

RESEARCH ARTICLE

Antenatal care of pregnant women during pandemic: A phenomenology studyLestari Sudaryanti¹, Amellia Mardhika², Arina Qona'ah³, Anastasia Pangestu Mei Tyas⁴, Chong Mei Chan⁵**Abstract**

Objective: To assess the experience of pregnant women related to antenatal care during the coronavirus disease-2019 pandemic.

Method: The qualitative interpretive phenomenology study was conducted from July to September 2022 in Lamongan General Hospital after approval from Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia. The sample comprised pregnant women at very high risk in the third trimester during the coronavirus disease-2019 pandemic. Data was collected from the medical records, and subsequently through semi-structured interviews. Data was analysed using the Braun and Clarke thematic analysis.

Results: Of the 19 subjects with a mean age of 33.3 ± 4.91 years, 11 (58%) had studied up to high school level and 16 (84%) were housewives. There were 5 themes that had a total of 14 sub-themes. The themes were fear of getting pregnant during a pandemic, afraid of losing her baby, losing the support system, adherence to health protocols, and differences in healthcare systems.

Conclusion: Pregnancy during the pandemic had an impact on the physical and mental health of women and turned into a terrifying experience. Health workers need to pay attention to the physical and psychological conditions of pregnant women, including antenatal care services that must be provided at least six times directly or by using telemedicine.

Keywords: Pregnancy, Prenatal care, Mental health, Anxiety, Telemedicine, Fear, COVID-19.

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Introduction

Coronavirus disease-2019 (COVID-19) in 2020 became a global pandemic, and it was found that 8.77% of pandemic-related deaths were of pregnant women who were COVID-19-positive.¹ These deaths added to the number of maternal mortality cases in Indonesia, where the maternal mortality rate (MMR) is an indicator of an assessment of the degree of health in the community and an assessment of maternal health programmes. The MMR in Indonesia was high from 1991 to 2015, ranging from 390 to 305 per live births. Based on a model established by the Ministry of Health of the Republic of Indonesia, the MMR is estimated to fall to 131 per 100,000 live births.² Based on Indonesia Demographic and Health Survey (IDHS) done in 2015, the MMR was 359 per 100,000 live births.³ Despite a number of efforts by the government, the MMR has not been on track to achieve the target set by the Sustainable Development Goals (SDGs),⁴ according to which, MMR should be <70 per 100,000 births by 2030.⁵ According to the Indonesian Obstetrics and Gynaecology Association (POGI), 536 pregnant women tested positive for COVID-19 from April 2020 to April 2021, and 3% of them died.⁶ During the pandemic, pregnant women have a higher risk of developing serious illnesses.⁷

The prevalence of anxiety and depression in pregnant women increased significantly during the epidemic. To reduce the possibility of anxiety and depression in pregnant women, social support, physical activity and some psychological interventions are needed.⁸ Staying at home was a choice during the active phase of the pandemic,⁹ but pregnant women needed to go out for antenatal care,¹⁰ which added to their risk and caused an increase in mortality.¹¹

Efforts were needed to overcome the issue by way of, among other things, self-isolation for the sick.¹² The risk of pregnant women can be screened using the Poedji Rochjati Scorecard.¹³ Pregnant women, who are at very high risk, have risk factors for the mother and the foetus, and it is possible for an emergency to occur during pregnancy and childbirth.¹⁴ When visiting health facilities during a pandemic, pregnant women must observe all health protocols.¹⁵ Even though they get a lot of information through the mass media, pregnant women feel worried about going to the hospital.¹⁶

The current study was planned to assess the experiences of pregnant women related to antenatal care during the COVID-19 pandemic.

Materials and Methods

The qualitative interpretive phenomenology¹⁷⁻¹⁹ study was conducted from July to September 2020 at the Lamongan

^{1,2,4}Department of Vocational Studies, Universitas Airlangga, Surabaya, Indonesia; ³Department of Nursing, Universitas Airlangga, Surabaya, Indonesia; ⁵Department of Nursing, University of Malaya, Kuala Lumpur, Malaysia.

Correspondence: Arina Qona'ah. email: arina-qonaah@fkip.unair.ac.id

General Hospital after approval from Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia. The sample, raised using purposive sampling technique, comprised pregnant women at very high risk in the third trimester during the COVID-19 pandemic.

The risk was calculated using Poedji Rochjati Scorecard, a standard antenatal screening tool to find risk factors for pregnant women¹³. The sample size was not determined and subjects were enrolled till data saturation²⁰.

After taking informed consent from the participants, data was collected from the medical records, and subsequently through semi-structured in-depth interviews. Interview guidelines were pilot-tested before application. Interviews were conducted for 30-60 minutes at a place and time mutually agreed upon by the participants and the data-collectors. All interviews began with the question, "How do you feel getting pregnant at very high-risk during pandemic?" All further questions were based on participant's response to the first question. Data was complemented by notes about the date, time and information about the atmosphere during the interview.

All interviews were transcribed verbatim and data was analysed using thematic analysis.²¹ Initial codes were generated by marking key words that led to the formation of categories, and subsequently to themes.

Data credibility, dependability, confirmability, transferability and stability was ensured by sharing the data with the participants and by involving relevant experts.^{17,21,22}

Results

Total of the 19 subjects with a mean age of 33.3 ± 4.91 years, 11(58%) had studied up to high school level and 16(84%) were housewives (Table 1). There were 5 themes that had a total of 14 sub-themes (Table 2).

The first theme was fear of getting pregnant during a pandemic that was experienced by women related to problems with themselves and the foetus.

The first sub-theme was risk for transmission. Most of the participants were fearful, particularly about the possible consequences for the foetus.

"Yes, I am afraid, afraid of getting infected. Worried about catching a virus and spreading into the womb and then dying. Someone died in the womb with the virus, whether it was corona or something else, I am also worried." (Participant 2)

The second sub-theme was financial problems due to loss of jobs.

"I just think, what about the money when I am operated upon tomorrow." (Participant 11)

The third sub-theme was getting identified as COVID-19 survivor. Participants said that if they went to the hospital, they would be mistaken for a COVID-19 patient. They were afraid that if the surrounding community thinks they have coronavirus, then they will be isolated.

"I am afraid, afraid of being mistaken as a corona case because someone at the same time with me continues to be in the quarantine. She was before me, had finished giving birth. Then there were those who were hospitalised at the same time as my child, and the baby was quarantined." (Participant 3)

The second theme was afraid of losing the baby because high-risk pregnancy with decreasing immunity could worsen the situation if they got exposed to the coronavirus.

The first sub-theme was risk for getting worse. Pregnant women feared that the pregnancy would cause greater harm and complications to both the mother and the foetus.

"During my pregnancy, I got high blood pressure. I had to undergo surgery on that hard day because I had high blood pressure ... it can affect all the things." (Participant 5)

The second sub-theme was changing structure and function of the body. Pregnant women felt anxiety related to a change in either the structure or function of body during pregnancy.

"I was a little depressed because I did not go out, I didn't see the road. So it had a psychological impact." (Participant 5)

The third sub-theme was disturbed daily living. The pandemic caused anxiety and that made pregnant women to suffer loss of appetite, and to feel lethargic.

"Yes, I turned pale, had no appetite out of fear. Then my blood pressure went up, because I had never had surgery ... the doctor told me to get the surgery because I had a breech baby." (Participant 19)

The third theme was losing the support system. Pregnant women needed social support from family and environment as a source of coping to make adaptations during the pandemic.

The first sub-theme was limited visiting. Pregnant women who had to make antenatal visits to the hospital or give birth could not be accompanied by many people.

"It is a lot different; you can't wait for a lot of people. When things were normal, anyone's family was allowed. Now they are taking turns." (Participant 4)

The second sub-theme was support by nuclear family, with pregnant women stressing that during the antenatal phase, care at the hospital came only from the nuclear family.

Table-1: Demographic characteristics of the participants.

Participant	Age (years)	Education level	Job	Number of pregnant	Height (cm)
Participant 1	35	Junior high school	Housewife	1	155
Participant 2	30	Bachelor	Private worker	2	160
Participant 3	34	Junior high school	Housewife	3	150
Participant 4	33	Junior high school	Housewife	5	155
Participant 5	27	Senior high school	Housewife	2	155
Participant 6	40	Elementary school	Housewife	3	150
Participant 7	37	Senior high school	Housewife	2	150
Participant 8	31	Senior high school	Housewife	2	152
Participant 9	37	Junior high school	Housewife	3	150
Participant 10	28	Junior high school	Housewife	2	150
Participant 11	38	Senior high school	Private worker	2	150
Participant 12	27	Junior high school	Housewife	2	155
Participant 13	42	Senior high school	Private worker	2	153
Participant 14	29	Senior high school	Housewife	2	158
Participant 15	30	Senior high school	Housewife	2	155
Participant 16	37	Senior high school	Housewife	2	150
Participant 17	25	Senior high school	Housewife	2	150
Participant 18	35	Senior high school	Housewife	3	155
Participant 19	38	Senior high school	Housewife	3	163

Table-2: Themes and sub-themes identified.

Themes	Sub themes
1. Fear of getting pregnant during a pandemic	1.1 Risk for transmission 1.2 Financial problems 1.3 Identified as Covid survivor
2. Afraid of losing her baby	2.1 Risk for getting worse 2.2 Changing structure and function of the body 2.3 Disturbed daily living
3. Losing of support system	3.1 Limit of visiting 3.2 Supported by nuclear family
4. Adherence to health protocols	4.1 Stick to health protocol 4.2 Living in the home for a long time 4.3 Booster by traditional drink
5. Differences in healthcare systems	5.1 Minimal examination 5.2 Decreasing close contact 5.3 Screening for detection

"Yes, sadly no one is waiting. Only the husband. Entering the hospital, I am used to it, but there is no companion." (Participant 1)

The fourth theme was adherence to health protocols. Almost all the participants said that they followed the health protocols.

The first sub-theme was sticking to the health protocol, with the pregnant women washing hands, wearing masks and keeping social distance.

"If you want to leave the house with a mask, wash your hands, wash your feet, take off your clothes, change your clothes, then take a shower." (Participant 2)

The second sub-theme was living in the home for a long time. The pregnant women carried out their daily activities at home, leaving the house only for very important things, like antenatal care.

"I never went out; I was always home. Not hanging out outside, sometimes sunbathing. I don't need to think about it, just watch television, use mobile phone. Sometimes I go out, but not far." (Participant 5)

The third sub-theme was the use of energy and immunity boosters. The pregnant women took a variety of traditional drugs, adhered to health protocols, and took supplements in the shape of both vitamins and herbals.

"The herbs are like ginger, and I keep clean, use masks, wash my hands. When I get home from outside, I take off clothes and mask, change clothes." (Participant 17)

The fifth theme was differences in healthcare systems. Health services during a pandemic were different, like short physical examination, and reduced contact between the physician and the pregnant women.

The first sub-theme was minimal examination. The subjects felt that incomplete physical examinations were carried out during the pandemic. They felt that not all functions of their bodies were checked, especially the condition of the foetus. Short explanations did not satisfy them.

"The time before COVID-19 did not exist anymore, like having to keep a distance, then the doctor did not talk in detail. Earlier, the doctors used to talk about the condition and even the gender of the foetus, but now there is little response." (Participant 5)

The second sub-theme was decreased close contact. Pregnant women talked about less physical contact during antenatal check-ups at the hospital. They felt that the health workers were not doing detailed physical examination, and that made them wonder if their pregnancy was proceeding correctly.

"It is different from before. You can't sit close to each other, and the number of consultations has also been reduced since the pandemic." (Participant 4)

Discussion

Pregnant mothers with a very high risk are required to do pregnancy checks and to have childbirth at the hospital. This made mothers feel anxious and depressed during the active phase of the COVID-19.²³ At the beginning of the pandemic, many hospitals received a lot of COVID-19 patients²⁴, pregnant women postponed their pregnancy examinations, and government policies were enforced regarding staying at home. However, all pregnant women were encouraged to have at least six antenatal care visits.²⁵ Decreasing number of antenatal care visits will increase the MMR and the SDG target will remain unfulfilled.²⁶

In the current study, pregnant women at very high-risk experienced anxiety about what to do next and about the condition of the foetus. This is in line with literature.²⁷ There was a need for comprehensive care and family support, which is important for pregnant women.²⁸ Husbands needed to provide support to their wives in getting antenatal care during the pandemic.²⁹

The high number hospitalised COVID-19 patients affected maternal and neonatal services. There was a decrease in problems during the first and second trimesters (up to week 24) in accessing emergency services for pregnant women.³⁰ When carrying out antenatal care, health workers continued to follow the designated health protocols which, in the perception of the study subjects, compromised the physical examination. Physical examination of pregnant women can reduce the risk of infant mortality.³¹ It is also important for mothers to take a good nutrition because nutrition during pregnancy plays an important role in the growth of the child's brain and body.³²

If possible, pregnancy consultations and classroom education for pregnant women should be used via telemedicine applications or through online communications. A telemedicine application, named e-ANC, (Ante-Natal Care) which includes counselling, early detection of high-risk cases, and monitoring of relevant medication, can be relevant in this regard.³³

Conclusion

Pregnancy during the pandemic had an impact on the physical and mental health of women and turned into a terrifying experience. Health workers need to pay attention to the physical and psychological conditions of pregnant women, including antenatal care services, which must be provided at least six times directly or by using telemedicine.

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