

Original Article

Exploring the Challenges and Stressors Faced by First-Time Mothers in Ghana as a Result of the COVID-19 Pandemic

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Abstract: First-time mothers in Ghana are not exempt from the COVID-19 pandemic's considerable changes and difficulties, which have included disruptions in employment, education, and daily activities. First-time mothers in Ghana were significantly impacted by the COVID-19 pandemic. These challenges were compounded for first-time mothers, who were experiencing the stressors associated with pregnancy and the postpartum period while also dealing with the pandemic's impact on social support, healthcare services, and economic stability. This study looked into how the COVID-19 epidemic affected the mental health and general wellbeing of first-time moms in Ghana. This study employed a mixed-method approach to investigate the experiences and perspectives of first-time moms in Ghana regarding the influence of the pandemic on their mental health and general well-being. The impact of the COVID-19 pandemic on first-time moms was the dependent variable, and multiple regression analysis was used to explore the relationship between the independent variables, such as social support and access to healthcare services, and the dependent variable. The results showed that about 80% of first-time mothers had elevated stress and anxiety, including postpartum depression, during the COVID-19 pandemic in Ghana. The study's findings aid in the creation of focused treatments to help first-time moms' mental health and wellbeing both during and after the epidemic. While preparing for a future of inclusive and equitable maternity care, healthcare systems can priorities safe and accessible maternity care both during and after the pandemic. The study emphasizes the significance of health supports and services that may easily change to accommodate new parents' requirements.

Keywords: COVID-19 pandemic; Mental Health; First-time mothers; Ghana; Postpartum Period; Social Support; Healthcare Services; Economic Stability.

I. INTRODUCTION

Global health, the economy, and society have all been significantly impacted by the COVID-19 pandemic. Governments all across the world implemented some measures to stop the virus's spread in response to the pandemic, including lockdowns, social isolation, and travel restrictions. These actions had a huge impact on people's life, disrupting regular activities like work and school and affecting their mental health and wellness. Before the pandemic, investments were made in maternity and child health to support women and raise the standard of care, which is now necessary (Di Toro et al., 2021).

Women have unique mental and physical healthcare needs and the transition to motherhood can be challenging (Adebayo, Parcell, Mkandawire-Valhmu, & Olukotun, 2022; Tully, Stuebe, & Verbiest, 2017). The pandemic has had a unique impact on first-time mothers, who were experiencing significant changes and challenges when they would normally be receiving support and guidance from family, friends, and healthcare providers. The stressors associated with pregnancy and the postpartum period, such as sleep deprivation, hormonal changes, and the challenges of breastfeeding, were compounded by the pandemic's impact on social support, healthcare services, and economic stability (Agbi, Lulin, Asamoah, & Kissi, 2022; Di Toro et al., 2021).

The COVID-19 pandemic had an impact on Ghana, as well as many other nations. Ghana had about 160,000 cases and 1,300 fatalities related to COVID-19 as of April 2023 (Organization, 2023). The effects of the pandemic on physical health were widely covered, but the effects on mental health have received less attention, especially among certain groups like first-time mothers.

It is crucial to comprehend how the COVID-19 pandemic has affected the mental health and general wellbeing of Ghanaian first-time moms in order to create treatments to help this at-risk group. The lack of adequate research in this area emphasizes the need for additional study and the creation of focused interventions to promote the mental health and wellbeing of first-time moms both during and after the epidemic.



A pertinent and crucial field of research is the examination of the difficulties and pressures experienced by first-time moms in Ghana as a result of the COVID-19 pandemic. The pandemic had a profound impact on people's lives worldwide, with far-reaching consequences that include social, economic, and health-related issues. There has been little research on how COVID-19 has affected the mental health and wellbeing of first-time moms in Ghana, despite studies showing the detrimental effects of pandemics on mental health. Our research investigated these two areas:

- What effects has the COVID-19 pandemic had on the mental health and general wellbeing of first-time moms in Ghana?
- Determine the risk factors that contributed to the pandemic's poor mental health outcomes for Ghanaian first-time mothers and the best course of action.

II. LITERATURE REVIEW

Global social, economic, and healthcare systems have been profoundly impacted by the COVID-19 pandemic, which has an effect on people's welfare and mental health (Cullen, Gulati, & Kelly, 2020). These difficulties include restricted access to healthcare services, a precarious financial situation, and increasing caring duties. To provide specialized treatments to help the mental health and welfare of this population, research in this field is essential for recognizing the particular difficulties and pressures encountered by this group (Cullen et al., 2020; Dong et al., 2020; Durizzo, Asiedu, Van der Merwe, Van Niekerk, & Günther, 2021)

A) Impacts of COVID-19 on First Time Birth Mothers

a. Mental Health

Although both are interrelated, postpartum health outcomes for first-time mothers frequently place a greater emphasis on physical health than on mental health during the pandemic. Although mental health is important throughout life, the postpartum period is particularly risky for mental health. According to a study done in China during the COVID-19 epidemic, moms of small children had higher levels of anxiety and sadness than fathers and those who were not parents (Shi et al., 2020). Similar findings were made by an Italian study that discovered moms of young children had higher levels of anxiety and sadness than fathers (Spinelli, Lionetti, Pastore, & Fasolo, 2020). These findings imply that the pandemic may significantly affect mothers' mental health and welfare, especially those who are caring for small children.

The focus on confidence, stress, anxiety, and feeling normal are among the mental health results. For both the new mother and the baby's short- and long-term health, as well as the child's cognitive, motor, and language development, good mental health is crucial. In Ghana, studies have shown that maternal mental health problems are prevalent, with up to 27% of mothers experiencing symptoms of depression and anxiety (Agbi, Lvlín, & Asamoah, 2021b; Birmeta, Dibaba, & Woldeyohannes, 2013; Boateng et al., 2021). These pre-existing mental health issues were made worse by the COVID-19 pandemic, especially for first-time mothers who were already under more stress and worry due to the pandemic's unknowns. In order to promote maternal mental health throughout the postpartum time, peer and social support was crucial. First-time mothers' ability to get support from elderly family members may decline during the COVID-19 crisis (Fisher et al., 2020). The effects of postpartum depression extend to young moms' children. Numerous stressors increased the likelihood of poor mental health following the pandemic because of the unique context, surroundings, and changes brought on by the pandemic.

b. Economic Stability

The COVID-19 pandemic had a severe financial impact on people and families throughout the world. Numerous jobs have been lost because of the pandemic, which has also resulted in decreased income and higher spending for healthcare and other pandemic-related costs. First-time mothers in low- and middle-income countries like Ghana may find it particularly challenging to deal with the economic impacts of the pandemic (Dong et al., 2020; Liu, Dong, & Yen, 2022). Several risk factors for poor mental health outcomes in mothers during the COVID-19 pandemic have been identified by research. These risk factors include financial insecurity, limited access to healthcare services, and social isolation. In Ghana, the pandemic disrupted economic activities, leading to job losses and reduced incomes, which may increase financial insecurity among mothers (Aduhene & Osei-Assibey, 2021). Additionally, the pandemic's restrictions have limited access to healthcare services, including antenatal and postnatal care, which affected first-time mothers' mental health outcomes.

According to a study by Ahmad and Vismara (Ahmad & Vismara, 2021), economic hardship brought on by COVID-19 was linked to higher levels of depression, anxiety, and stress among pregnant mothers in Pakistan. Similarly, a study by Zhai discovered that economic stress brought on by COVID-19 was linked to higher levels of anxiety and sadness in Chinese pregnant mothers. The epidemic has had a substantial negative economic impact on Ghana, where many households have experienced job losses and decreased income (Zhai et al., 2020). Ampofo also found that the pandemic

had led to a decline in economic activity in Ghana, with many individuals experiencing reduced income and job loss (Ahmad & Vismara, 2021; Ampofo, Ampomah, Amissah-Reynolds, Owusu, & Opoku-Manu, 2020).

The economic impact of the pandemic may be particularly challenging for first-time mothers, who may already be facing financial pressures related to pregnancy and the postpartum period. A study by Ampofo found that the pandemic had led to significant economic challenges for pregnant women in Ghana, including reduced income and increased expenses related to healthcare and other pandemic-related costs (Ampofo et al., 2020). Because pregnant women may find it difficult to access healthcare services and meet basic needs related to nutrition and other aspects of maternal and child health, the authors noted that these economic difficulties may have a significant impact on the outcomes for maternal and child health (Andrikopoulou et al., 2020).

According to the literature, first-time moms in low- and middle-income countries, including Ghana, may experience severe stress because to the COVID-19 pandemic's economic effects. These women's financial struggles have a big impact on their mental health and wellbeing, as well as the outcomes for maternal and child health. Interventions that address the economic impact of the pandemic on first-time mothers in Ghana are critical for supporting their mental health and wellbeing and improving maternal and child health outcomes during and beyond the pandemic.

c. Social Support

First-time moms have faced particular difficulties as a result of the COVID-19 epidemic, including as social isolation and a lack of access to support networks. Inadequate social support can have detrimental effects on both mother and child development and maternal well-being (Gao et al., 2021). A summary of COVID-19's effects on first-time moms' social support and any potential ramifications are given in this answer. First-time mothers struggled with a lack of support during the pandemic. Social distancing measures and lockdowns have made it difficult for new mothers to access support networks, such as family, friends, and healthcare providers. This can be particularly challenging for mothers who are dealing with postpartum depression or anxiety (Agbi, 2021; Fisher et al., 2020).

The pandemic disrupted traditional sources of social support for first-time mothers, including in-person support groups, family visits, and home visits from healthcare providers. In a study conducted in China, revealed that the pandemic had a significant negative impact on the social support of first-time mothers (Gao et al., 2021; Organization, 2023). Many participants reported feeling lonely, anxious, and stressed due to a lack of social support. Some also reported that the pandemic had led to delays in accessing healthcare services, such as postnatal care and vaccination services for their infants.

According to a study conducted in Ghana by (Sylverken et al., 2022), the pandemic has disrupted traditional sources of social support for pregnant women and new mothers, including antenatal care, postnatal care, and home visits from healthcare providers. The absence of social support brought on by the pandemic, according to the study, has increased first-time mothers' feelings of anxiety and stress. In a study, the impact of the pandemic on maternal mental health in Ghana was examined (Ahinkorah, Hagan Jr, Ameyaw, Seidu, & Schack, 2021). According to their research, first-time mothers experienced higher levels of anxiety and despair during the pandemic, which were linked to lower levels of social support. The necessity of pandemic-related measures that strengthen social support for expectant mothers and new moms was emphasized by the authors.

Reduced social support for new mothers can have long-lasting consequences. According to a study done in the United States, moms who reported having less social support during the pandemic were more likely to suffer from anxiety and depressed symptoms (Cameron et al., 2020). These unfavorable results may have an impact on the development of the newborn and the mental health of the mother, emphasizing the value of social support at this crucial time.

Coping mechanisms employed by mothers during the pandemic may also affect their mental health outcomes. Studies have shown that social support, including support from family and friends, can mitigate the negative impact of stressful events on mental health (Defina & Rizkillah, 2021). In the context of the pandemic, social support may be limited due to social distancing measures and restrictions on gatherings. However, online support groups and virtual interactions may provide a source of social support for mothers during this time (Fisher et al., 2020; Spinelli et al., 2020).

In conclusion, the COVID-19 pandemic has significantly impacted the social assistance that first-time mother's get, which has resulted in feelings of loneliness and stress. Reduced social support may have detrimental effects on baby development and maternal mental health, highlighting the need for alternate social support systems and therapies to deal with the pandemic's effects on this vulnerable population.

d. Cultural factors & Stigma

During the pandemic, cultural factors can play a role in how first-time mothers are perceived and supported. In addition to the risk factors mentioned in the previous section, cultural factors and stigma may also play a role in the mental health outcomes of first-time mothers in Ghana. A study conducted in Ghana found that cultural beliefs and practices influenced women's perceptions of mental illness, leading to stigma and barriers to seeking mental health care (Appiah-Kubi et al., 2022). This stigma was worsened by the pandemic, leading to increased reluctance to seek mental health care among first-time mothers.

During the COVID-19 pandemic, first-time moms in Ghana experienced cultural discrimination that made parenthood more difficult. In Ghana, motherhood is highly valued and regarded as a woman's primary role in society (Frimpong-Manso, Tagoe, & Mawutor, 2020). This cultural belief puts immense pressure on first-time mothers to meet societal expectations and fulfill their duties as mothers. The pandemic has disrupted this norm, and first-time mothers had to balance their traditional roles with new responsibilities brought about by the pandemic, such as homeschooling and remote work. Moreover, traditional postpartum practices, such as confinement and the use of herbal medicines, are highly valued in Ghanaian culture (Agbi et al., 2021b; Frimpong-Manso et al., 2020). However, the pandemic disrupted these practices, leading to feelings of anxiety and uncertainty among first-time mothers. These cultural factors contributed to the challenges faced by first-time mothers in Ghana during the pandemic.

On the other hand, the stigma around pregnancy and motherhood is not new, but the pandemic has amplified these issues. Stigma is the negative perception or judgment of a person or group based on a particular characteristic or behavior (Yatirajula et al., 2022). First-time mothers who contract COVID-19 face stigma and discrimination from their families, friends, and communities. First-time mothers who test positive for COVID-19 are stigmatized, and their babies are sometimes denied essential medical care due to the fear of infection. This stigma can cause emotional distress and prevent first-time mothers from seeking medical care when needed (Park, Greene, Melby, Fujiwara, & Surkan, 2021).

First-time mothers in Ghana faced cultural factors and stigma that worsen the challenges of motherhood during the COVID-19 pandemic (Aduhene & Osei-Assibey, 2021). Cultural beliefs and practices that prioritize motherhood place immense pressure on first-time mothers to meet societal expectations. Stigma and discrimination against first-time mothers who contract COVID-19 prevent them from seeking essential medical care, leading to emotional distress. Addressing these cultural factors and stigma is essential in supporting first-time mothers in Ghana during the pandemic.

e. Healthcare Systems

The availability and caliber of mental health services for first-time mothers were impacted by the pandemic's effects on the healthcare system. A research done in Ghana during the pandemic discovered that there were delays in the provision of prenatal and postnatal care, among other maternal and child health services (Ampofo et al., 2020; Appiah-Kubi et al., 2022). These disruptions may lead to missed opportunities for early identification and intervention for maternal mental health problems.

Access to healthcare services has also been impacted by the pandemic. Some healthcare providers were overwhelmed with COVID-19 cases, which led to delays in prenatal care and postpartum check-ups (Ahinkorah et al., 2021). It can be challenging for new mothers who want the support of their partner or other family members when hospitals place restrictions on the number of support personnel permitted during labor and delivery.

Teletherapy, online support groups, and home-based therapies are among options for supporting the mental health and wellbeing of first-time mothers during the epidemic. According to a U.S. study, teletherapy helps pregnant women with depression and anxiety symptoms lessen their symptoms (Adom, Mensah, & Osei, 2021). Maternal mental health outcomes have improved in Ghana as a result of home-based treatments, such as the use of mobile technology to deliver mental health care (Sylverken et al., 2022).

Overall, the limited information on how the COVID-19 epidemic has affected Ghanaian first-time mothers' mental health and welfare emphasizes the need for more study in this area. It is critical to appreciate the unique challenges this demographic faces in order to develop treatments that will support their mental health and wellbeing both during the pandemic and after.

III. METHODOLOGY

A) Research Settings

The research was undertaken in Ghana. On the Gulf of Guinea sits the West African nation of Ghana. The capital city is Accra, with a population of about 31 million. Ghana is a country with a lower-middle income, and its economy is based on agriculture, mining, and services. Although the nation has made great strides in lowering poverty and expanding access to

healthcare, there are still many obstacles to overcome, such as high rates of maternal mortality and insufficient healthcare access in rural regions. More than 138,000 confirmed cases and more than 1,200 fatalities from the COVID-19 epidemic have been reported in Ghana as of April 2021. Due to the pandemic, there have been job losses, school closures, and travel disruptions in the healthcare system, economy, and daily life.

B) Research Design, Sampling and Data Collection

This study used a mixed-method design, comprising a cross-sectional survey and in-depth interviews. To determine the prevalence or distribution of a specific outcome or risk factor in a community, cross-sectional studies collect data at a single moment in time. The result in this instance is how the COVID-19 epidemic affects first-time mothers in Ghana. To ascertain the degree of the pandemic's impact on first-time moms in Ghana, data on social support, mental health, access to healthcare services, and other pertinent aspects were collected using the study design.

The sample for the study was selected using a random sampling method to ensure that it was representative of the population of interest. Using this method, participants are chosen at random from the target population, guaranteeing that each person has an equal chance of taking part in the study. First-time mothers in Ghana who gave birth during the pandemic and who were citizens of Ghana made up the research population. 235 people who agreed to take part in the study were found through internet forums and social media.

The Generalized Anxiety Disorder-7 (GAD-7) and the Patient Health Questionnaire-9 (PHQ-9) were two validated tools utilized in the survey to evaluate mental health outcomes. The GAD-7 is a seven-item assessment that rates the frequency of anxiety symptoms over the last two weeks on a 5-point Likert scale with responses ranging from 0 (not at all) to 4 (almost every day) in order to assess the severity of generalized anxiety symptoms and the illness they are associated with. The items are added up to produce a total score, which runs from 0 to 21. More severe anxiety symptoms are indicated by higher scores. The categories of anxiety levels utilized are as follows: 0–5 represents the least amount of anxiety, 5–9 represents mild anxiety, 10–14 represents moderate anxiety, and 15–21 represents severe anxiety. The data were gathered systematically using a questionnaire that included both closed- and open-ended questions to extract more detailed information.

Additionally, the survey gathered data on sociodemographic traits, stressors connected to COVID-19, and coping strategies. To gain a deeper understanding of the survey respondents' experiences during the epidemic, interviews with a sample of them were undertaken. The six stages suggested by Braun & Clarke were followed when doing a thematic analysis on the interview data (Braun & Clarke, 2019). Prior to participation in the study, participants gave their informed consent, and confidentiality and anonymity were upheld throughout the investigation.

In conclusion, the study's qualitative research design enabled a thorough examination of how the COVID-19 pandemic affected Ghanaian first-time moms' mental health and wellbeing. It also gave researchers insights into how these women experienced and perceived the pandemic's effects on their lives. The results of this study aid in the creation of focused treatments to promote first-time moms' mental health and wellbeing both during and after the epidemic.

C) Statistical Analyses

The analysis was done with SPSS Version 26. Inferential statistics were used to look for correlations between variables and descriptive statistics to summarize the data after it had been collected. Both descriptive and inferential statistical methods were employed to analyse the data after data collection. The data were summarized and the characteristics of the sample were described using descriptive statistics, such as mean, median, and standard deviation. After becoming familiar with the data, the analysis involved creating preliminary codes, looking for themes, evaluating themes, defining and labelling themes, and preparing the final report. Ethical considerations were taken into account during the study.

To check for significant variations in the connections between variables, inferential statistics like t-tests were applied. The impact of the COVID-19 pandemic on first-time moms was the dependent variable, and multiple regression analysis was used to explore the relationship between the independent variables, such as social support and access to healthcare services, and the dependent variable. The most important predictors of the pandemic's effects on first-time mothers in Ghana were determined by this investigation. The study took six months, including three months for data collection, two months for data analysis, and one month for discussion.

The data from qualitative interviews were then examined using thematic analysis. This requires identifying recurring themes or patterns in the data in order to comprehend the experiences and perspectives of first-time mothers throughout the pandemic. A more complete knowledge of the pandemic's effects on Ghana's first-time mothers was achieved through the use of qualitative data to supplement and enhance the quantitative information gathered through surveys. In conclusion, multiple regression analysis, descriptive and inferential statistics, and qualitative analysis were used to fully understand how the COVID-19 epidemic has affected first-time mothers in Ghana.

IV. RESULTS

This study shed light on Ghanaian first-time mothers' mental health and welfare during the COVID-19 pandemic. Our research pinpointed the causes of subpar mental health outcomes and provided guidance for developing focused interventions to help this population's mental health and wellbeing. The purpose of the study is to shed light on how the COVID-19 pandemic has affected the mental health and general wellbeing of first-time moms in Ghana. 235 first-time expecting mothers (age = 24 years, SD = .73), who were typically at 27.24 weeks gestation, participated in the study. Married participants made up 41% of the group. Pregnant women primarily identified as employed (66%) and jobless (34%). There were no adoptive parents in our sample because more than half of the participants did not already have another kid and every participant gave birth to their child vaginally (83%) or through a Caesarean section (17%). Table 1 shows further demographics and obstetric details below.

Table 1 Demographics and Obstetric Characteristics of First Time Mothers (N=235)

Components	Responses Frequency		Percent (%)
Age	18-24 years	106	45
	25-34 years	80	34
	35-44 years	49	21
	Mean (SD)	2.12 (.73)	
Marital Status	Married	96	41
	Divorced	47	20
	Single	92	39
	Mean (SD)	2.17 (1.4)	
Educational level	High School	50	21
	University	185	79
	Mean (SD)	2.8 (.42)	
Employment status	Employed	155	66
	Unemployed	80	34
	Mean (SD)	1.6 (.51)	
Birth Type	Vaginal delivery	196	83
	Caesarean delivery	39	17
	Mean (SD)	1.14 (.35)	

A) Impacts of Covid19 pandemic on first time mothers in Ghana

a. A Rise in Mental Health Issues

Postpartum depression is a major topic in health discourses, as shown by the abundance of research and assessment methods. However, our participants did not believe that the government or healthcare services were adequately addressing the urgency and significance of postpartum mental health during the pandemic. For first-time expectant mothers, anxiety was moderately correlated with COVID-19 pregnancy-related distress. As shown in figure 1, the majority of first-time expecting mothers (75%) expressed anxiety at changes to their prenatal care brought on by COVID, with 25% indicating moderate to severe distress. Although very few first-time mothers reported changing their preferred delivery method or birthplace, many (63%) did admit to feeling some anxiety about changes to their birth plan brought on by the pandemic. Over half of the participants (85%) reported experiencing depression, abandonment, loss, exhaustion, irritability, sadness, anger, and anxiety. One participant said, "Anxiety also plays a big part in this difficult time," in reference to the compounding nature of stressors, namely those associated to being a new parent in general and in dealing with a pandemic. Finding assistance or support for their mental health was a major worry for research participants, especially mothers who felt abandoned.

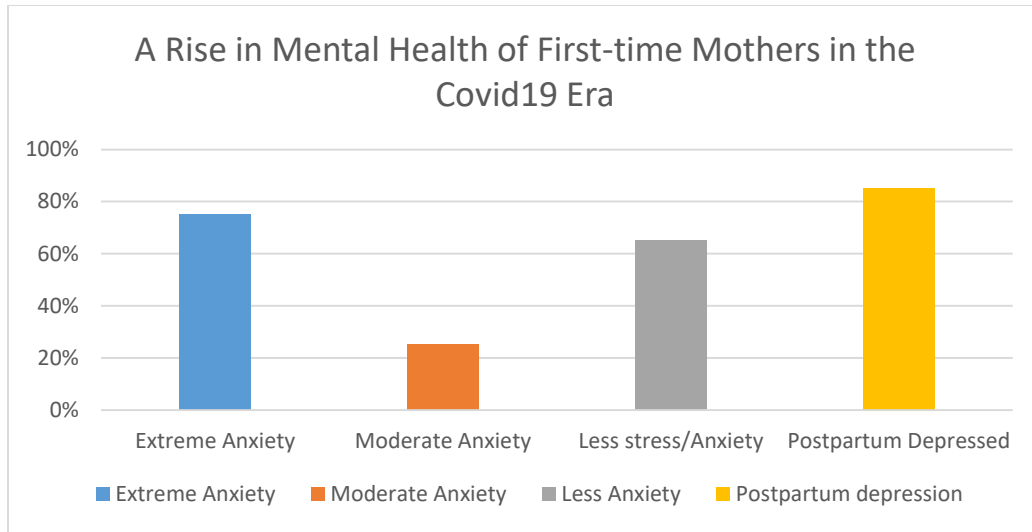


Figure1 shows the rise in anxiety and stress level among first-time mothers in Ghana

b. Disruption in social support

For first-time mothers, social support is essential, and our study found that the pandemic's effects on social support were a major influence on mental health and well-being (indicated in figure2). According to the results of our study, the pandemic disrupted social support for Ghanaian first-time mothers. A little over (35%) of first-time mothers said they could not see their grandparents, and (65%) said they did not get help from their extended family because of their social isolation. Postpartum mental health concerns were made worse by first-time mothers' feelings of isolation (86%) as a result of following public health directives.

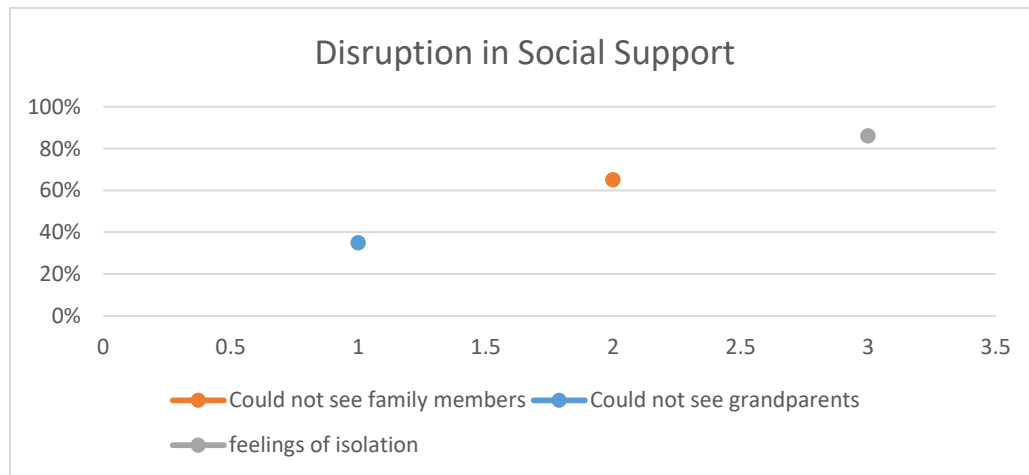


Figure2.shows the disruption in social support to first time mothers in Ghana.

c. Challenges in Accessing and Getting Information from Healthcare Services

For first-time mothers, having access to healthcare services is crucial, and the pandemic's effects on healthcare services had a substantial influence on mental health and well-being. Our study revealed that (70%) of Ghanaian first-time mothers were facing challenges in accessing healthcare services during the pandemic. Hospitals tried to address this by limiting the number of patients per room, the length of their stay, and postpartum stays, but this had a severe impact on patients' access to high-quality care. (66%) of first-time mothers reported the rapid restructuring of maternity care, while (55%) reported reductions in hospital stays during the pandemic, which affected the quality of services they received. 73% of first-time mothers did not have access to health information and resorted to the internet and agencies to solve their issues, and 31% had limited information on the COVID-19 pandemic. Additionally, 71% of these expectant mothers stated that they switched from in-person to phone or video prenatal appointments, while 29% stated that their provider cancelled some or all of their prenatal visits. These emotions, particularly for a new parent, can be detrimental to general health and wellbeing as well as parental confidence, which can have a big effect on the baby as well as the entire family. Therefore,

the COVID-19 pandemic had a significant impact on obstetric care, as shown in figure3 below, which shows changes in care-seeking behavior and care accessibility.

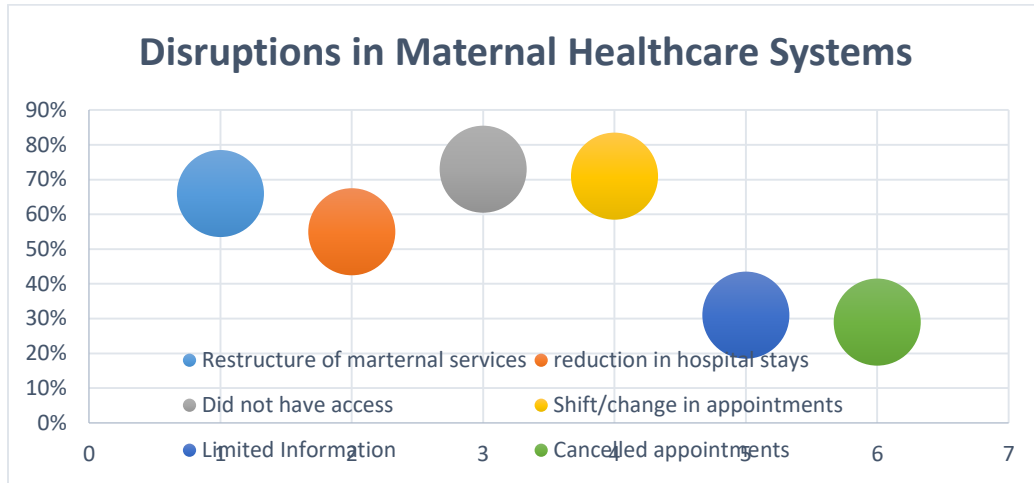


Figure3.shows the disruption in maternal healthcare systems in Ghana.

d. Economic instability

The pandemic's impact (see Figure4) on the economy was particularly challenging for first-time mothers, who were facing financial pressures while also dealing with the stressors associated with pregnancy and the postpartum period. The study revealed that Ghanaian first-time mothers experienced economic instability during the pandemic. In the current poll, 55% of respondents claimed that the epidemic was making it harder for them to pay their expenditures. Furthermore, 19% of respondents said that they had financial difficulties that prevented them from attending their appointments. Finally, 26% of respondents said that the COVID-19 pandemic caused them or their partner to lose their jobs.

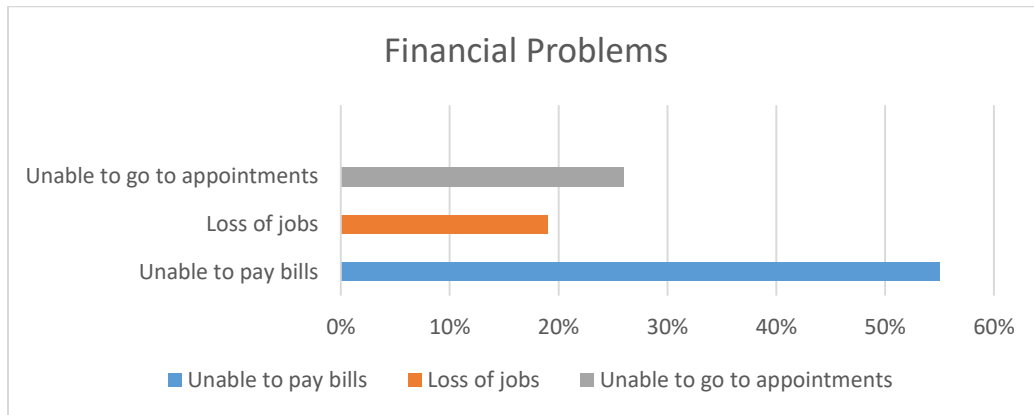


Figure4.shows the financial problems the Covid19 Pandemic effects on first-time mothers.

Table 2 The Effects of Covid19 Pandemic on First-time Mothers Quality of Life

Components	β	Mean	SD	t	Sig.(p)	95% CI for β	
						Lower	Upper
Mental Health	-.507	2.0	1.012	5.13	.90** .001	-.40	-.52
Economic stability	-.547	2.1	.977	8.38	.92** .000	-.43	-.69
Maternal Healthcare Systems	-.356	2.1	.940	6.43	.89** .000	-.26	-.50
Social Support	-.404	2.8	1.02	6.75	.35** .000	-.28	-.51

a. Dependent Variable: Covid19

** Correlation is significant at the 0.01 level

Multiple regression was used to examine the relationship between the independent variables (mental health, social support, economic stability, and maternal healthcare systems) and the dependable variable (covid-19 pandemic effects on first-time mothers). Multiple regression (see Table 2) indicates that the overall COVID-19 pandemic significantly negatively affected first-time mothers ($\beta = -0.37$, $p < 0.01$). Conversely, the COVID-19 pandemic was significantly negatively associated with mental health, economic stability, maternal healthcare systems, and social support ($\beta = -0.35$ to -0.55 , respectively, all $p < 0.01$).

Table 3 Means, standard deviations, and group difference effect sizes for the overall sample (n=235).

Components	t	df	Sig.	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Mental Health	8.21	235	.000	.31	.06	.56
Economic Instability	4.59	235	.001	.56	.31	.81
Disruption in Social Support	4.98	235	.001	.60	.35	.82
Healthcare systems challenges	9.30	235	.000	1.20	.94	1.50
Overall Impacts First time moms	5.11	235	.000	.61	.37	.85
One-Sample T-Test, Test Value = 1.5						

To look for group differences based on the COVID-19's effects on first-time mothers, independent sample T-tests were used. It is clear that there are some statistically significant group differences (see Table 3): First-time mothers reported significantly higher rates of healthcare system challenges ($t = 9.30$, $p < 0.01$) and elevated mental health ($t = 8.21$, $p < 0.01$). On the other hand, first-time mothers reported lower rates for disruptions in social support ($t = 4.88$, $p < 0.05$) and economic instability ($t = 4.59$, $p < 0.05$).

B) Coping Mechanisms for first time mothers during the Pandemic

According to the perceived stress category, Figure 5 shows the techniques parents considered useful for handling parenting challenges during COVID-19. The most popular techniques were conducting family activities together (72% of first-time mothers reported this), staying in touch online (68%), and maintaining a daily schedule for the kids (59%). Over time, some techniques saw an increase in the total percentage of parents who said they were successful in handling their parenting challenges while other strategies saw a drop. Using community services, staying in touch with family and friends online, and regulating the information they seek on COVID-19 declined the most (by 13% of first-time parents) while keeping their kid on a daily schedule and using resources from extended family grew the most (by 8% of parents).

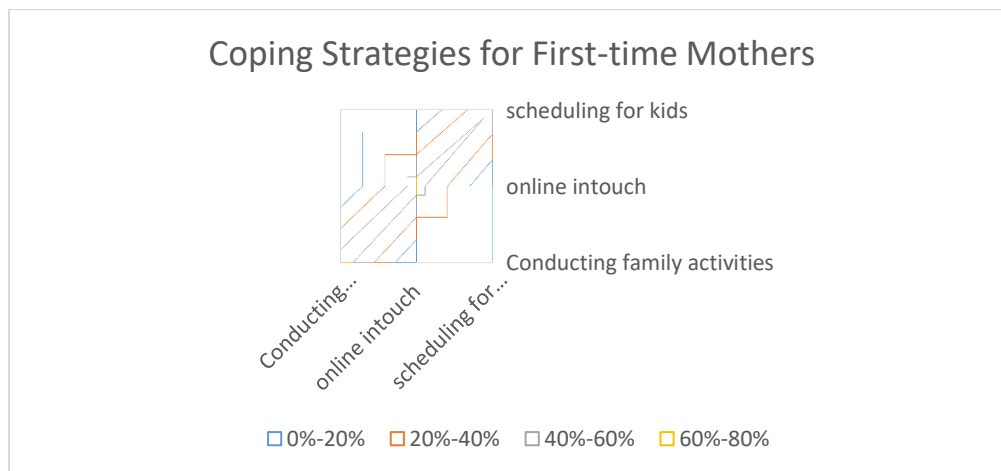


Figure 5. shows the coping strategies adopted by Ghanaian First-time mothers.

V. DISCUSSIONS

The initial wave of the COVID-19 pandemic revealed numerous postpartum care gaps that already existed but were made worse by the epidemic's consequences. The special conditions brought on by the pandemic and its impact on maternal and infant health, as well as on families, underscore the necessity of prioritising and promoting both the social and mental health of families throughout the postpartum period. Postpartum mental health issues can be challenging to approach or discuss, and they aren't usually given priority by parents or medical professionals.

First, according to the results of our study, the epidemic in Ghana caused first-time mothers to experience higher than usual levels of worry and sadness. Finding the source of one's mental health is the first step in figuring out how to take care of oneself. The COVID-19 outbreak has been linked to increased levels of anxiety and depression worldwide, which was worsened for first-time mothers already coping with the challenges associated with pregnancy and the postpartum period. Based on their own experiences, mothers reported their conviction that they were dealing with mental health difficulties or were at risk of doing so, but they were unable to get the proper treatment. The majority of study participants said that multiple causes, including loss of social ties, dissatisfaction over parental leave, feelings of isolation from loved ones, and the compounding effects of stressors, had negatively impacted their mental health. According to one participant, "As a new mum, you are already so nervous, so adding a pandemic to that is a pile of anxiety and worry." Our study shows that the pandemic has harmed relationships and undermined personal and dyadic coping resources, which has resulted in declining mental health for many, including first-time mothers (Cullen et al., 2020; Defina & Rizkillah, 2021; Di Toro et al., 2021; Rajkumar, 2020). What is remarkable from our study is that mothers reported concerns about an elevated risk for mental health issues as a result of the public health orders produced by COVID-19, even though mental health issues were generally expected. This demonstrates how COVID-19 has harmed first-time mothers in Ghana.

Second, the study discovered that the epidemic had disturbed Ghana's first-time mothers' social support system. For first-time mothers, social support is essential, and disruptions in social support can have a serious impact on one's mental health and general wellbeing. The nuclear family, which might not have support from extended family, continues to be valued in the dominant social discourses surrounding mothering. It is expected of new mothers to be "super moms" who can "do it all," and such idealistic standards of parenting were unattainable, hurtful, and detrimental. According to previous studies (Cullen et al., 2020; Defina & Rizkillah, 2021; Di Toro et al., 2021; Rajkumar, 2020; Sylverken et al., 2022; Tully et al., 2017), the social construction of mothering frequently reinforces the prevalent belief that new mothers should naturally experience happiness and be content to stay home with their newborn baby. It was essential to establish contacts with other new parents, especially because the baby's grandparents or other family members were unable to provide support owing to pandemic-related limitations.

Mothers' socialization was another issue. Mothers' need for socialization is frequently undervalued and not acknowledged as an essential aspect of the postpartum time. In order to support their mental health and to connect with other parents to share experiences, thoughts, and worries, several participants mentioned missing their mum groups, coffee conversations, and parent-baby programme. While many participants claimed that online communities, like Facebook groups for new parents, were somewhat helpful, they also claimed that these online spaces did not "make up for the in-person contact." Weak links, or relationships with strangers who are also moms, have been shown to significantly increase feelings of empathy and support (Aduhene & Osei-Assibey, 2021; Ahmad & Vismara, 2021; Fisher et al., 2020; Frimpong-Manso et al., 2020; Gao et al., 2021). It is crucial to consider how inadequate in-person socialization affects mothers' and infants' mental health. Mothers worry that a baby's lack of socialization could be detrimental. The results of this study likewise supported the influence of isolation on first-time mothers during the COVID-19 era. As a result, moms felt abandoned, alone, and helpless, and those feelings of loneliness had a profound effect. In addition to highlighting the value of "weak ties," which are connections or resources that are not necessarily within one's immediate social circle but are nonetheless regarded by mothers as reliable, valuable, and contributing to broader, more diverse lenses on parenting, this study supports recent literature in this area (Adebayo et al., 2022; Adler, 2002; Adom et al., 2021; Aduhene & Osei-Assibey, 2021; Agbi et al., 2022; Agbi, Lvin, & Asamoah, 2021a; Ahmad & Vismara, 2021; Fisher et al., 2020; Frimpong-Manso et al., 2020; Gao et al., 2021). Contrarily, the need for isolation or quarantine due to COVID-19 exposure was linked to lower levels of stress, which is consistent with research showing that pregnant women's well-being can be improved by isolation or quarantine requirements, possibly by allowing for more intimate time with their partners or by providing a decrease in daily hassles, more rest, and/or a lessened fear of exposure.

Third, the study found that access to healthcare services was difficult for first-time mothers in Ghana during the pandemic. For first-time mothers, having access to healthcare services is crucial, and the pandemic's effects on healthcare services had major effects on mental health and well-being. Our study found that, barriers to healthcare services for first-time mothers in Ghana included interruptions in the healthcare system and concerns about COVID-19 exposure. The findings

highlighted how important it is for families to have access to a variety of healthcare services, including community health, public health, and medical services that priorities mental, emotional, and physical health. For instance, first-time moms felt that whenever support or information was offered, it was always focused on the welfare of the unborn child and that they were frequently left to handle the majority of their health issues. According to recent studies in this field (Rajkumar, 2020; Spinelli et al., 2020; Thayer & Gildner, 2021), 55% of these expecting moms reported switching from in-person to phone/video prenatal sessions, while 29% said their physician cancelled part or all of their prenatal visits. These findings support the findings of (Preis, Mahaffey, Heiselman, & Lobel, 2020), who identified prenatal appointment adjustments and the possibility of developing COVID as two of the main sources of stress for expectant mothers. Our findings show that first-time moms who are pregnant are adjusting to healthcare and birth plan changes, which may cause them great distress and jeopardize the wellbeing of their unborn children and themselves as well as their relationships.

First-time mothers in our study value healthcare providers' support and patient-provider relationships. Without it, they felt forgotten, abandoned, and vulnerable, which can harm their health, well-being, and parental confidence and affect their infant and family. Restructuring of maternity care has demonstrated that high-quality treatment can be provided remotely, hospital stays can be cut short, and issues can be resolved with sufficient financing, research, and political will. COVID-19 public health orders made it hard for mothers in our study to access information and support. They lacked confidence in caring for their baby and safely breastfeeding due to unclear information and mixed messaging. Limited access to postpartum services made it worse, forcing mothers to navigate the complexities of postpartum health information alone.

Finally, this study found that the pandemic had a significant economic impact on first-time mothers in Ghana. Economic instability was particularly challenging for first-time mothers, who were facing financial pressures while dealing with the stressors associated with pregnancy and the postpartum period. The study found that first-time mothers in Ghana experienced economic instability due to job loss, reduced income, and increased expenses related to the pandemic. The experiences of the mothers in our study were impacted by stigma as well. Increased despair, stress, and anxiety were also substantially correlated with external changes brought on by COVID-19, notably having more difficulty paying bills and needing to offer direct care to infected patients. First-time expectant moms' higher levels of despair and anxiety were substantially associated with isolation or quarantine owing to exposure.

VI. IMPLICATIONS

Our study has wide-ranging effects on practice, research, and policy. It can aid in creating focused interventions to improve the mental health and welfare of first-time mothers in Ghana during and after the pandemic. Knowing the specific difficulties and pressures that this population faces, interventions targeting their needs and promoting their well-being can be designed. The study's conclusions can also help design policies to enhance maternal and child health outcomes in Ghana during and after the pandemic.

A) Research implications

The investigation's goal is to determine how Ghana's first-time moms' mental health and overall well-being have been impacted by the COVID-19 outbreak. The findings of the study will contribute to the growing body of knowledge on the impact of the COVID-19 pandemic on mental health and wellbeing, particularly among Ghanaian first-time moms. The study's qualitative research methodology enables a thorough examination of this population's experiences and views, shedding light on their particular needs and pressures during the pandemic. Future research into how this pandemic affects mothers' mental health and wellbeing in other low- and middle-income countries may be guided by the study's findings.

B) Practice implications

The study's findings have practical implications for healthcare professionals, policymakers, and organizations involved in maternal and child health. The findings can inform the development of targeted interventions that address the specific challenges and stressors faced by first-time mothers in Ghana during the pandemic.

C) Policy implications

The study can help policymakers improve maternal and child health in Ghana during and after the pandemic. Policymakers can use the study to increase funding for maternal mental health services and improve healthcare access, including remote and telehealth services. The study's findings can also guide policies like financial aid and work protection measures to address the pandemic's economic impact on first-time mothers and their families.

VII. LIMITATIONS OF THE STUDY

It is pertinent and significant to do research on how the COVID-19 pandemic has affected the mental health and wellbeing of first-time moms in Ghana. First-time mothers are a vulnerable population, and the pandemic has introduced new challenges and stressors that can negatively impact their mental health and well-being. These challenges may include isolation from family and friends, limited access to healthcare services, financial insecurity, and increased caregiving responsibilities.

However, there are a few limitations considered in this study. Access to accurate and representative data on the mental health and wellbeing of Ghanaian first-time mothers is one of the limitations. The pandemic has made it challenging to collect data through in-person interviews, and many women were hesitant to disclose their struggles with mental health due to stigma.

Another limitation of the study was the difficulty in distinguishing the pandemic's effects from other factors that impact mental health and well-being among first-time mothers. It's unclear whether pandemic-related stressors are the primary cause of mental health issues or whether pre-existing conditions or other life events play a more significant role. The pandemic, however, has had a huge impact on people's mental health and wellbeing all across the world, especially first-time mothers in Ghana. To pinpoint their particular difficulties and create strategies to help their mental health, research is essential. The results of the study should be seen in the context of its constraints.

VIII. CONCLUSION

The study looked into how the COVID-19 epidemic affected the mental health and general wellbeing of first-time moms in Ghana. The study's findings aid in the creation of focused treatments to promote this population's mental health and wellbeing both during and after the epidemic. The study's conclusions may also influence future research, clinical care, and governmental initiatives focused at enhancing mother and infant health in Ghana and other low- and middle-income nations. Overall, our data show how COVID-19 has affected first-time Ghanaian women's experiences as they adjust to parenting both inwardly and outwardly. The discourse(s) surrounding postpartum mental health and how COVID-19 affects maternal health should be explored in light of the study's findings.

Ethical considerations

The study abided by moral standards including informed permission, privacy, and anonymity. Participants were made aware of the study's objectives and their right to leave at any time. The Institutional Review Board has given the study its ethical approval.

Conflict of Interest

There are no conflicts of interest, according to the authors.

Data Availability

On reasonable request, the corresponding author (FAA) will provide the data used in this study.

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