

Psychological Impact of COVID-19 Pandemic on Pregnant Mothers – A Survey during the Early Days in Bangladesh

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Abstract

Objective: The COVID-19 pandemic possess significant risk to public health, including mental health. During pregnancy, women may experience stress and anxiety associated with potential adverse obstetrical outcomes. Stress and anxiety level may also increase during infectious disease outbreaks. Currently, there is no known information on the psychological impact, the effect on individual's social and/or psychological aspects, and mental health of pregnant women during the COVID-19 pandemic. This study aimed to evaluate the psychological impact of the COVID-19 outbreak on pregnant mothers in Bangladesh in early days.

Methods: This was an observational descriptive (survey) study conducted on 60 pregnant mothers during June and July, 2020. The data were collected through online survey form and analysed through SPSS v.20.

Results: Mean age of the respondents was 26.7 yrs. Majority of them were from urban community and housewives. Most of the participants were well educated, 65% graduate or above. Twenty three (38.3%) had never visited a doctor during the pandemic period and another 31.7% had visited only once. Twelve mothers faced various pregnancy related complications, but among them three (3/12, 25%) never consulted any medical professional. 38.3% mothers said they faced problem with investigations as there was a fear of contracting the virus during a visit. Majority (78.3%) preferred private hospital to plan their delivery. Most of the mothers (51/60, 85%) said they had not used and/or known about the medications for Covid19, but 50 (83.3%) had bought a PPE. Thirty three (55%) used telemedicine, among them 75% were satisfied. Throughout this pandemic, the pregnant mothers felt depressed (48.3%), restless (31.7%) and undue stress (26.7%). Half the mothers were anxious watching news or any stories on social media about Covid19. Majority 65% did not face any covid related symptoms as they mostly stayed at home. Twenty (33.3%) respondents opined that all pregnant women should be tested for Covid19 regardless of symptoms. Most of the participant recommended telemedicine, availability of good emergency obstetric service and separate transport facility for pregnant mothers.

Conclusion: The above results can be used to formulate psychological interventions to improve mental health and psychological resilience of pregnant mothers during the Covid19 pandemic.

Key-words: Covid19, pandemic, Psychology, depression

Introduction

In Bangladesh, an estimated 2.4 million babies was born under the shadow of the COVID-19 pandemic. Globally, the number was 116 million of these babies

were projected to be born up to 40 weeks after COVID-19 was recognized as a pandemic on March 11.¹ New mothers and newborns was greeted by harsh realities, including global containment measures such as

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lockdowns and curfews; health centers overwhelmed with response efforts; supply and equipment shortages; and a lack of sufficient skilled birth attendants as health workers, including midwives, were redeployed to treat COVID-19 patients. Pregnant mother prepared to bring a life into the world as it became – a world where expecting mothers were afraid to go to health centres for fear of getting infected, or missing out on emergency care due to strained health services and lockdowns. Even though there were no significant change in the maternal mortality ratio and neonatal mortality rate, an analysis of data in the Directorate General of Health Services dashboard showed that since the beginning of the COVID-19 crisis, there was a significant reduction in the uptake of maternal and newborn health services from the health facilities. Only 33 district hospitals in Bangladesh were performing all key functions of emergency obstetric care out of 63.

The coronavirus disease 2019 (COVID-19) outbreak possess significant risk to public health, including mental health. A survey conducted in China showed that 53.8% of the respondents rated the psychological impact of the outbreak as moderate or severe, and 28.8% reported moderate to severe anxiety symptoms and stress levels.² During pregnancy, women may experience stress and anxiety associated with potential adverse obstetrical outcomes such as fetal death or fetal abnormalities. Stress and anxiety level may also increase during infectious disease outbreaks. Currently, there is no known information on the psychological impact, the effect on individual's social and/or psychological aspects, and mental health of pregnant women during the COVID-19 epidemic. This

study aimed to survey pregnant women to evaluate psychological impact and anxiety during the COVID-19 outbreak.

Method:

This was an observational (descriptive survey) study conducted on 60 pregnant mothers during June and July, 2020. The data were collected through online survey form and analysed through SPSS v.20.

Result:

Of those in the 18–35 age group, 76.6% were from the Dhaka division. Of the 60 respondents, 35 percent were housewives and 15 percent work for the government. Post-graduation completion rates were 40%, and honors/madrassa completion rates were 35% up to the fazal level. During the epidemic, 38.3% never went to the doctor. Among the responders, only 8.3% made three or more trips. Pregnancy-related problems affected 20% of women; these were primarily limited to fetal distress, reduced fetal movement, abdominal pain, heaviness, Gestational Diabetes Mellitus (GDM), Urinary Tract Infection (UTI) and PROM. During the COVID epidemic, 44 respondents reported feeling unduly stressed about their own and their unborn child's health. Early in the COVID era, 31.3% of respondents expressed concern about unexpected changes in doctors and availability of doctors. Twenty five (25%) were worried about whether or not they will be able to access transportation in an emergency. Half were concerned about catching the corona virus from other people. Of the responders, 23.5% reported having panic attacks and a fear of dying. Lockdown had been in place for months on end in the beginning.

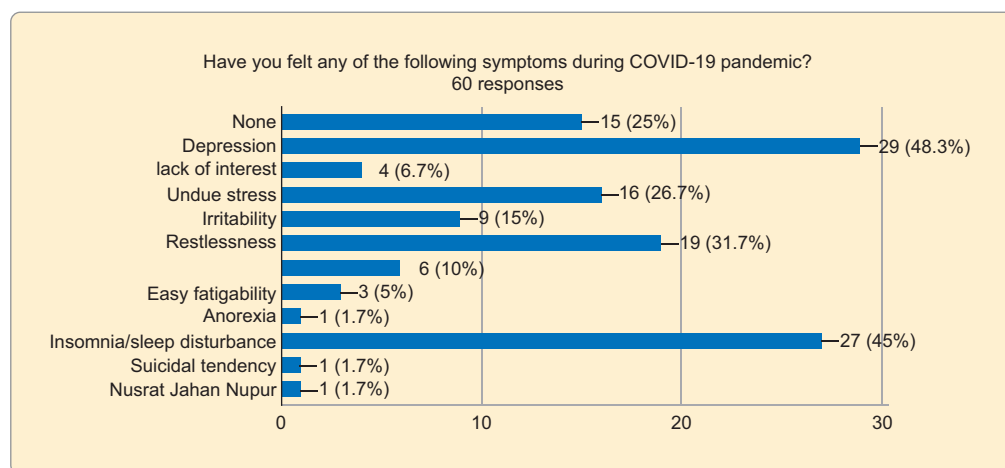


Fig.-1:

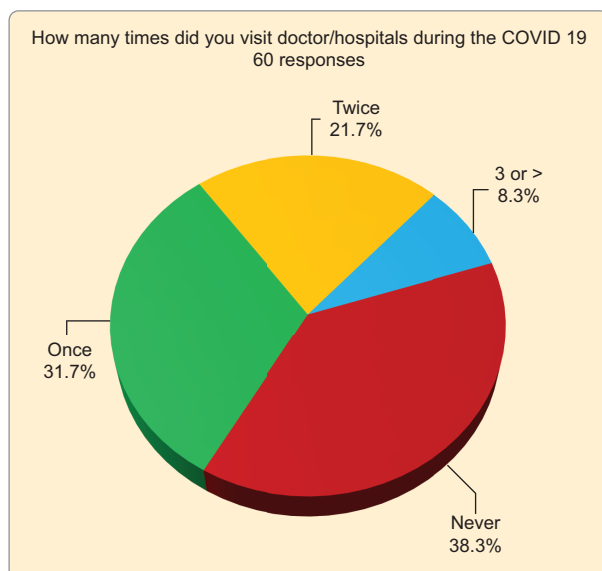


Fig.-2:

Expectant mothers and their families were alarmed because the majority of gynecologists had quit practicing in private practice and most hospitals had become COVID-exclusive. Of those in this survey, 26.7% experienced transportation issues and 38.3% encountered issues throughout their investigations. At private hospitals, 78.3% of births prefer to occur. 83.3% purchased a mask, gloves, personal protective equipment (PPE), and 15% purchased over-the-counter medication to prevent COVID-19 infection. During the lockdown, 63.3% of people used telemedicine for checkups, and 75% of them expressed satisfaction with the services. Due to lockdown and dread of death during the COVID-19 pandemic, 48.3% of expectant mothers had

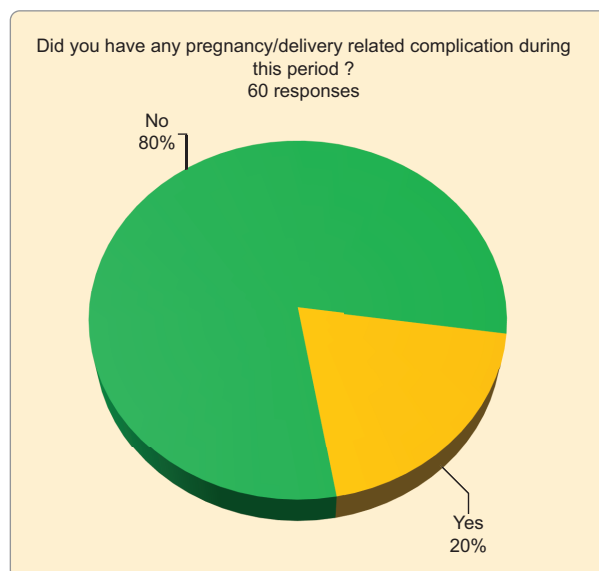


Fig.-3:

depression, 31.7% were restless, 45% experienced insomnia and sleep disturbance, 26.7% became excessively agitated, and 15% became irritated.

Watching news or any stories regarding COVID 19 on social media caused 38.3% of people to feel uneasy. Of those concerned about the virus infecting the fetus, 73.3% were worried about it, and 50% were unsure if it would affect breastfeeding.

10% of the 60 respondents said they had a neighbor, relative, or family member coming back from overseas, and 5% said their family members were in quarantine. 10% reported having interaction with COVID-19 suspicious patients in the past.

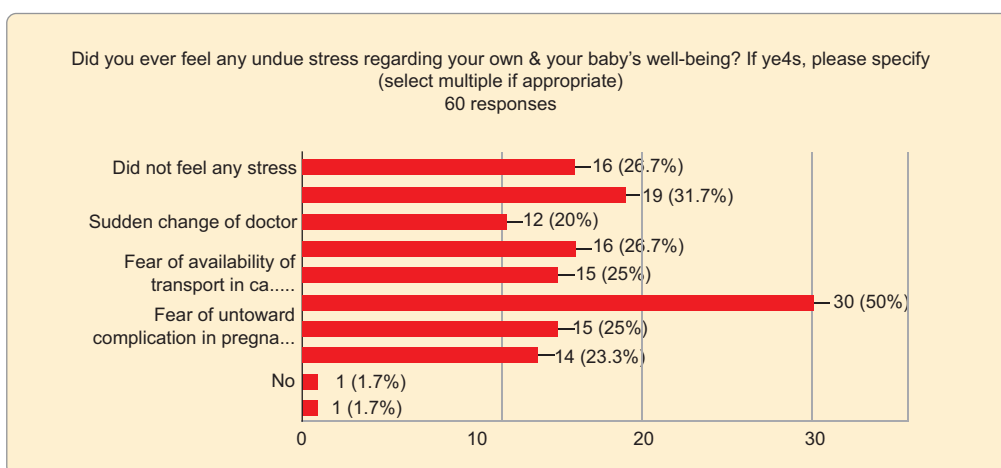


Fig.-4:

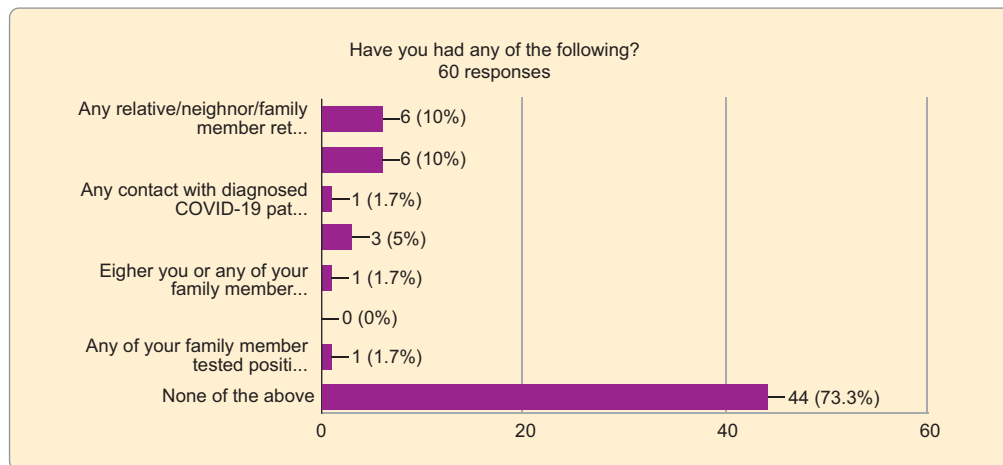


Fig.-5:

Fever, cough, and loose motion were among the COVID-19 symptoms that 10–11% of respondents reported having. According to 33.3% of respondents, COVID-19 testing should be mandatory for all expectant mothers.

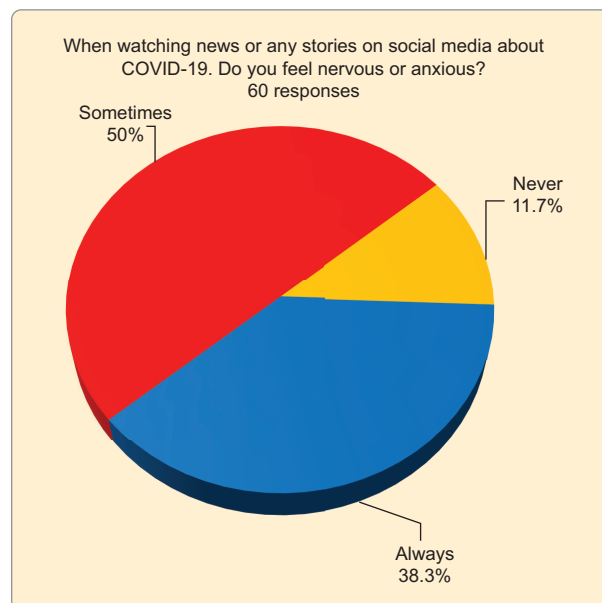


Fig.-6:

Discussion:

A significant increase in depression and sleeplessness was seen in pregnant women during the COVID-19 pandemic. Because this study used an internet survey, the majority of respondents were educated, from the urban age range of 18 to 35, with 76.6% of them coming from the Dhaka division. In a study done in China, ethnicity made up 96.7% of the sample, with 43.3%

of participants being between the ages of 26 and 30 and 41.7% being between the ages of 31 and 40. In line with our findings, 12.3% of pregnant women had a lower education level and 75.7% had a higher education level.³ Contrary to expectations, changes in the symptoms of affectivity, anxiety, and depression were not influenced by the sociodemographic variables.⁴ In this study, 44 respondents reported feeling excessively anxious about the COVID-19 pandemic and their own and their unborn child's health. Of the responders, 23.5% reported having panic attacks and a fear of dying. In order to stop COVID infection, 83.3% purchased masks, gloves, PPE, and 15% purchased over-the-counter medication from a pharmacy. During the lockdown, 63.3% of people used telemedicine for checkups, and 75% of them expressed satisfaction with the services. Due to lockdown and dread of death during the COVID-19 pandemic, 48.3% of expectant mothers had depression, 31.7% were restless, 45% experienced insomnia and sleep disturbance, 26.7% became excessively agitated, and 15% became irritated. Watching news or any stories regarding COVID-19 on social media caused 38.3% of people to feel uneasy. Fifty percent of respondents were unsure if the infection would interfere with breastfeeding, and seventy-three percent had concerns about the virus infecting the fetus. But as of right now, there is no proof that the coronavirus can spread through nursing or in a vertical manner from mother to fetus. Furthermore, there is no proof that moms are more susceptible to a severe COVID-19 infection or that pregnant women are more prone to contract the virus.⁵ The examination of the pandemic's secondary consequences, such as mental health issues, becomes more pertinent given the uncertainty

created by the pandemic backdrop and the current lack of knowledge regarding the virus's transmission routes and effects on pregnant women. This study looked at the presence and evolution of psychopathological indicators of depression, anxiety, and affectivity in a sample of pregnant and non-pregnant women because of the potential negative psychological effects that the pandemic and social distancing could have on mothers and their children. During the COVID-19 pandemic or other similar disease outbreaks, pregnancy may be an additional risk factor for the development or exacerbation of some psychopathological disorder or the emergence of psychological distress.⁶ When it comes to depression, the symptoms increased along with the pandemic. The prevalence of depression was reported 37% in Canada,⁷ 25% in Colombia⁸, 25.3% in Belgium.⁹ Research indicates that the lengthening of the epidemic and pregnancy appear to be factors that exacerbate the intensity of depression symptoms.⁶ Nearly 35% of the recruited pregnant women reported engaging in self-isolating behaviors in an effort to prevent the spread of COVID-19.⁴ 10% of the 60 respondents said they had a neighbor, relative, or family member coming back from overseas, and 5% said their family members were in quarantine. 10% reported having interaction with COVID-19 suspicious patients in the past. Fever, cough, and loose motion are among the COVID-19 symptoms that 10–11% of respondents reported having. According to 33.3% of respondents, COVID-19 testing should be mandatory for all expectant mothers. A significant increase in depression and sleeplessness was seen in pregnant women during the COVID-19 pandemic. The COVID-19 pandemic in China was shown to have caused minor types of depression, generalized anxiety, sleeplessness, and psychological stress in 35.3%, 19.0%, 29.6%, and 15.2% of subjects, respectively³ and in US is 36.4%.¹⁰ Since the COVID-19 outbreak was declared on January 20, 2020, strict measures to limit the spread of the disease have been implemented, including a ban on pointless social activities, a flexible work schedule, work from home through skype, zoom platform and quarantine regulations. When it came to the vertical transmission of the disease, nearly half of the women (46%) reported having considerable anxiety. The first trimester experienced greater anxiety and a more severe psychological impact during the COVID-19 pandemic than second or third trimester of

pregnancy.¹¹ Study participants 38.3% never went to the doctor after the outbreak. Among the responders, only 8.3% made three or more trips. Pregnancy-related problems affected 20% of women; these were primarily limited to fetal distress, reduced fetal movement, abdominal pain, heaviness, GDM, UTI, and PROM. In China, the first trimester was associated with a higher risk of depression and higher levels of depressive symptoms, whereas the third trimester was associated with higher levels of psychological stress and insomnia.³ The trends align with earlier research carried out in Portugal¹¹ and Switzerland.¹² One explanation could be that during the pandemic, pregnant women only visited the hospital once for routine prenatal care during the first trimester, and that during that time, outside activities drastically declined as a preventive measure. Pregnant women's mental health may have suffered as a result of home quarantine and the ensuing social isolation. Among the third trimester, clinically recognized sleeplessness was more common among pregnant women.³ Early in the COVID era, 31.3% of respondents expressed concern about unexpected changes in doctors and availability of doctors. 25% are worried about whether or not they will be able to access transportation in an emergency. Half were concerned about catching the corona virus from other people. Lockdown had been in place for months on end in the beginning. Expectant mothers and their families were alarmed because the majority of gynecologists had quit practicing in private practice and most hospitals had become COVID-exclusive. Of those in this survey, 26.7% experienced transportation issues and 38.3% encountered issues throughout their investigations. At private hospitals, 78.3% of births prefer to occur. Significantly higher rates of psychological stress in the third trimester could be caused by more hospital visits and anxiety about the possibility of infection during childbirth, particularly in a hospital that has been certified as a COVID-19 facility. More family support was a protective factor against the current incidence of the evaluated mental health disorders, although prior psychological status was a risk factor, according to logistic regression analyses. In line with our findings, depression was expected to emerge in the absence of social support in 22.2% cases. Reductions in assistance throughout pregnancy had a detrimental effect on the mental health of the mothers.¹³ Family support could mitigate mental health issues for expectant mothers among the COVID-19 pandemic.

Conclusion:

Psychological impact on pregnant women in early days of COVID-19 was quite severe. Our findings can be used to formulate psychological interventions to improve mental health and psychological resilience during the COVID-19 epidemic.

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