



VARIED CLINICAL PRESENTATIONS OF COVID-19 IN PREGNANT WOMEN

Amna Begum¹, Arifa Jabeen^{2*}, Tasneem Kousar³, Israr Ali khan⁴

¹Assistant Professor, Pir Sayed Abdul Qadir Shah Jilani Institute of Medical Sciences, Gambat

^{2*}Assistant Professor, Pir Sayed Abdul Qadir Shah Jilani Institute of Medical Sciences, Gambat

³Medical Officer, Lahore Cantonment General Hospital, Lahore

⁴Assistant Professor of Urology Khalifa Gul Nawaz Medical Teaching Institute Bannu Medical College, Bannu

***Corresponding author:** Arifa Jabeen

*Assistant Professor, Pir Sayed Abdul Qadir Shah Jilani Institute of Medical Sciences, Gambat
Email: arifabalouch@yahoo.com

ABSTRACT

Background: Globally, we are seeing one of the most severe health-related tragedies of the century is Covid-19. It is a unique disease with a plethora of unanticipated consequences.

Objective: The aim of the study was to explore Varied Clinical Presentations of COVID-19 in Pregnant Women.

Methodology: The current study was conducted at Pir Sayed Abdul Qadir Shah jilani institute of medical sciences Gambat. The duration of our study was one year from January 2020 to January 2021 after taking the approval from the ethical committee of the institute. A total of 40 suspected and probable Covid-19 pregnant participants were enrolled in the present study while Covid -19 negative individuals were excluded. SPSS software, version-20D was used for data analysis. The symptoms of the study participants were presented as frequency and percentage.

Results: A total of 40 pregnant women presented with the symptoms of covid-19 were included in this study. Majority of the patents showed symptoms of Covid -19 25(62.5%) while 13(32.5%) had not .Various parameters including history of contact and symptoms of the study population were presented as frequency and percentage. The individuals displayed a range of Covid-19 symptoms. The majority of patients 25(62.5%) experienced a fever, and there were also minor symptoms.

Conclusion: We came to the conclusion that the clinical presentation of COVID-19 pregnant individuals is comparable to that of other parts of the world and the general population. To comprehend its variety in symptoms and severity, additional research with a greater number of participants would be necessary.

Key words: Clinical Presentations; COVID-19; Pregnant Women

INTRODUCTION

The disease that the SARS-CoV2 virus causes is called COVID-19. The Chinese province of Hubei, namely Wuhan, is where the epidemic originated. The initial case was documented on December 31, 2019.¹ It quickly swept over the region. China has effectively controlled this quickly spreading illness by enforcing travel restrictions to other areas and implementing lock down. Unfortunately, though, this illness spread over the world and began to impact a great number of individuals. On

January 30, 2020, the World Health Organization (WHO) designated this illness as a Public Health Emergency of International Concern (PHEIC).² This terrible disease has spread to 216 nations as of May 31, 2020, affecting 5,939,234 people as documented cases and 367,255 losses that have been reported.³ Over time, some individuals came to believe that this sickness was made up or nonexistent, however a substantial amount of individuals have been affected by it. Their lives are restricted, they are hesitant to interact with one another, lead a life inactive, and they experience mild depression.⁴⁻⁵ Individual variations exist in the disease's clinical appearance. Many people may misidentify the illness as the common cold, and in certain cases, it can be serious enough to cause death. During this whole time, a variety of new scientific discoveries, information, and treatment approaches have been disseminated.⁶ During the previous SARS and N1N1 pandemics, pregnant patients were more vulnerable and experienced a higher death rate than the whole population.⁷ However, there is little information available on the clinical signs and symptoms of COVID-19 in mothers and newborns.⁸ therefore the current study was conducted to determine the varied clinical presentations of covid-19 in pregnant women in Pakistan.

METHODOLOGY

The current study was conducted at Pir Sayed Abdul Qadir Shah jilani institute of medical sciences Gambat. The duration of our study was one year from January 2020 to January 2021 after taking the approval from the ethical committee of the institute. A total of 40 suspected and probable Covid-19 pregnant participants fulfilling the criteria as presented in the table 1 were enrolled in the present study while Covid -19 negative individuals were excluded .

Statistical analysis of data

SPSS software, version-20D was used for data analysis. The symptoms of the study participants were presented as frequency and percentage.

RESULTS

A total of 40 pregnant women presented with the symptoms of covid-19 were included in this study. Majority of the patents showed symptoms of Covid -19 25(62.5%) while 13(32.5%) had not .Various parameters including history of contact and symptoms of the study population were presented as frequency and percentage (table 2). The individuals displayed a range of Covid-19 symptoms. The majority of patients 25(62.5%) experienced a fever, and there were also minor symptoms as shown in table 3.

Table-1: Suspect of Corona (Inclusion Measures)	
Criteria	Score
Specific regions travel history(Karachi , Muzaffargarh, UAE China, Kuwait Saudi Arabia, UK , Italy, , Dubai, and USA,) n the last 14 days before the appearance of symptoms	2
Breathing problems	1
Symptoms of flue	1
Pains and aches of the body	1
Fever	1
Cough	1
Conformed covid-19 individual exposure	1
Heath care person	1

Table 2: common appearances of the study population (N=40)		
Variables	Categories	N (%)
Symptoms	Yes	25(62.5)
	No	13(32.5)
History of contact	Yes	16(40.0)
	No	22(55)

Table-3: Overall distribution of symptoms of Covid-19 in the study participants (n=40)		
Variables	Categories	N (%)
Symptoms	High fever	25(62.5)
	Rapid cough	17(42.5)
	Gastro intestinal problems	12(30)
	Respiratory distress	10(25)
	Flue like symptoms	9(22.5)

DISCUSSION

We are seeing one of the greatest health-related tragedies of the century on a global scale. Covid-19 is a unique illness with a plethora of unexplored possibilities. In the current study we explored the clinical presentations of covid-19 in 40 pregnant women. A similar study was conducted by I Poon L C et al. in 2020 in china wherein 56 pregnant patients who presented in the second and third trimesters of pregnancy were found to be Covid positive. The majority of these patients had fever and cough as their presenting symptoms, and most of them also had a positive contact history.⁹

According to a research by Zaigham M. et al., which comprised 22 Covid-19-positive pregnant women from China, the USA, Korea, and Honduras, 20% of the patients were in the first trimester and 80% were in the third. Sixty-eight patients (68%) having fever, 34% showed severe coughing, and 12% observed severe difficulty in breathing.⁶ these results are comparable to those of our research, in which (62.5%) of patients had a fever, (42.5%) had cough, and 25% had respiratory distress when they first appeared. In the third trimester of their pregnancies, 38 pregnant Covid-19 positive individuals were reported by Schwartz DA et al., and 78% of these patients had a fever. At the time of presentation, 44% of patients had a cough, and 11% experienced respiratory distress.¹⁰ A significant study involving 121 pregnant individuals who tested positive for COVID-19 was published by Li N et al. The results showed that relatively few of the patients had fever and cough.⁸

This is in contrast to the majority of research reported in the literature, in which fever, coughing, and respiratory distress were the most common presentations among the patients. In a limited series of 15 Covid-19 positive pregnant patients published by Liu D et al., 13% of the patients claimed having contact with a Covid-19 positive person; in our study, however, 25% of the patients reported having contact with a Covid-19 positive person in the past.¹¹

The clinical presentation of Covid-19 illness in the general population includes fever, coughing, respiratory discomfort, anosmia, headaches, rhinorrhea, and gastrointestinal symptoms, according to a number of previous investigations. The most typical symptom in mild to severe patients was fever. Fever was the first symptom to appear in 45.4% of patients in the biggest cohort study in Europe.¹² However, in two of the largest studies conducted in China, fever accounted for 80% of the Covid-19 instances.¹³⁻¹⁴ The second most prevalent symptom across all studies was cough, which varied between 63.2% and 65.7% in China and Europe.¹²⁻¹⁴ In more severe instances of Covid-19 illness, respiratory discomfort was noted.¹⁵⁻¹⁷ Notable signs and symptoms of Covid-19 in the general population include gastrointestinal issues and rhinorrhea.¹⁶⁻²⁰ Desmond Sutton and his coworkers reported their results, which were published in The New England Journal of Medicine, regarding obstetric patients. 1.9% of the SARS-CoV2 positive patients had symptoms, 13.5% had no symptoms, and 84.6% of patients had no SARSCoV2 infection.²¹ in our study Majority of the patents showed symptoms of Covid -19 (62.5%) while (32.5%) were a symptomatic.

CONCLUSION

We came to the conclusion that the clinical presentation of COVID-19 pregnant individuals is comparable to that of other parts of the world and the general population. To comprehend its variety in symptoms and severity, additional research with a greater number of participants would be necessary.

REFERENCES

1. Panahi L, Amiri M, Pouy S. Risks of Novel Coronavirus Disease (COVID-19) in Pregnancy; a Narrative Review. *Arch AcadEmerg Med*. 2020; 8(1): e34.
2. Zhu N, Zhang D, Wang W, Li X, Yang B, Song J, et al. A novel coronavirus from patients with pneumonia in China, 2019. *New England Journal of Medicine*. 2020.
3. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
4. O'Connor C, Murphy M. Going viral: doctors must tackle fake news in the covid-19 pandemic. *bmj* 2020; 369: m1587.
5. Zhou SJ, Zhang LG, Wang LL, Guo ZC, Wang JQ, Chen JC, Liu M, Chen X, Chen JX. Prevalence and socio-demographic correlates of psychological health problems in Chinese adolescents during the outbreak of COVID-19. *European Child & Adolescent Psychiatry* 2020; 1-10.
6. Zaigham M, Andersson O. Maternal and perinatal outcomes with COVID-19: A systematic review of 108 pregnancies. *Acta obstetrica et gynecologica Scandinavica*.2020 Apr 7: 823-829
7. Rasmussen SA, Jamieson DJ, Bresee JS. Pandemic influenza and pregnant women. *Emerg Infect Dis* 2008; 14: 95–100.
8. Li N, Han L, Peng M, Lv Y, Ouyang Y, Liu K, Yue L, Li Q, Sun G, Chen L, Yang L. Maternal and neonatal outcomes of pregnant women with COVID-19 pneumonia: a case-control study. *Clinical infectious diseases*. 2020 Jan 1: 2035-2041.
9. Poon LC, Yang H, Kapur A, Melamed N, Dao B, Divakar H, McIntyre HD, Kihara AB, Ayres-de-Campos D, Ferrazzi EM, Di Renzo GC. Global interim guidance on coronavirus disease 2019 (COVID-19) during pregnancy and puerperium from FIGO and allied partners: Information for healthcare professionals. *International Journal of Gynecology & Obstetrics*. 2020 Jun; 149(3):273-86.
10. Schwartz DA. An analysis of 38 pregnant women with COVID-19, their newborn infants, and maternal-fetal transmission of SARS-CoV-2: maternal coronavirus infections and pregnancy outcomes. *Archives of pathology & laboratory medicine*. 2020 Jul; 144(7):799-805.
11. Liu D, Li L, Wu X, Zheng D, Wang J, Yang L, Zheng C. Pregnancy and perinatal outcomes of women with coronavirus disease (COVID-19) pneumonia: a preliminary analysis. *American journal of roentgenology*. 2020 Mar 18:1-6.
12. Lechien, Jerome R. Clinical and Epidemiological Characteristics of 1,420 European Patients with mild-to-moderate Coronavirus Disease 2019. *Journal of internal medicine* (0954-6820) [Internet] 2020 April. [Cited 2020 May 11]; DOI: <https://doi.org/10.1111/joim.13089>
13. Feng Y, Ling Y, Bai T, et al. COVID-19 with Different Severity: A Multi-center Study of Clinical Features. *Am J Respir CritCare Med*. 2020;10.1164/rccm.202002-0445OC. [Internet] 2020 April. [Cited 2020 May 11]; DOI: 1007/s00405-020-05965-1
14. ChenL, Deng C, Chen X, et al. Ocular manifestations and clinical characteristics of 534 cases of COVID-19 in China: A cross-sectional study. *medRxiv* 2020;2020.03.12.20034678. [Internet] 2020 March. [cited 2020 May 11]; DOI:<https://doi.org/10.1101/2020.03.12.20034678>
15. Tian S, Hu N, Lou J et al., Characteristics of COVID-19 infection in BeXuijing. *Journal of Infection* [Internet]. 2020 Feb [cited 2020 Mar 23]; 80: 401–406DOI: <https://doi.org/10.1016/j.jinf.2020.02.018>
16. Chen J, Qi T, Liu L et al., Clinical progression of patients with COVID-19 in Shanghai, China, *Journal of Infection*, [Internet]. 2020 Mar [cited 2020 Mar23]; <https://doi.org/10.1016/j.jinf.2020.03.004>
17. Young BE, Ong SWX, Kalimuddin S, et al. Epidemiologic Features and Clinical Course of Patients Infected With SARSCoV-2 in Singapore. *JAMA*. [Internet].2020 Feb [cited 2020 Mar 23]; doi:10.1001/jama.2020.3204

18. Yang W, Cao Q and Qin L, et al., Clinical characteristics and imaging manifestations of the 2019 novel coronavirus disease (COVID-19): A multi-center study in Wenzhou city, Zhejiang, China. *Journal of Infection* [Internet]. 2020 Feb [cited 2020 Mar 23]; 80 (2020) 388–393. DOI:<https://doi.org/10.1016/j.jinf.2020.02.016>.
19. Chang, Tu-Hsuan et al. Clinical characteristics and diagnostic challenges of pediatric COVID-19: A systematic review and meta-analysis. *Journal of the Formosan Medical Association* (0929-6646), 119 (5), p. 982. [Internet] 2020 April. [Cited 2020 May 11]; DOI: <https://doi.org/10.1016/j.jfma.2020.04.007>
20. Shen, Q. et al. Novel coronavirus infection in children outside of Wuhan, China. *Pediatric pulmonology* (8755-6863), 55 (6), p. 1424.[Internet] 2020 April. [Cited 2020 Ma 11];
21. Sutton D, Fuchs K, D'alton M, Goffman D. Universal screening for SARS-CoV-2 in women admitted for delivery. *New England Journal of Medicine* 2020; 382 (22):2163-2164