ORIGINAL ARTICLE

Varied Clinical Presentations of COVID-19 in Pregnant Women in Tertiary Care Hospital of Lahore-Pakistan

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ABSTRACT

Background: The whole world is facing one of the biggest health related disasters of the century. As a novel disease, Covid-19 has so many parameters yet to explore.
Aim: To explore varied pattern of clinical presentation of COVID-19 in obstetric population in tertiary care hospital.
Study design: Cross-sectional study.
Methodology: This study with enrolled pregnant females (n=36) was carried out after ethical review committee's (ERC) approval at Department of Gynecology & Obstetrics, Sir Ganga Ram Hospital, Lahore-Pakistan over a period of 3 months in 2020. Data was analyzed by SPSS software, version-20. Presenting symptoms of subjects were presented as frequency and percentage.
Results: Total 36 patients were selected. Twenty four (66.66%) patients were symptomatic while the rest 12 (33.33%) patients were asymptomatic.
Conclusion: We concluded that clinical presentation of COVID-19 pregnant patients is similar as in rest of the world and it is also same as in general population.
Keywords: Covid-19, Pregnant Patients and Clinical Presentation.

INTRODUCTION

COVID-19 is the disease caused by SARS-CoV2 virus. This disease started in Wuhan, in the province of Hubei, China. The first case was reported on 31 December 2019[1]. It spread rapidly throughout the area. China has successfully taken control over this rapidly evolving disease by travel restrictions to other provinces and effective lock down. But unfortunately this disease became a pandemic affecting a large number of people worldwide. World health organization (WHO) has declared this disease as Public Health Emergency of International Concern (PHEIC) on January 30, 2020[2]. Up till 31 May 2020, this disastrous disease has spread across 216 countries, affected 5,939,234 persons as confirmed cases and 367,255 deaths have been declared[3]. With the passage of time, some people regarded this disease as fictitious and non existing[4] but a large number of people have been over whelmed by the disease. They have limited their lives, afraid to meet each other, live a dormant life and somewhat suffer a depressive state of mind[5]. The clinical presentation of the disease varies from person to person. The disease may be misidentified as common cold in majority of the people and may prove fatal enough to lose their lives in some individuals. A number of new scientific information, finding and treatment modalities are continued to be shared throughout all of this period[6]. In the earlier pandemics of SARS and N1N1, the obstetric patients were at major risk and suffered a large number of mortality then the rest of general population.[7] But the data about the maternal and neonatal clinical signs and symptoms of the COVID-19 is limited[8].

The objective of the study was to explore the varied pattern of clinical presentation of COVID-19 in the obstetric population in tertiary care hospital of Pakistan.

METHODOLOGY

This study with enrolled pregnant females (n=36) was carried out after ethical review committee's (ERC) approval at Department of Gynecology & Obstetrics, Sir Ganga Ram Hospital, Lahore-Pakistan over a period of 3 months in 2020. All suspected and probable Covid-19 pregnant patients fulfilling the following criteria (table-1) were enrolled while Covid-19 negative cases were excluded. Ethical approval was given from Ethical Review Committee.

Table-1: Suspect of Corona (Inclusion Criteria)

Criteria	Score
Travel history of specific places(Sindh, Muzaffargarh, China, Saudi Arabia, Iran, Taftan, Italy, USA, UK, Dubai, Kuwait and UAE) in the last 14 days prior to onset of symptoms	2
Breathing difficulty	2
Flu Symptoms	1
Body aches and pains	1
Dry Cough	1
Fever	1
Exposure to confirmed Corona patient	1
Healthcare Worker	1

Statistical analysis: Data was analyzed by SPSS software, version-20. Presenting symptoms of subjects were presented as frequency and percentage.

RESULTS

Distribution of parameters like symptoms and history of contact among patients in present study were presented as frequency and percentage in table-2.

Table 2: General features of enrolled subjects (n=36)

Variables	Categories	Frequency	%age
Symptoms	Yes	24	66.7
	No	12	33.3
History of Contact	Yes	15	41.6
	No	21	58.4

Patients presented with variable symptoms of Covid-19. Majority of Patients 24(66.7%) had fever while other minute symptoms were present too as shown in table-3.

Table-3: Overall distribution of symptoms of Covid-19 among subjects (n=36)

Variables	Categories	Frequency	%age
Symptoms	Fever	24	66.7
	Cough	16	44.4
	Gatro-intestinal issues	11	30.5
	SOB	9	25
	Flue	8	22.22

DISCUSSION

Poon L C et al conducted a study in 2020 in China where fifty six pregnant patients presenting in 2nd and 3rd trimester of pregnancy were diagnosed as Covid positive and fever and cough was the presenting feature in majority of the cases and a contact history was also positive in most of the cases[9]. Zaigham M et al presented a study from China, USA, Korea and Honduras where 22 Covid-19 positive pregnant patients were included, 20% were in 1st trimester whereas 80% presented in 3rd trimester. Sixty eight (68%) patients presented with fever, 34% reported with cough whereas 12% reported with respiratory distress[6]. These findings are similar to our study where 66.66% patients represented with fever, 44.44% patients had cough and 25% patients had respiratory distress at the time of presentation. Schwartz DA et al reported about 38 pregnant Covid-19 positive patients in 3rd trimester of pregnancy where 78% patients reported with fever. 44% presented with cough and 11% had respiratory distress at presentation.[10] Li N et al published a large series of 121 Covid-19 positive pregnant patients with a contrasting result where very few patients presented with fever and cough.[8] This is in contrast to most of the studies in literature where most of the patients presented with fever, cough and respiratory distress. Liu D et al presented a small series of 15 Covid-19 positive pregnant patients where 13% patients reported a contact with a Covid-19 positive person whereas in our study, 25% patients had a history of contact with Covid-19 positive person[11].

Various studies conducted in past have revealed that clinical presentation of Covid-19 disease in general population include fever, cough, respiratory distress, anosmia, headaches, rhinorrhea and gastrointestinal symptoms. Fever was the most common symptom in mild to moderate cases. In largest cohort study in Europe, fever was the presenting feature in 45.4% cases[12]. Whereas in 2 largest studies in China, fever was representing feature in

80% of the Covid-19 cases[13,14]. Cough was the second most common symptom observed in all studies and ranged from 63.2% to 65.7% in Europe and China[12-14]. Respiratory distress was reported in more severe cases of Covid-19 disease[15-17]. Other symptoms of Covid-19 disease in general population include rhinorrhea[16-18] and gastrointestinal symptoms[19,20].

Desmond Sutton and his co researchers stated their findings published in The New England Journal of Medicine about obstetrical patients where 1.9% of the SARS-CoV2 positive patients have presented with symptoms while 13.5% of the SARS-CoV2 positive patients were asymptomatic while 84.6 % patients didn't have SARS-CoV2 infection.[21] In our study out of total 4360 obstetrical patients 0.55% patients were symptomatic 0.27% patients were asymptomatic

Limitations: Our study had limitations like financial constraints, lack of resources and small sample size.

CONCLUSION

We concluded that clinical presentation of COVID-19 pregnant patients is similar as in rest of the world and it is also same as in general population. However, more studies with larger sample size will be required to understand its variability in symptoms and seriousness.

Authors' Contribution: SA & MG: Conception and design of work, TT & ZH: Collecting and analyzing the data, MM & MZ: Drafting the manuscript, TL: Drafting and revising the manuscript for intellectual content.

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