human-cases-20200117 [Last accessed on 2021 Apr 02].

13. World Health Organization. Available from: https://www.who.int/emergencies/diseases/novel-coronavirus-2019 [Last accessed on 2021 Apr 02].

14. Canning D, Karra M, Dayalu R, Guo M, Bloom DE. The association between age, COVID-19 symptoms, and social distancing behavior in the United States. Preprint. medRxiv. 2020;2020:1-23. https://doi.org/10.1101/2020.04.19.20065219. PMid:32511621

15. Salzberger B, Buder F, Lampl B, Ehrenstein B, Hitzenbichler F, Holzmann T, *et al.* Epidemiology of SARS-CoV-2. Infection. 2021;49(2):233-9. https://doi.org/10.1007/s15010-020-01531-3 PMid:33034020

16. Goujon A, Natale F, Ghio D, Conte A, Dijkstra L. Age, Gender, and Territory of COVID-19 Infections and Fatalities, EUR 30237 EN. Luxembourg: Publications Office of the European Union; 2020.

17. Elimian KO, Ochu CL, Ebhodaghe B, Myles P, Crawford EE, Igumbor E, *et al*. Patient characteristics associated with COVID-19 positivity and fatality in Nigeria: Retrospective cohort study. BMJ Open. 2020;10(12):e044079. https://doi.org/10.1136/bmjopen-2020-044079

PMid:33334842

18. de Lusignan S, Dorward J, Correa A, Jones N, Akinyemi O, Amirthalingam G, *et al*. Risk factors for SARS-CoV-2 among patients in the Oxford Royal College of General Practitioners Research and Surveillance Centre primary care network: A cross-sectional study. Lancet Infect Dis. 2020;20(9):1034-2. https://doi.org/10.1016/s1473-3099(20)30371-6

PMid:32422204

19. Kolifarhood G, Aghaali M, Saadati HM, Taherpour N, Rahimi S, Izadi N, *et al*. Epidemiological and clinical aspects of COVID-19; A narrative review. Arch Acad Emerg Med. 2020;8(1):e41.

PMid:32259130

20. Wong JEL, Leo YS, Tan CC. COVID-19 in Singapore-current experience: Critical global issues that require attention and action. JAMA. 2020;323(13):1243-4. https://doi.org/10.1001/jama.2020.2467

PMid:32077901

21. Aggarwal S, Garcia-Telles N, Aggarwal G, Lavie C, Lippi G, Henry BM. Clinical features, laboratory characteristics, and outcomes of patients hospitalized with coronavirus disease 2019 (COVID-19): Early report from the United States. Diagnosis (Berl). 2020;7(2):91-6. https://doi.org/10.1515/dx-2020-0046

PMid:32352401