

Association of Mother-Child Attachment with Maternal Mental Health in Early Years

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A thesis submitted to BRAC Institute of Educational Development in partial fulfillment
of the requirements for the degree of
Master of Science in Early Childhood Development

BRAC Institute of Educational Development
BRAC University
December 2020

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Declaration

It is hereby declared that

1. The thesis submitted is my/our own original work while completing degree at BRAC University.
2. The thesis does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The thesis does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
4. I/We have acknowledged all main sources of help.

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Ethics Statement

Title of Thesis Topic: Association of Mother-child Attachment with Maternal Mental Health in Early Years

Student name: Umme Ruman Ruma

1. Source of population: Educated mothers who had at least one child aged 0-2 years
2. Does the study involve (yes, or no)
 - a) Physical risk to the subjects (No)
 - b) Social risk (No)
 - c) Psychological risk to subjects (No)
 - d) discomfort to subjects (No)
 - e) Invasion of privacy (No)
3. Will subjects be clearly informed about (yes or no)
 - a) Nature and purpose of the study (Yes)
 - b) Procedures to be followed (Yes)
 - c) Physical risk (Yes)
 - d) Sensitive questions (Yes)
 - e) Benefits to be derived (Yes)
 - f) Right to refuse to participate or to withdraw from the study (Yes)
 - g) Confidential handling of data (Yes)
 - h) Compensation and/or treatment where there are risks or privacy is involved (Yes)
4. Will Signed verbal consent for be required (yes or no)
 - a) from study participants (Yes)
 - b) from parents or guardian (Yes)
 - c) Will precautions be taken to protect anonymity of subjects? (Yes)
5. Check documents being submitted herewith to Committee:
 - a) Proposal (Yes)
 - b) Consent Form (Yes)
 - c) Questionnaire or interview schedule (Yes)

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Executive Summary

A mentally distressed mother fails or sometimes takes more time to establish a strong mother-child attachment. The purpose of this quantitative research was to explore the relationship between maternal mental health and mother-child attachment of the urban mothers in the early years. Mothers who had children of 0-2 years of age completed three self-reported questionnaires such as SES Questionnaire, GHQ, MAI using a digital platform. Findings show that 49.41% mothers are found distressed and COVID-19 pandemic is the underline cause of this highest percentage. Some other factors including lack of time for self-care, domestic violence, low income, mother's physical illness, lack of mothers financial freedom are associated with maternal mental distress It is also revealed a negative relationship between maternal distress GHQ) and mother-child attachment (MAI), but not statistically significant ($p=0.094$). This finding emphasizes the importance of understanding maternal mental health state difficulties to ensure a holistic development for their children.

Keywords: Child's development; COVID-19; Early years; Mother-child attachment; Postpartum depression; Risk factors

Dedication

This thesis is dedicated to my beloved son and daughter, who unfold prior to me many domains of ECD in practice.

Acknowledgements

Foremost, I would like to express my sincere gratitude to BRAC Institute of Educational Development for providing me the opportunity for post-graduation in Early Childhood Development. I am extremely grateful to Dr. Erum Mariam, Director, BRAC IED for selecting me for the course.

I heartily thank my supervisor, Ms Sakila Yesmin, Senior Lecturer, BRAC IED, BRAC University, who instigated my interest in the area and assisted me greatly in moulding the study from its origin into its final form. I can look back to my starting point and can see how much I have developed and learnt in regards to my understanding of undertaking research. I sincerely applaud all the faculty members of BRAC IED for their guidance and cooperation throughout this M.Sc course.

I am indebted to all the mothers who participated in this study - without them it would just be an idea.

It would be an injustice to my family members if I do not offer my sincere gratitude for all the support they offered to me to help me finish the study. To my parents, thank you for being my #1 supporters on every sideline. To my siblings, thank you for always knowing what to say and do when I need you. Last, and certainly not least, my husband - for walking every single step of this journey beside me. Words are not enough.

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List of Acronyms

BRAC	Bangladesh Rural Advancement Committee
COVID-19	Corona Virus Disease of 2019
ECD	Early Childhood Development
GHQ	General Health Questionnaire
HIC	High Income Counties
LMIC	Low- and Middle-Income Countries
MAI	Maternal Attachment Inventory
PTSD	Post Traumatic Stress Disorder
SPSS	Statistical Package for Social Science
UNFPA	United Nations Population Fund
WHO	World Health Organization

Chapter I: Introduction & Background

1.1 Introduction

When a child is born, he/she requires to establish attachment with others as it is essential for his/her survival. The attachment they formed in their early life helps them to develop mentally, physically, intellectually, emotionally, and socially. Generally, mother-child attachment is a natural fabrication of human beings. However, many maternal conditions during pregnancy and after delivery have been determined as risk factors for the later disruption of mother-child attachment. A mother's mental health complications hinder her ability to take proper care of her child , which in turn has an adverse effect on a child's growth and development.

The World Health Organization (WHO) defines maternal mental health as "a state of well-being in which a mother realizes her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her community" (WHO,2020).

Maternal mental health refers to a woman's mental health during pregnancy and the first one year after birth , although in worst cases it might continue for a longer period of time. Depression, accompanied by anxiety disorder, is the most common maternal mental health disorder. Other disorders include bipolar disorder, postpartum psychosis and birth-related PTSD. Even a mother who is not diagnosed with these disorders, might be distressed due to the hormonal changes and new lifestyle being a mother. Besides this, family and society in our context impose more expectations on newly mothers which might also disrupt her thoughts, emotions and behaviors.

A wide range of research says that these distresses on mothers have dreadful effects on children's optimal outcome. Some researchers have also identified that a mother who is mentally ill or upset fails to establish a strong mother-child attachment (Cunningham et al., 2007)).

John Bowlby was a British psychoanalyst who developed the psychological theory of attachment. In this theory, he described how the attachment between a mother and a child is formed. He also explained the impact of this attachment on children's optimal development (Bowlby, 1969). A secure mother-child attachment plays a pivotal role in the early years to make sure that the child will have a healthy growth and development in his/her later life . The quality of this attachment formed between a mother and a child may be associated with maternal mental health.

1.2 Statement of the Problem

Mother-child attachment is a very natural phenomenon that a human being acquired innately among themselves. When a child is born, it is expected that an attachment system will be developed with the mother (Jeanne et al.,2013). However, there are some mothers who take much time or sometimes fail to establish this attachment (Kumar,1997). In these cases, mothers might neglect the infant and in the worst cases, the mother might drive to harm the infant as well (Ohara et al.,2016). This finding was underpinned by several observational studies. For example, cross-sectional studies demonstrated that poor mother-child attachment has a connection with less interactive behavior (Noorlander et al., 2008; Hornstein et al., 2006;).

Failure to initiate this attachment during early years can have significant effects on the mother-child relationship, which can affect a child's holistic development (Kinsey & Hupcey, 2013). There are many maternal circumstances during the perinatal period that have been identified as risk factors for the later disturbances of the mother-child attachment, catalyzing an impairment of the child's emotional and social development and might impede the mental health of the child in later years (Nguyen, 2017). This study uncovered that maternal mental health is one of the major determinant to deteriorate the mother-child attachment. There are several factors that could affect maternal mental health and a mother who is not mentally healthy fails to establish a strong connection with her child. In most of the cases, these types of dysfunctions go undiagnosed and untreated, which in turn may create an alarming domino effect for mothers, their children and their families.

Hence, this proposed study provided an opportunity to explore whether there is any association between maternal mental health and mother-child attachment as well as to what extent this relationship exists.

1.3 Purpose of the Study

The main aim of this research was to analyze the relationship between maternal mental health and mother-child attachment of the urban mothers in the early years. The researcher measured the score of every mother for their overall psychological and emotional wellbeing irrespective of their mental illness. Additionally, different factors associated with maternal mental health were observed through validated tools. This study also addressed the barriers to receive mental health care service for the urban mothers.

1.4 Justification and Significance of the Study

Bangladesh has made a noteworthy improvement in accomplishing millennium development goals (MDGs) 4 and 5. In the last 30 years, a remarkable progress has been achieved in child mortality (Chowdhury et al.,2011). Now it is time to focus on maternal mental health as this is one of the most important predictors for a child's overall development.

Previous studies have indicated that pregnant women and new mothers are more likely to face a lot of challenges both physically and psychologically. As childbirth brings changes in hormonal balance, it may cause several issues like mood swing, insomnia, fatigue, baby blues and more. During this time, women may have physical illness as well as concern about the return to a normal state of health, child-care stress, breastfeeding, relationship with family members (Kanotra et al.,2007; Khan,2020). These disturbances can deteriorate a mother's mental health resulting in unsatisfactory mother-child attachment.

Relatively little study on the relationship of maternal mental health and mother-child attachment has been carried out to date. Most of the studies conducted on mother-child attachment have focused on antenatal and postpartum depression and anxiety. Apart from these common mental disorders, a mother might also have a lot of distress which can hamper her thoughts, emotions and behavior. Although the prevalence rate of maternal mental disorders is significantly higher in LMICs , there have been few remarkable studies on Bangladeshi context in identifying the relationships between mother-child attachment and maternal mental health.

Therefore, this study has extended existing knowledge about the importance of maternal mental health as well as the association of mother-child attachment with mothers' psychological and emotional condition. For policy makers, this study would be useful while developing strategies for improving mental health for both working and non-working mothers. It will also be beneficial for the health professionals, teachers, caregivers & other family members, students, and researchers.

1.5 Research Questions

The purpose of the proposed study was to address the following research questions::

RQ 1: What is the relationship between mother-child attachment and maternal mental health ?

RQ 2: What are the factors affecting the maternal mental health of urban mothers?

RQ 3: What are the barriers to access mental health care services in urban areas?

1.6 Operational Definitions

Maternal Mental Health: A state of well-being in which a mother knows her own skills, can cope with life's usual pressures, can work productively and fruitfully, and can contribute to her society (WHO, 2020).

Mother-Child Attachment: A series of internal behaviors that would make the child closely related to his or her primary caregiver, who is normally the mother (Bowlby, 1969) .

Chapter II : Literature Review

To know the significance and the interconnection of maternal mental health and mother-child attachment, a lot of relevant and available literature were reviewed. Especially, the studies regarding mental health in the postpartum period and its impact on birth outcomes and child behavior were searched.

2.1 Global Context

A most recent study (Fatori et al., 2020) revealed that the prevalence rates of antenatal and postnatal depression in the developed countries were estimated at 15% and 10% respectively, whereas in the developing countries the corresponding rates were higher compared to high income countries which were 25% and 19%. Moreover, after analyzing published reports on maternal mental health, Satyanarayana et al. (2011) reported the prevalence of depression in Sweden as 12.5% at eight weeks postpartum, in Australia 7.5% at six to eight weeks postpartum and in Italy 13.5% at three weeks postpartum. On the other hand, in the developing countries, the rate of postnatal depression was found 18.3% in African continent, 16.8% in Thailand, 4.9% in Nepal, 17% in Morocco, 20.7% in Brazil, 22% in Indonesia and 26.3% in India. The study also stated that the rate of postpartum depression was lowest in Malaysia (3.5%) and highest in Pakistan (63.3%) among the Asian countries.

According to the WHO-UNFPA report of the meeting held in Geneva, Switzerland (2008), majority of the maternal mental health studies have been conducted in high income countries, although the prevalence of maternal mental health problems are higher in low income countries. This report also demonstrated that maternal mental health has

numerous effects on child development (WHO & UNFPA, 2008). Several research evidences have proven that maternal mental health plays an important role during pregnancy and after delivery (Leis et al.,2013; Bennett et al.,2015).

For many women, pregnancy is difficult, but it can be overshadowed by mental illness for a minority of women. The Lancet's Perinatal Mental Health Series examines the impacts of maternal mental health both on the mother and the child. Non-psychotic mental illnesses such as depression, anxiety, and post-traumatic stress disorder are discussed in the first of three papers (Howard et al., 2014). The second paper (Jones et al., 2014) focuses on severe mental illness, such as bipolar disorder, schizophrenia, and psychosis; and the third paper (Stein et al., 2014) summarizes the proof for the evidence of the impact of mother's mental health problems on children ranging from low to high income countries.

Similar finding can be observed in another two studies (Field et al., 2004; Lundy et al., 1999) describing that a distressed mother is more probable to premature delivery and low birth weight child compared to a non-distressed mother. Apart from this, the neonates of distressed mothers also show some disturbances in their behavior. One systematic review (Cook, Ayers & Horsch, 2018) also showed that a mother's stress during the perinatal period causes some negative outcomes in children.

One study (Lehnig et al.,2019) suggests that an acute postpartum depression hinders a mother to form a strong attachment with her child. Postpartum anxiety is also associated with the mother-child attachment problem, but this correlation can be vanished if postpartum depression is managed. However, mothers suffering from social phobia did not show any changes in mother-child attachment than the mothers who did not

experience social phobia. Another systematic review (Śliwerski et al., 2020) considering depression expressed that there might be an association between maternal mental health and mother-child attachment. A depressed mother not only fails to establish a strong attachment with her child, but she also feels more stressed compared to a non-depressed mother. Furthermore, a mentally unstable mother sometimes treats her child in a negative way as she cannot manage all her responsibilities properly and cannot enjoy her motherhood. Nakano et al. (2019) found a strong correlation with a high degree of impaired maternal bonding. Secondly, negative thoughts about pregnancy were also associated with impaired maternal attachment. Moreover, the study discovered that being a mother for the first time had moderate level of mother-child attachment failure..

The outbreak of coronavirus disease (COVID-19) in China in 2019 has become a deep concern to global health, especially for mental health. Numerous psychological and socioeconomic stressors that are often associated with parental mental wellbeing are influencing the parents due to the pandemic. These issues are further worsened by financial concerns, such as job losses and decreased salaries (Caparros-Gonzalez & Alderdice, 2020). Moreover, In general, pregnant women are more vulnerable to respiratory pathogens and the development of extreme pneumonia, including altered cell-mediated immunity and changes in pulmonary function due to physiological changes in pregnancy. It can be an incredibly painful experience, if a women goes through a quarantine during this sensitive period. In addition, separation from loved ones, loss of liberty, loneliness, confusion about the future and boredom can also have significant consequences.

Hessami et al. (2020) also explained the consequences of the COVID-19 pandemic on women during pregnancy and perinatal period. Many researches on catastrophic events indicate that both the mother and the child can be affected by pandemic, earthquakes, famine or other severe disasters. There are several possible causes of stress in the situation of the emerging COVID-19 pandemic that could have a mental health effect. For instance, social distancing is a key strategy for slowing down the COVID-19 pandemic; but as humans, we have an instinctive need to interact with others, which help us to mitigate the level of stress.

There are other factors apart from COVID-19 that could affect maternal mental health. Some major factors include mother's age, level of education, culture, premature delivery, low-birth child, out of a job, poverty, lack of social support, mother's physical illness, first child, unwanted pregnancy, any previous history of mental disorder, lack of sleep, domestic violence, unsatisfactory relationship with husband, amount of household chores etc (Engle,2009). Furthermore, one study published in British Sociological Association journal pointed out that full time working mothers are more stressed than the women who are also full time working, but have no children (Barr, 2019).

Researchers have also discovered some protective factors that can help the mothers from being distressed in the perinatal period. In a research conducted in South Africa, Ramchandani et al. (2009) found that level of education has an impact on maternal mental health. Educated mothers are expected to be less depressed during the postpartum period compared to less educated or illiterate mothers. In addition, Zelkowitz et al. (2008) identified some protective factors, such as mothers with low physical illness, less stress and happy married life. Breastfeeding is another important factor that can protect mothers

from postpartum depression (Srinivasan,2011). It also helps a mother to form a strong mother-child attachment.

2.2 Bangladesh Context

Few studies are found in Bangladeshi context on maternal mental health. In a cross-sectional study conducted in Vietnam, Ethiopia and Bangladesh , Nguyen et al. (2013) reported that the prevalence rate of maternal common mental disorder was 49% in Bangladesh. One study carried out in an urban slum area of Dhaka city discovered this rate as 46.2% (Khan & Flora, 2017), while other studies carried out in rural Bangladesh revealed the rate of postpartum depression ranging from 18% to 52% (Black et al.,2007; Gausia et al.,2009; Nasreen et al.,2015; Islam et al.,2017). Furthermore, One community based cohort study was conducted in Mymensingh district examining the impact of depressive and anxiety symptoms . That study reported that 11.3% of the mothers had poor mother-child attachment to their infants in two to three months postpartum (Edhborg et al.,2011).

One research on cultural attitudes has discovered that childbirth is considered as one of the most joyful and triumphant achievements in Bangladesh. The time after childbirth is tagged in this society as the happiest time in a woman's life and that's why there is an idea that this cheerful time helps a mother to protect from developing postnatal depression (Williams, Sarker, & Ferdous, 2017).

As in other parts of the world, the incidence of COVID-19 infection is growing in Bangladesh via community transmission which are imposing psychological effects on people. Majority of the people prefer to avoid hospitals until any emergency arrives as

they are afraid of getting infected. At the same time, doctors and health care practitioners in Bangladesh do not attend patient care without ensuring that whether the patient is COVID-19 positive or not. In addition, people are afraid of their family members and relatives when receiving the infection update and death rate news on TV and other outlets. All these issues are generating extra pressures for the emergency patients and might even extend risks to their life (Islam et al., 2020).

There are multiple factors that affect maternal mental health, such as women's socioeconomic status, relationship with others, physical health condition etc. But there are many other factors. A recent study recognized some factors for postpartum depression in rural Bangladeshi women. These are poverty, lack of nutrition, physical violence, household quarrels with in-laws, unsatisfactory marital relationship, physical sickness and any previous mental disorder (Hossain et al., 2020). A previous study also stated that young mothers are relatively more depressed than the older mothers, as they do not have enough parenting skills to raise a child (Coll et al., 1987). These adolescent mothers have limited knowledge of child development and are less capable to give their child proper stimulation. As a result, a poor mother-child attachment is formed in these mother-child dyad and they might have a tendency to abuse their child (McAnarney et al., 1986; Culp et al., 1988; Gullo, 2006)

One study conducted in rural Bangladesh examining how maternal mental health is associated with child development found that infants whose mothers were not mentally healthy and recognized their infants to be irritable had lower scores on Bayley Scales (Maureen et al., 2007). In another community based psychosocial intervention, Yesmin et al. (2016) discovered that in Bangladesh the area of maternal mental health is totally

overlooked. Most of the mother and child health program emphasized on mothers' and children's physical health, vaccination and family planning. The intervention was designed addressing both the child development and maternal mental health issues, as mental health care services are not easily accessible at the community level. Majority of the mental health services are hospital based and situated at the big cities. The service cost is also expensive in mental health segment. Therefore, this study found it effective to integrate the maternal mental health program with the Early Childhood Development programs.

Chapter III : Methodology

3.1 Study Design

The correlation design was used in this quantitative analysis to determine whether and to what degree a relationship exists between maternal mental health and mother-child attachment, as a correlational research design measures a relationship between two variables. The degree of the relationship was expressed as a correlation coefficient.

3.2 Study Participants

All the participants were selected based on the following criteria:

- mothers who had at least one child aged 0-2 years
- were educated
- had an e-mail ID and internet access

3.3 Study Site

This study was carried out in Dhaka city. It is the capital of Bangladesh and a mostly populous city having almost 20 million people. Set beside the Buriganga river, it covers a total area of 306.38 square kilometres. Dhaka is the centre of industrial, commercial, cultural, educational and political activities.

3.4 Sample size and Sample Method

To conduct the study, 85 mothers were selected from Dhaka city who had at least one child of 0-2 year of age, were educated and had e-mail ID & internet access as the survey

was conducted through a digital platform . The purposive sampling method was used considering the time and COVID-19 pandemic situation.

3.5 Data Collection Tools

To calculate the predictive power and strength of the relationship between the variables, the following instruments were used:

i. Maternal Attachment Inventory (MAI): MAI was developed by Muller to analyze the interpersonal relationship between mothers and infants (Muller, 1994). There are 26 items ranging from 1 to 4 on the scale, where high scores show a clear attachment to the infant. It was translated from Bangla into English. For the Bangla version, Cronbach's alpha was 0.78 and the test-retest reliability was 0.64 ($p < .01$).

ii. General Health Questionnaire (GHQ): This scale was developed to assess general mental health, including depression (McDowell, 2006). This scale has high reliability and validity and is one of the most commonly used psychometric tests in health and psychiatry (Goldberg et al.,1997). There are 6 positive and 6 negative items in it.

Furthermore, it is a Likert style scale with 4 point reaction options, usually ranging from 0-3. The scale's high score indicates mental health problems. In this current study, the Bangla version of the scale was used to assess mothers' mental health. The test-retest reliability coefficient of the Bengali version was found to be 0.57 and the internal accuracy of the Cronbach Alpha coefficient was 0.82.

iii. SES Questionnaire: The questionnaire also included questions to collect socio-economic information i.e. the age of the mother, level of education, occupation, family structure, no. of children etc.

As the questionnaire was self-administered, possible explanations were provided to make the questionnaires user-friendly. In addition, pilot testing of the instrument was done to permit any refinement before the final data collection.

3.6 Data Collection Procedure

Considering the context and possible challenges due to the COVID-19 pandemic, the survey was conducted using a digital platform to collect the data. As the field of the research is complex for the participants, one online session was arranged to clarify the concept and the questions on the questionnaire.

The self-administered questionnaire was transformed into Google form and sent to the participants prior to the online session. An internet link was supplied to the participants with a reasonable amount of time in hand to respond. It was ensured that respondents' identity would remain secure and confidential along with their given responses. They were also assured that the survey would be solely used for the study purposes. Informed consent was taken from the participants via email before data collection.

3.7 Data Analysis Plan

Data were managed and analyzed through content analysis involving following steps:

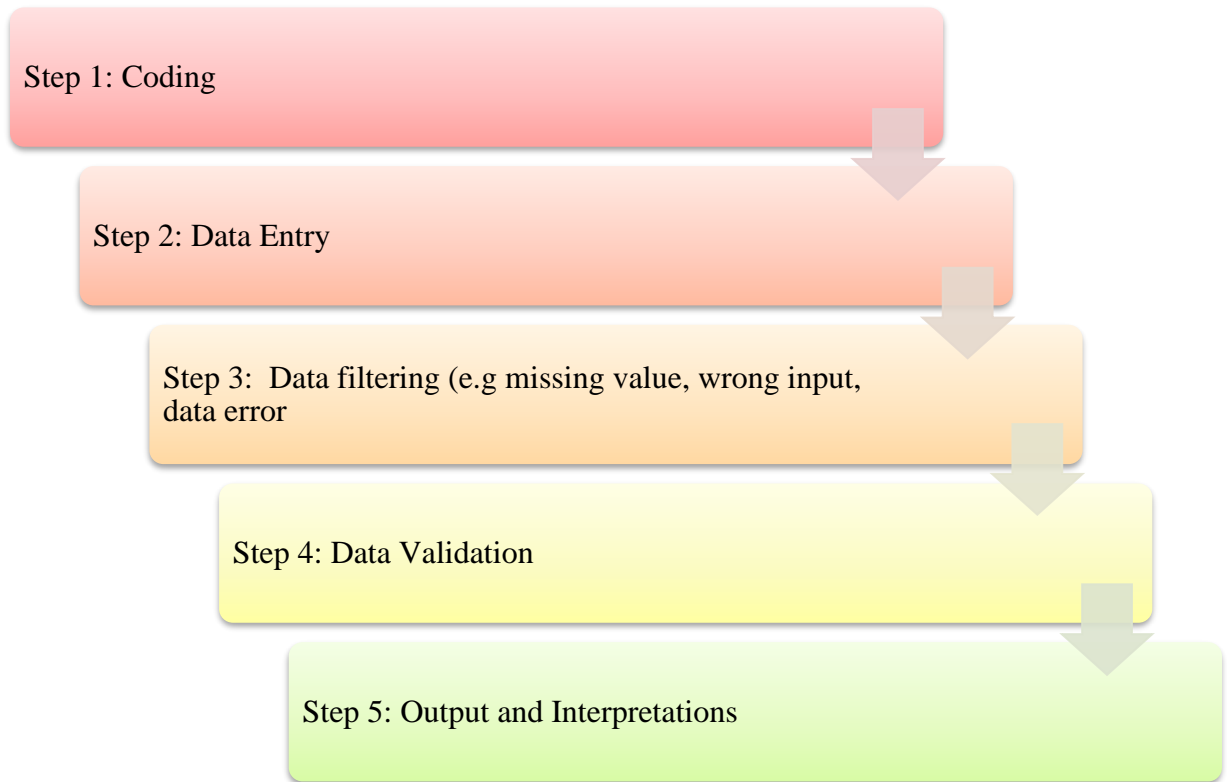


Figure 1: Data Analysis Plan

As a Google form was used for data collection, all the data were entered into an excel file automatically as a default file. Data were cleaned manually and then imported into SPSS for analysis. Descriptive statistics and correlation analysis were applied to analyze the data. Finally, findings were presented in a meaningful manner.

3.8 Ethics

The researcher obtained ethical approval from BRAC IED, BRAC University, for this study. Consent was taken from the participants before performing the survey. In addition, the participants were told of: the intent of the study, what would be expected of a participant in the research, the expected amount of time to be needed to participate, the likely risks and benefits, the fact that the nature of the participation was voluntary, and the right to withdraw at any time without any negative effects. The researcher also explained how this study will maintain confidentiality and anonymity.

The researcher is a certified mental health counselor. Moreover, the researcher received support from her supervisor as she is a mental health specialist. Any participant found with a high score (indicating mental illness), referred to a mental health professional, if the mother agreed.

3.9 Limitations of the study

There were few limitations of the study that might affect the findings. Due to the COVID-19 pandemic, it was not possible to take the interview face to face. Secondly, as the time was limited, the sample size considered in this study was small and only urban area was selected for data collection, which might have an effect on the reliability and the subsequent generalizability of the statistical result. Moreover, data was taken at a single point in time and in consequence, changes over the time could not be distinguished. However, proper effort was given to ensure the outcomes of the research.

Chapter IV : Results

4.1 Characteristics of Participant's:

A total of 85 participants (N=85) completed the survey. The age of the mothers ranged from 24 to 40 years with a mean of 30.79 ± 3.526 years. Maximum (52.94%) mothers were post-graduated. Most of the mothers (61.17%) were working mothers and one-third of the mothers were housewives. The fathers' mean(SD) age was 35.31(4.66), with the range being 27 to 45 years. The majority (47.06%) of fathers were service holders and one sixth of them were businessmen. Most (58.82%) of the participants had one child and only 5(5.88%) of them had 3 children. Infants were relatively more common (71.76%) than other child age groups, whereas the age group 19 months to 24 months consisted of a minimum number of children (11.76%). More than half (56.47%) of the participants belonged to the nuclear family (Table 1).

Table 1: Demographic Characteristics of Participant's (N=85)

Variables	Frequency	Percentage	Mean	SD
Mother's age (in years)			30.79	3.526
21-25	6	7.06%		
26-30	40	47.06%		
31-35	28	32.94%		
36-40	11	12.94%		
Mother's Educational Qualification				
H.S.C	6	7.06%		
Graduate	34	40.00%		
Postgraduate	45	52.94%		
Mother's Occupation				
Homemaker	31	36.47%		
Student & housewife	2	2.35%		
Service holder	11	12.94%		
Professionals	39	45.88%		
Business	2	2.35%		
Husband's Age			35.31	4.66
26 - 30	12	14.12%		
31 - 35	35	41.18%		
36 - 40	24	28.24%		
41 - 45	14	16.47%		
Husband's Occupation				
Service holder	40	47.06%		
Professionals	30	35.29%		
Business	15	17.65%		
No. of Children			1.47	0.609
1	50	58.82%		
2	30	35.29%		
3	5	5.88%		
Child's age (in month)			10.07	6.319
1 month - 6 months	27	31.76%		
7 months - 12 months	34	40.00%		
13 - 18 months	14	16.47%		
19 months - 24 months	10	11.76%		
Family Structure				
Nuclear Family	48	56.47%		
Joint Family	37	43.53%		

4.2 Prevalence of Depressive symptoms

Table 2 shows participants' outcome by depression status. Based on GHQ scoring (score >15 evidence of distress), 49.41/% mothers were found distressed.

Table 2: Level of Distress

Variable	Frequency	Percentage
Not Distressed	43	50.59
Distressed	42	49.41
Total	85	100

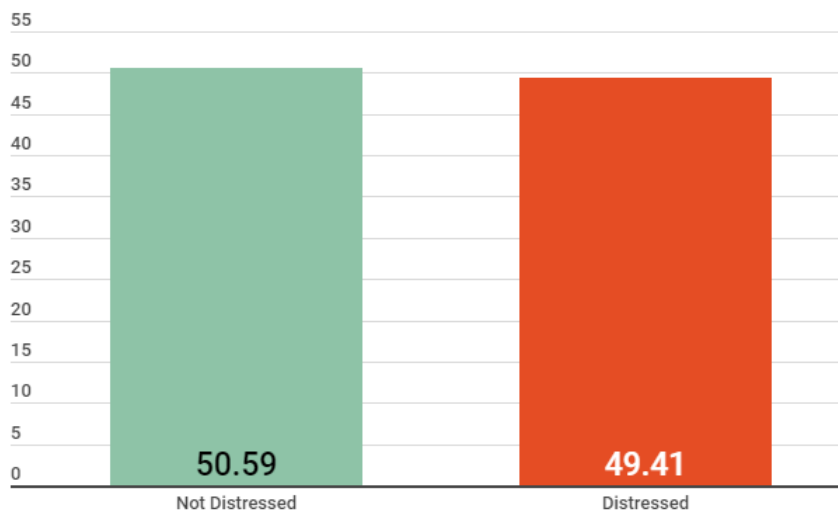


Figure 2: Level of distress

4.3 Relationship Between Maternal Mental Health and Mother-Child Attachment

Table 3 shows association between maternal mental health and mother-child attachment. Result has revealed a negative correlation between GHQ and MAI, which indicates that if the GHQ score was high, corresponding MAI score was low and vice-versa. This indicates that a mother who was more distressed had a lower attachment with her child and on the other hand, a mentally healthy mother had a stronger attachment. However, the correlational coefficient was not significant in this study.

Table 3: Association between maternal mental health and mother-child attachment

Tool	MAI Total
GHQ Total	-0.183 (p=0.094)

4.4 Factors Associated with Maternal Mental Health

The participants were asked whether COVID-19 pandemic had any negative effect on their mental well-being. 95.7% mothers replied that they were somehow anxious or tensed due to COVID-19 related issues (figure 3).

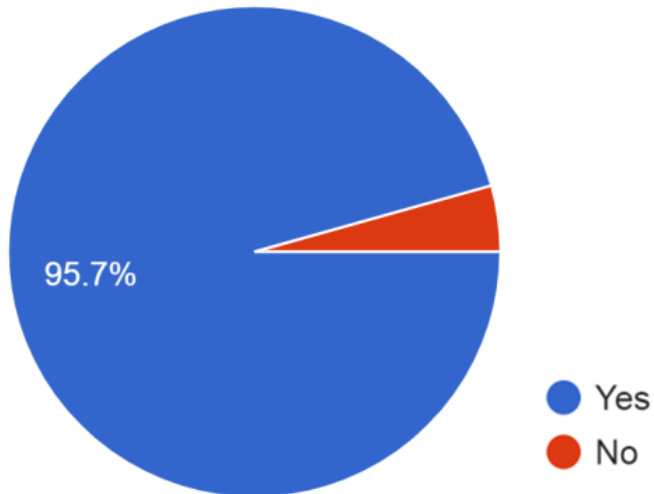


Figure 3: Percentage of mothers anxious or tensed because of COVID-19

Table 4 displays some other factors that are linked to maternal mental health. Most of the participants reflected "lack of time for self-care"(67.06%) and "domestic violence"(64.71%) as major factors for deteriorating maternal mental health. Other crucial factors include : low income (55.29%), mother's physical illness (54.12%), lack of mother's financial freedom (52.94%)and child care stress (42.35%).

Table 4: Factors Associated with Maternal Mental Health (N=85)

Variables	Frequency	Percentage
Low income	47	55.29
Childbirth at young age	26	30.59
Unwanted childbirth	23	27.06
Lack of mother's financial freedom	45	52.94
Mother's physical illness	46	54.12
Any mental illness during pregnancy or before	29	34.12
Domestic violence	55	64.71
Childcare stress	36	42.35
Lack of time for self care	57	67.06

4.5 Barriers Receiving Mental Health Service in Bangladesh

Table 5 shows some barriers that urban mothers face to receive mental health services. Based on their responses, lack of awareness about maternal mental health (68.24%), negative attitude toward mental illness (67.06%), inadequate support from husband & other family members (61.18%) and mental health stigma (47.06%) are the challenges for mental health service. Scarcity of mental health professionals (28.24%) is also a hurdle receiving mental health service.

Table 5: Challenges Receiving Mental Health Services (N=85)

Variable	Frequency	Percentage
Lack of awareness about maternal mental health	58	68.24
Negative attitude toward mental illness	57	67.06
Mental health stigma	40	47.06
Inadequate support from husband and other family members	52	61.18
Scarcity of mental health professional	24	28.24

Chapter V : Discussion

5.1 Discussion

The aim of this research was to define the relationship between maternal mental health and mother-child attachment. In addition, different factors associated with maternal mental health were observed. This study also addressed some challenges that urban mothers face to receive mental health services. An association between maternal mental health and mother-child attachment was found in this study, which indicates that if the GHQ score was high, corresponding MAI score was low and vice-versa. It demonstrates that a mother who was more distressed had a lower attachment with her child and on the other hand, a mentally healthy mother had a stronger attachment. However, the correlational coefficient was not significant in this study. Possible explanations could be the small number of participants and use of self-administered questionnaire in this study. Further research is required in these areas.

One recent study (Lutkiewicz et al.,2020) conducted on Polish mothers examined the relationship between mother-child attachment and maternal mental health including stress, anxiety and postpartum depressive symptoms .The outcome showed that mother-child attachment is significantly associated with the level of stress, anxiety and postnatal depressive symptoms. These results are in line with some other studies that have clarified the relationship between postpartum depressive symptoms and child attachment during the early postpartum period (Grace,S et al.,2003; Dubber,S et al.,2014; Ohara,M et al.,2017).Contrary to these findings, few other studies have shown that despite having a high level of stress, some mothers displayed a stronger link with the infant. Moreover,

these mothers demonstrated greater responsiveness and openness to the needs of the infant.(Hsu,T.L & chen,C.H, 2001; Hsing-Chi,C et al.,2016).

In this study, the higher scores in general mental health problems ,identified with the GHQ, reported that almost half (49.41%) of the mothers were distressed. Maybe the current situation due to COVID-19 pandemic is the cross-cutting factor behind this highest percentage. This finding is in line with some recent studies conducted among Bangladeshi citizens (Didar-Ul Islam et al.,2020; Zubayer et al.,2020; Banna et al.,2020b) demonstrated that many people developed psychiatric symptoms like anxiety, stress, depression ,panic attack, sleep problem etc. during this pandemic. According to these studies, people's daily life events were significantly disrupted due to COVID-19 pandemic as it had a negative impact on their job, income and education resulting in sleep shortness, short temper and chaos in the family. Another research (Davenport et al.,2020) examining the effect of the COVID-19 pandemic on maternal mental health revealed that during the perinatal period, depression and anxiety affected approximately 1 out of 7 mothers and were correlated with decreased mother-child attachment.

This study also revealed some other factors that are associated with maternal mental health. Lack of time for self care was found as one of the major factors. Having a new child in a mother's life is an exciting time. However, a newly-mother often struggles with the issue of self care which means identifying and meeting her own needs. All of her energy is focused on the child and sometimes she forgets to look after herself. (Dimaggio, 2020)

While self-care has been recognized during the perinatal era as one of the key elements, most women find it difficult in their daily lives to practice good self-care. Barkin & Wisner (2013) suggested that proper self-care implementation involved allocating some time for physical activity, enabling the participation of fathers in child care so that mothers have some moments for themselves and go out to walk or dine out. They also noticed some challenges to the practice of good self-care for mothers, including financial solvency, time management, lack of resources, and often difficulty getting help.

Domestic violence is another important risk factor found in this study. Three studies (Azad et al.,2019; Edhborg & Nasreen, 2015; Hossain, S. et al.,2020) conducted in rural Bangladesh also documented violence against women as major risk factors for being distressed. Violence by partner or spouse was also referred as a risk factor of mental disorder in the Vietnamese mothers (Fisher et al., 2013). This current study gathered information on violence against women by their husband or other family members and considered different forms of abuse such as physical, psychological and financial.

Finally, the result of the current study has revealed several barriers to receive mental health service in Bangladesh. Lack of awareness among the mothers and their families resulted in poor recognition of symptoms. Negative attitude toward diagnosis and treatment of perinatal mental health also led to the women to keep themselves away from receiving treatment and buttressed the feelings of stigma on mental health issue (Smith et al.,2019). However, a large number of mothers had been found in the present study stating that they would visit a mental health professional if they feel mentally distressed. One possible explanation could be their level of education and lifestyle as all the participants of this study were educated and belonged to a better socio-economic class.

In this study, lack of support from husband and other family members has been found as another challenge for accessing mental health care services. In a patriarchal system like Bangladesh, women often experience insufficient support from their husband as well as other members of the family (Nuri et al, 2019). Unavailability of mental health professionals is also identified as a barrier in the current study. Although the health sector is moving forward remarkably empowering the primary health care, the referral system between the care level is still unsatisfactory in Bangladesh (Arafat et al., 2018). One study examining the effectiveness of an intervention program showed that if the maternal mental health program can be incorporated with the Early Childhood Development projects, it will improve children's holistic development, while ensuring their mother's mental health as well (Yesmin et al., 2016).

5.2 Conclusion

This present study was a quantitative study intended to explore the relationship between maternal mental health and mother-child attachment. Although no significant correlation was found due to some limitations, this study has revealed the fact that a large number of mothers were mentally distressed and this distress has effects on children's optimal development. Specifically, some crucial factors have been identified that are associated with improper maternal mental health in our context. Additionally, this study has discovered several barriers that Bangladeshi mothers face to receive mental health service.

Although mental health is incorporated in the World Health Organization's definition of health, it is often neglected in our country. Newly mothers and their family members are

not much aware of their mental health. In spite of the fact that female literacy rate has been improved, a lack of financial capability and independence hinder their access to mental health care. Moreover, significant social stigma has a severe impact on health seeking behaviour. Social stigma not only impedes the mothers from seeking care, but also puts them in a situation where they suffer silently. Sometimes they make themselves socially isolated as they do not even get any emotional support from others. It becomes difficult for a depressed woman to perform the social responsibilities as a mother and as a result, those children might suffer from the problem of health, developmental as well as behavioral issues. It also hinders to establish a strong attachment between a mother and a child. Apart from the child, it has a considerable influence on the other family members as well.

In conclusion, this study represents a noteworthy direction towards a better interpretation of maternal mental health and the associated factors and barriers responsible for the mental health problems of the mothers in their postpartum period. The findings of this study can help to better understand the importance of maternal mental wellbeing so that they can develop a healthy attachment to their children and thus ensure the children's holistic development. It also highlights the demand for future research of more detailed methodological quality to further clarify how maternal mental health issues may contribute directly and indirectly to form attachment with young children.

5.3 Future Research

To better understand maternal mental health, the result of this study unlock some perspectives to carry out further research to extend the knowledge. Some relevant new directions for research that the study point out are as follows:

- Although the result of this study displayed an association between maternal mental health and mother-child attachment, the correlation coefficient was not found significant . Therefore, a longitudinal study needs to be carried out with a large number of samples including both the urban and rural mothers so as to determine the association between these two variables in the context of Bangladesh.
- In this study, many risk factors that are associated with inappropriate maternal mental health have been reported. There are also some protective factors that can keep the mothers away from developing depression in the postnatal period. Therefore, assessing the protective factors against postpartum depression as well as the resulting mother-child attachment might be another important area.
- A further validation of the cut-off points in the GHQ can be done in larger and more diversified participants. A sample that includes mothers with critical cases of attachment disorder and also mothers from the mass population will certainly refine the diversity of the total score and the identification of acute cases.
- Although motherhood and the mother-child attachment have been considerably researched, the same does not happen in fatherhood and father-child attachment. An interesting direction for research would be to explore how father's

involvement is linked with improved mental health and well-being for mothers as well as children.

- It may also be beneficial for future research to look into children's socio-emotional development of the depressed mothers.

5.4 Recommendation

After reflecting on the findings and discussions of the present study , the researcher has come up with some recommendations on the subject matter. The recommendations are:

- Maternal mental health can be integrated into primary health care services in a culturally appropriate way. This integration would be a promising approach to make sure that mothers' will be able to receive all the necessary services during pregnancy and after child-birth. It would help the mothers to be informed about the mental health issues and thus reduce their negative attitude and stigma toward maternal mental health. (Arafat et al.,2018). Interventions might include cognitive-based therapy (CBT), interpersonal psychotherapy (IPT), participatory learning, social support (group session and home visit), aerobic exercises , etc.
- Raising awareness of parents, caregivers, health workers, midwives, community members and other facilitators can be introduced. Some suggested area are psycho-education, antenatal education and awareness campaigns through electronic & print media, social media & other digital platforms, courtyard meeting, door-to-door visit , etc.
- An e-health systems (mobile app, tele-counselling etc.) can be launched to provide maternal mental care services. Recently BRAC, in collaboration with Psychological Health and Wellness Clinic (PHWC), and the emotional support and

suicide prevention hotline Kaan Petey Roi, have inaugurated '**Moner Jotno Mobile E**', which is a tele-counselling platform to give emergency counselling support for the people experiencing distress, frustration and stress caused by the COVID-19 pandemic. This type of tele-health service may prove to be an important strategy to enhance access to mental health professionals (Telecounselling service 'Moner Jotno Mobile E' For anxieties related to COVID-19 Featured, 2020).

- There is a need for advocacy to improve early childhood development by ensuring mental health facilities for pregnant women and new mothers in the national agenda and will implement programs and interventions that address relevant issues both directly and indirectly.

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Annex 1

Consent Form for Mothers

Title of the Research: Association of mother-child attachment with maternal mental health in early years.

I am conducting this research as a part of my Masters Degree requirement from BRAC Institute of Educational Development, BRAC University. The aim of this research is to examine the relationship between maternal mental health and mother-child attachment of the urban mothers who have children of 0-2 years of age.

If you want to take part, please sign the form below after you read this form telling you what the study is about. Your participation is totally voluntary, and you may change your mind and withdraw at any time before and during the study. You have to fill up a questionnaire that will be sent to you via your email address. It would take approximately 10 minutes to complete the form.

We will maintain your privacy and confidentiality about any information (sensitive information). Your child and your family members' names will not be written on any of the material, and only the researchers will have access to your information. All materials with your information in it will be stored in a safe, locked location. The researchers will be responsible to ensure the protection of the information.

There is no risk to you or your child for participating in this study. The information you provide will, however, have significant contribution to extend existing knowledge about the importance of maternal mental health as well as the association of mother-child attachment with mothers' psychological and emotional condition.

If you have any questions about the survey or facing any difficulties with the link, please do not hesitate to contact me at 01963629907 or you can mail me at ummeruman.82@gmail.com.

I have read the consent form. I completely understand my rights about participation and I am willing to participate in this research.

Name

.....Signature:.....

Annex 2

Survey Questionnaire in English

SES Questionnaire:

DOI:.....

Mother's Name.....Age (in years):.....

Education:.....Occupation:.....

Husband's Age.....Husband's Occupation.....

No. of children:.....Child's age:.....

Family Structure:.....

Address:.....

.....

Contact No.:.....Email ID:.....

General Health Questionnaire (GHQ)

Items	Much more than usual	Rather more than usual	No more than usual	Not at all
1. Have you recently been able to concentrate on what you're doing?	3	2	1	0
2. Have you recently lost much sleep over worry?	0	1	2	3
3. Have you recently felt that you are playing a useful part in things?	3	2	1	0
4. Have you recently felt capable of making decisions about things?	3	2	1	0
5. Have you recently felt constantly under strain?	0	1	2	3
6. Have you recently felt you couldn't overcome your difficulties?	0	1	2	3

7. Have you recently been able to enjoy your normal day to day activities?	3	2	1	0
8. Have you recently been able to face up to your problems?	3	2	1	0
9. Have you recently been feeling unhappy or depressed?	0	1	2	3
10. Have you recently been losing confidence in yourself?	0	1	2	3
11. Have you recently been thinking of yourself as a worthless person?	0	1	2	3
12. Have you recently been feeling reasonably happy, all things considered?	3	2	1	0

Maternal Attachment Inventory(MAI)

Item	Almost Always	Often	Sometimes	Almost Never
1. I feel love for my baby				
2. I feel warm and happywithmy baby				
3. I want to spend special time with my baby				
4. I look forward to being with my baby				
5. Just seeing my baby makes me feel good				
6. I know my baby needs me				
7. I think my baby is cute				
8. I'm glad this baby is mine				
9. I feel special when mybaby smiles				
10. I like to look into my baby's eyes				
11. I enjoy holding my baby				
12. I watch my baby sleep				
13. I want my baby near me				
14. I tell others about my baby				
15. It's fun being with my baby				
16. I enjoy having my baby cuddlewith me				
17. I'm proud of my baby				
18. I like to see my baby do new things				
19. My thoughts are full of my baby				
20. I know my baby's personality				
21. I want my baby to trust me				
22. I know I am important to my baby				
23. I understand my baby's signals				
24. I give my baby special attention				
25. I comfort my baby when he/she is crying				
26. Loving my baby is easy				

Additional Questions:

1. Do you talk about mother's mental well-being during pregnancy or after childbirth in a conversation with your friends, family members or relatives?

- Yes
- No
- Sometimes

2. What are the factors you do think affect maternal mental health?

- Low income
- Childbirth at young age
- Unwanted childbirth
- Lack of mother's financial freedom
- poor relationship with husband, in-laws & others
- Mother's physical illness
- Any mental illness during pregnancy or before
- Domestic violence (physical or psychological)
- Child care stress
- Lack of time for self care
- Others.....
-

3. If you feel mentally depressed (or unwell) after your childbirth, will you visit a mental health professional?

- Yes

- No
- Will think about how others would judge about my issues

4. What are the challenges or barriers do you think Bangladeshi mothers face to receive mental health service?

- Lack of awareness about maternal mental health
- Inadequate support from husband and other family members
- Scarcity of mental health professional

5. Do you think that COVID-19 pandemic has any negative effects on your mental health?

- Yes
- No

**Thank you very much for your
participation**