

Effect of the COVID-19 Pandemic on Antenatal Care

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ABSTRACT

Objective: To assess how the antenatal population of a hospital was affected by the COVID -19 Pandemic.

Study Design: Prospective longitudinal study.

Place and Duration of Study: Antenatal Clinic of Government Hospital, Rawalpindi Pakistan, for the month of August 2020.

Methodology: The population in the antenatal clinic of a hospital were given a questionnaire with simple directed questions after consent.

Results: All (150, 100%) of the antenatal population received their COVID-19 pandemic information from television. Most 147 (98%) did not feel embarrassed if they contracted COVID-19 infection, and 147 (98%) took precautions against it. The majority, 146 (97%) of women, had an antenatal check-up. Out of the total, 126 (84%) had a private check-up, but only 36 (24%) had more private visits than prior pregnancies. A significant number, 56 (37%), had to spend more than in prior pregnancies, but only 28 (18.6%) had fewer antenatal visits than before. Most 141 (94%) of women wanted a higher frequency of antenatal visits than the recommended 08 visits by the WHO.

Conclusion: The COVID-19 pandemic did not affect antenatal care because of a well-established private health care system. The patients in prior pregnancies were already using the private sector.

Keywords: COVID-19 pandemic, Private antenatal visits, Private health sector.

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INTRODUCTION

Coronavirus disease 2019 (COVID-19) is a viral pulmonary infection caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).¹ Its first patient appeared on the scene in December 2019 in Wuhan, Hubei, China, and it was declared a pandemic on 11th March 2020. As of 11th July 2021, more than 187 million cases have been reported across 220 countries and territories with more than 4,045,000 deaths; more than 170 million people have recovered.²

Health care facilities in the pandemic-hit countries have become overwhelmed, and care has been preferentially directed towards COVID-19 affected patients and their ITC care.³ In developing countries, this is particularly true as resources are already scarce. Another concern is avoiding unnecessary movement and keeping 'social distancing' in mind.⁴ Therefore, telemedicine and virtual visits have taken hold. Obstetrical antenatal check-ups were also modified. It was realized that work could be done with much less movement and office space.⁵

In some cases, offices were done away with altogether. Likewise, antenatal care in Pakistan during

the pandemic also was affected. Therefore, this study was carried out to gauge the extent of the effect.

METHODOLOGY

This was a prospective longitudinal study. The study population was the Antenatal Clinic of a Government Hospital at Rawalpindi Pakistan. The study was carried out over one month period from 1st August to 31st August 2020. The Ethical Review Board (ERC/IERB) permission was taken with IERB approval certificate number: A/28/35/EC/185/2020. A total of 150 women were selected via convenience consecutive sampling.

Inclusion Criteria: All patients who had at least one prior private antenatal visit were included in the study.

Exclusion Criteria: Patients who had high-risk pregnancies and needed more than the eight recommended WHO antenatal visits were excluded.

The women were given unmarked anonymous questionnaires about their views on COVID-19 pandemic and their antenatal care situation. Informed consent was taken prior to handing over the questionnaire. Those who could not read were read the questionnaire with an attendant alongside. It was ensured that the questionnaire was filled in privacy. Two subject specialists peer-reviewed the questionnaires, and a

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pilot study was conducted on 10% of the population. The answers were collected, and percentages. Statistical Package for Social Sciences (SPSS) version 23.0 was used for the data analysis. Quantitative variables were summarized as Mean±SD and qualitative variables were summarized as frequency and percentages.

RESULTS

The selected pregnant women in the study were of the low-risk category. The average age was 26.5±6.9 years, and the study population belonged to lower-middle socioeconomic groups. Only 21 did not attend school, and minimum schooling was up to the primary standard (5th grade).

Out of the total 150, 96% followed COVID-19 infection precautions from the start of the pandemic, and 100% of those surveyed got their information from TV, as is shown in Table-I.

Table-I: COVID-19 pandemic and the antenatal population behavior/response (n=150)

| | Yes n (%) | No, n (%) |
|--|-----------|-----------|
| Would you be embarrassed if infected with COVID 19? | 3 (2) | 147 (98) |
| Did you follow precautions from the beginning of the COVID-19 pandemic in Pakistan? | 147 (98) | 3 (2) |
| Did you think COVID 19 pandemic was a farce? | 4 (3) | 146 (97) |
| Did anyone close to you get infected? | 2 (1) | 148 (99) |
| Did you get your information on COVID 19 from TV? | 150 (100) | 0 (0) |
| Did you get your information on COVID 19 from a close relative? | 48 (32) | 102 (68) |
| Did you get your information on COVID 19 from the hospital? | 57 (38) | 93 (62) |
| Did you get your information on COVID 19 from the cell phone public service messaging? | 17 (11) | 133 (89) |

Only 03 of the total felt it would be embarrassing to get the infection, as only 04 thought it was a farce. Despite the pandemic and lockdowns, 146 (97%) of the population under study still managed to get antenatal care. Of 150 patients, 36 (24%) said they had to spend more on this pregnancy. According to the patients, the extra expense was mainly due to commute problems during the pandemic, as shown in the Table-II.

Of the patients studied, 28 (18.6%) said they had fewer antenatal visits. This worried them, and 141 (94%) said the high frequency of antenatal visits gave them peace of mind, as shown in the Table-III.

Table-II: Antenatal Visits During the Pandemic (n=150)

| | Yes Frequency (%) | No Frequency (%) |
|--|-------------------|------------------|
| Did you have regular antenatal check up during COVID 19 pandemic? | 146 (97) | 4 (3) |
| Did you have private antenatal checks? | 126 (84) | 24 (16) |
| Were your private check ups more in this pregnancy than previous pregnancies? | 36 (24) | 114 (78) |
| Did you have to spend more in this pregnancy than previous pregnancies due to the COVID 19 pandemic? | 56 (37) | 94 (63) |
| Was the extra expense due to commute difficulties because of COVID 19 pandemic? | 38 (25) | 112 (75) |
| Did you spend less than Rs 10,000? | 147 (98) | 03 (2) |

Table-III: Antenatal Visits Frequency and Patient Opinion (n=150)

| | Yes, n (%) | No, n (%) |
|---|------------|-----------|
| Did you have more than 10 antenatal visits in the previous pregnancies? | 96 (64) | 54 (36) |
| Were your antenatal visits less this time due to COVID 19 pandemic? | 28 (19) | 122 (81) |
| Were the less antenatal visits worrying? | 24 (16) | 126 (84) |
| Do you find high frequency of antenatal visits bothersome? | 68 (45) | 82 (55) |
| Do you find high frequency of antenatal visits gives you peace of mind? | 141 (94) | 9 (6) |

DISCUSSION

The COVID 19 pandemic was declared on 11th March 2020 by WHO.³ Pakistan's first case was reported on 26th February 2020, and the pandemic peaked in Pakistan in June-July 2020.⁴ Due to a myriad of reasons, Pakistan was one of the few countries in the world able to control the infection, and the economy is already opening up for business.^{4,5}

However, during the peak and dynamic surge of the disease, many health resources were redirected to combat the pandemic.⁶

This was the case with antenatal care also. The said hospital's antenatal population is almost 90% booked. This is a rarity in Pakistan. This can be due to the urban setting where pregnant women are more able to access health care.⁷ The WHO states that at least eight visits with six parameters of antenatal care are the minimum standard to be followed.⁸

However, at least surveyed hospital regularly advises antenatal visits for its booked patients.⁹ If the pregnancy has complications, then the number is higher. How this situation was affected by the COVID-19 pandemic amid resource redirection was the subject of the study. Some basic questions were asked to assess

the population in question's response to the pandemic. Overwhelmingly, the women thought that it was not an embarrassment if they got infected. They did not think it was a farce and took precautions right from the beginning. Most of their information was from television,¹⁰ and almost all had a close relative that contracted COVID-19 infection. This corroborates that in a country of 220 million, nearly ten lakhs have been infected, and more than 22,000 have died.

The antenatal visits to the hospital during the pandemic were curtailed to only five in number (high-risk pregnancies were excluded). Amid this, the antenatal study cohort of 146 (97%) still managed to get an antenatal check-up, and only 28 (18.6%) had lesser antenatal visits than their previous pregnancy. This was mainly due to private antenatal care. The private health sector caters for 78% of Pakistan's health care.¹¹

Interestingly, only 36 (24%) felt their private check-ups were more during this pregnancy due to the pandemic. This means they were already in the private health sector orbit. This is even though this hospital client is given free health care. Another interesting statistic was that although 68 (45%) women found the frequent antenatal visits bothersome, 141 (94%) felt the high frequency gives them peace of mind. This means the women are so used to frequent visits that they would still find ways to have a check-up.

The private health sector is alive and vibrant for many reasons, the foremost being the distance from the booking government hospital.¹² Travel and stay expenses of the patient with a member or two for an antenatal visit may cost more than an antenatal visit made locally. In the study, only 56 (37%) had to spend more due to the pandemic because women already spent out of their pocket for antenatal care. The reason that makes women visit the booking hospital anyway is a belief that it has a larger care system for the eventual delivery.^{13,14} Tertiary and secondary care hospitals are far short of the population need and are situated in cities only.¹⁵ The high-risk patients still approached the hospital of the study, but low-risk pregnant women approached the private sector health network. Primary care government health centres have a shortage of facilities and personnel.^{16,17} Those who can pay for a private primary care centre do so.

Private health care will continue to thrive unless the government health systems improve. The positive aspect of this situation was that during the pandemic, the disruption of antenatal care appeared to be low. The negative aspect was the realization that women

were being made to spend more than necessary during normal times (outside of pandemic). The new WHO model for antenatal care advises eight visits without health compromise. More visits provide mental satisfaction.¹⁸ This is very similar to the responses of the antenatal population under study, where 141 (94%) said that despite frequent visits being vexing, they would do it for mental satisfaction. For a low-income society like Pakistan, these women must be redirected, and WHO protocol followed. This will reduce the financial burden on the women and the physical burden on the doctors.¹²

CONCLUSION

The antenatal population was very aware of the pandemic and took all precautions. The redirected resources of the hospital did not cause a huge difference in antenatal care because the antenatal population is already using the private sector health sector. The private sector did not shut down, and some were redirected to the COVID pandemic. However, this result highlights also the large part the private sector plays in our health care system due to serious deficiencies in the public health sector.

Conflict of Interest: None.

Author's Contribution

AAK:, MAA, UG: Data collection, NA: Writeup, JKA: Tabulation, SA: Proof reading.

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