

Exploring Postpartum Depression Among Mothers in Dhaka's Slum Areas: A Qualitative Study

Rowshan Ara Afrin¹, Md. Mejbah Uddin Mithu²,
Md. Ruhul Furkan Siddique³

¹Department of Public Health, German University Bangladesh, Gazipur, Bangladesh.

²Department of Public Health, Daffodil International University, Savar, Bangladesh

³Department of Public Health, Anower Khan Modern University, Bangladesh.

Abstract

Postpartum depression (PPD) is a major public health problem, especially in low-income communities with inadequate access to mental health care. This study investigates the incidence, experiences, and risk factors for postpartum depression among mothers in Dhaka's slum regions. Using a qualitative technique, we conducted in-depth interviews with 31 mothers aged 18 to 35 who had recently given birth and lived in various Dhaka slum neighborhoods. Interviews centered on their emotional well-being, social support networks, and impediments to mental health care. Thematic analysis identified a number of important variables that contribute to PPD, including as limited access to healthcare services, financial stress, marital abuse, and a lack of social support. The problem was made worse by the cultural stigma associated with mental health and parenting, which discouraged many mothers from getting treatment. Many participants said they felt alone, overburdened, and guilty of their emotional problems; others didn't know that their sensations may be connected to a health issue. The results highlight the need for community-based support networks and focused mental health interventions to address the particular difficulties experienced by new moms in urban slums. This study underlines the need of integrating mental health services into maternity healthcare in resource-constrained settings to promote overall maternal wellbeing and minimize the burden of postpartum depression.

Keywords: Postpartum Depression, Maternal Mental Health, Healthcare Barriers.

1. Introduction

Postpartum depression (PPD) is a significant public health issue that has been shown to negatively impact a mother's physical and mental well-being in the postpartum period (Azad Id et al., 2019) . The postpartum period consists of three phases: acute, sub-acute, and delayed. The acute phase occurs within six to twelve hours, while the sub-acute phase lasts two to six weeks, involving significant body changes and the third phase is the delayed postpartum period, which can last up to 6 months(Mattea, 2010). The most prevalent mental illness in the world is depression(Penninx et al., 2013). Postpartum Depression is one of the significant issues in maternal health after delivery and the burden of these disorders may create devastating health consequences(Greden, 2001) . If PPD is not treated early after delivery, it can be more

severe and can last for months to 1 year (Carlson K et al., 2024).

A thorough summary of the most recent research shown the final analysis of 565 studies from 80 different nations or areas finds that 17.22% (95% CI 16.00–18.51) of people worldwide suffer from postpartum depression (Carlson K et al., 2024), with a frequency of up to 15% in eighty distinct nations or areas the year prior (Sultan et al., 2022). Recent study of Bangladesh found Postpartum mothers had a 29.9% prevalence of PPD symptomatology (Alam, 2021).

PPD has been connected to detrimental effects on the mother's emotional and cognitive development, decreased mother-infant attachment, and mother suicide (Slomian et al., 2019). The functioning of women, marriage and interpersonal relationships, the strength of the mother-infant bond, and the social, behavioral, and cognitive development of children are all negatively impacted by PPD (Amer et al., 2024). Research undertaken globally has revealed several significant factors of postpartum depression (PPD) including the age of women, job and financial stress, pregnancy problems, history of miscarriage, depression throughout pregnancy, intimate partner abuse, relationship with husband's family, unplanned pregnancy, in-laws' involvement, physical illness due to sleeping pattern disturbance, children gender issues etc. (Azad Id et al., 2019; Honjo et al., 2018). The infant's gender and the mother's interpersonal behavior appear to act as moderators against the negative effects of postpartum depression on children's development (Mirhosseini et al., 2015).

The social-economic condition of female slums in Dhaka city is unfavorable, with long working hours, outside jobs, and household responsibilities. They often face psychical torturing by husbands and lack understanding of human rights. Despite contributing economically and socially, girls are deprived throughout their lives, starting from early marriage (Sharmin & Luna, 2015).

The postpartum period is a sensible period for mothers. In this period mothers go through many physical and psychological changes. A few studies were conducted on postpartum depression especially in slum areas. Recently, some new issues like many infants being abused, many children being found in dustbins, beside the road, thrown from building roof were arising to concern. These may be consequences of mother's depression or mental abnormalities. Mother's suffering might be so severe that they may even commit suicide. The general objective of the study was to determine the prevalence of Postpartum Depression among the women who have under 1 year Child and the Specific objectives were to find out the causes of PPD, to know the behavioral changes of respondent and to assess the effect of PPD on her family. This study aimed to analyze the prevalence of Postpartum Depression among the women who have under 1 year Child as well as the causes of PPD, to know the behavioral changes of respondent. to assess the effect of PPD on her family. This study will contribute to reducing social degradation by creating an awareness program on PPD.

2. Methodology

A cross-sectional study was conducted among women having under 1 year child. The number of samples was 102 approximately because of the availability of respondents. Women having at least one child of under 1 year was the inclusion criteria. Due to the study perspective non-probability purposive sampling technique was used. This study was conducted on mixed methods but mostly focused on qualitative part. The study was conducted at two selected large slums from different geographical representative areas in Dhaka city, Bangladesh. These slums included the Korail slum in Gulshan and the Sattala slum in Mohakhali. A semi-structure questionnaire was used to conduct the study. More open-ended and few close ended questions were formed in the questionnaire. Open ended question's

answer was given descriptive information which was more useful in this study. The questionnaire was designed to respondent's native language, as they did not get any confusion to answer. Pre-testing was conducted before collecting data at the sattola slum among 12 mothers. A minor correction was done in the questionnaire after pre-testing.

Corrected questionnaire was used in next for main research. Mobile recording was also conducted with the participants' permission. A screening tool was used to detect postpartum depression. Edinburgh Postnatal Depression Scale (EPDS) is a well-validated screening tool for the detection of patients at risk for Post-Partum Depression (PPD)(Cox et al., 1987). The EPDS is easy to administer and has proven to be an effective screening tool. This screening tool is a questionnaire based, not any clinical test issues. It contains 10 questions. Each question has 0,1,2,3 scores. Questions number 1, 2, & 4 have scores of 0, 1, 2, 3 with top box having score of 0 and the bottom box having score of 3. Questions number 3, 5-10 have reverse scores, with the top box having score of 3 and the bottom box having score of 0. After adding the total score maximum score will be 30. Total depression scores greater than 10 is referred as possible of PPD. To be useful as a screening test for depression following childbirth, therefore, a self-report scale is fully acceptable to women who may not regard themselves as unwell, or as in need of medical help. The scale needs also to be simple to complete, and not require the health worker to have any specialist knowledge of psychiatry. So, it gives satisfactory reliability and validity (Cox et al., 1987). Data collection was conducted by face-to-face in-depth interview. Data collection through direct conversation plays a major role in determining more information about depression's cause, behavioral changes and effect of postpartum depression. Data collection technique was divided into two major parts. One was socio-demographic, socio-economic and Edinburgh Postnatal Depression Scale related close ended and another was open ended In-depth interview among them who were referred as PPD according to EPDS. Examples of questions include:

- Which person that you like to talk frankly with?
- What do you do when you feel bad?
- Do you feel any types of behavioral change on you?
- Which types of issues bother you during this period? Can you please explain?

In-depth interviewing is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program, or situation. In-depth interviews are useful when detailed information about a person's thoughts and behaviors is needed or want to explore new issues in depth (Carolyn Boyce, 2006). This technique is also comfortable for researchers and respondents. Data collection was conducted until the saturated information was found. Consent form was filled-up by respondent with signature. This interview with the respondent took a maximum of 45 minutes to minimum 10 minutes. Data was recorded by questionnaire, audio recorder in mobile (with the permission of respondent) and note taking. Data were collected by one month (April 2019- May 2019). Ethical permission was granted by the Biosafety, Biosecurity and Ethical Clearance Committee of Jahangirnagar University, Savar, Dhaka-1342.

All fill-up questionnaires were transcribed in full of the Bengali (native) to English. The status of postpartum depression is difficult to determine clinically. So, it was mostly focused on qualitative data. It was fixated on narrative analysis according to the speaking (attitude like eye contact, voice of respondent, behavior, expression of respondent, speaking frequency, laugh, and cry) structure and tropes and interpreting the meaning. The transcribed questionnaire was given unique identifier codes. Screening tools

help to identify probable experiences of postpartum depression respondents. According to saturated information four types of themes and a few subthemes were generated. Data analysis was done by Microsoft Excel where coding and sub-coding were being used which were helpful for narrative analysis because of correlating the variable with others. It was designed to identify related concepts and familiar issues. Subtheme related speech from respondents has been highlighted directly.

3. Result and Discussion

The postpartum period is a sensible period for mothers. In this period mothers go through many physical and psychological changes. Depression during the postpartum is a serious mental health problem for women and its consequences have serious implications for the welfare of the family and the psychological development of the child.

In the slum of korail and sattola, different types of people are living here for livelihood. The stories and experiences of every mother was different and different their lifestyle and livelihood.

Table:1: Characteristics of the respondents according to their age and education

Characteristics	Range	Number	Percentage
Age	<20	20	20.4%
	20-25	13	13.26%
	25-30	62	63.24%
	30-35	7	7.14%
Education	Under primary	16	16.32%
	Complete primary	70	71.4%
	Under secondary	16	16.32%

The table presents the demographic characteristics of the study participants, specifically focusing on age and education levels.

The study's majority of mothers are in their mid-to late twenties, as indicated by the fact that 63.24 percent of participants are between the ages of 25 and 30. 13.26% of respondents are between the ages of 20 and 25, while an even smaller portion (20.4%) is under 20. Only a small percentage (7.14%) are between the ages of 30 and 35, which indicates that fewer older mothers participate. Regarding educational level, most (71.4%) have finished their primary education. A smaller but statistically significant portion (16.32%) of participants did not complete their primary education, while 16.32% of individuals started secondary school but did not complete it. This suggests that the individuals had a comparatively low level of formal education, which could have an impact on their understanding and access to postpartum depression alternates.

3.1 Post-Partum Depression

According to Edinburg postnatal depression scale, 11 respondents showed the screening score was into 11-13 in total 31 respondents. And other respondents score belonged to 14-22. A score of more than 13 indicates the varying severity of postpartum depression. The result of the study was that 33% approximately suffering from postpartum depression among 102 mothers. findings of another research were conducted in Bangladesh that the prevalence of PPD was 39.4%, which is relative to this study (Azad Id et al., 2019).

Score: 11-13 considered as moderate depression Score: ≥ 14 considered as severe depression

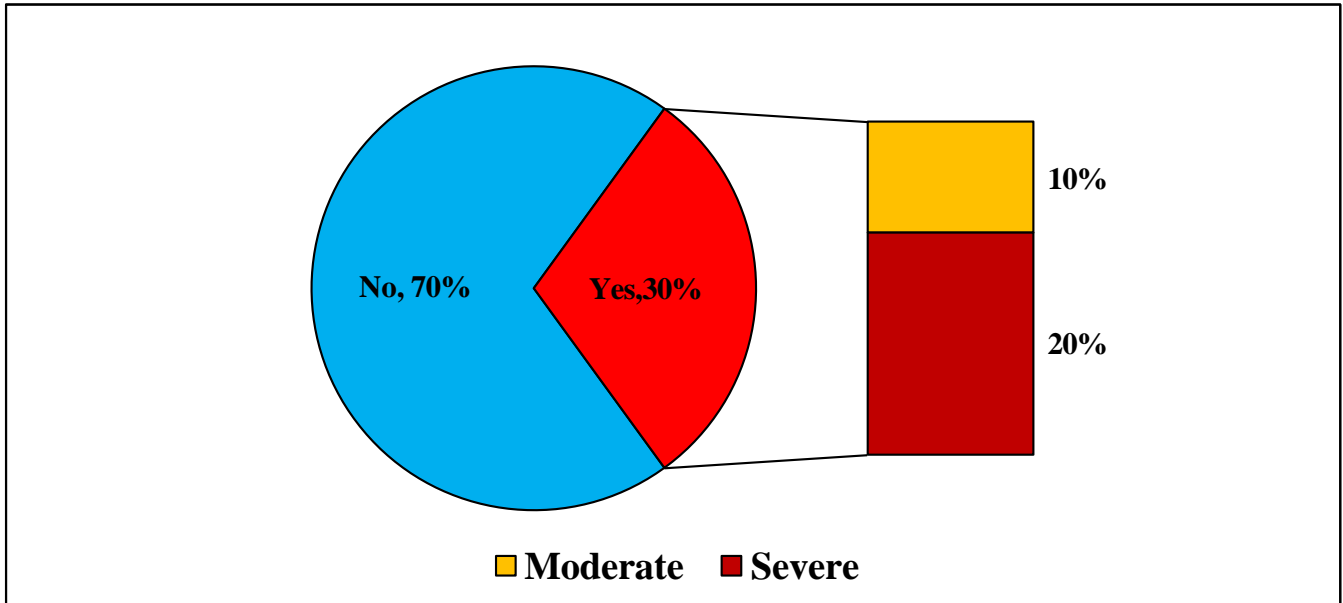


Figure-1: Severity of PPD according to their Edinburg Postnatal Depression Scale Screening Score

3.2 Thematic and narrative analysis

Among the 31 respondents who were identified postpartum depression according to Edinburg postnatal depression scale, In-depth-interview was done among them. Four major themes of causes postpartum depression were identified: “Personal causes of mother” concerning mothers physical and mental health, “child related cause” relating child’s gender and growth and development, “Husband related cause” connecting with financial and conjugal life, “Family related cause” involving in laws activity. These themes will be presented in turn, with direct quotes to back up them. Identified themes and their sub themes of causes are presented in table 2.

3.2.1 Personal causes

Table:2: Themes and sub-themes of causes of postpartum depression among (N=31) mothers

Theme	Number of respondents	Sub-theme
1. Personal causes	6	a. New circumstance
		b. Physical weakness
		c. unable to go to workplace.
2. Child related cause	7	a. Gender
		b. Physical abnormalities of child
		c. Child getting insufficient breast milk.
		d. Number of children
3. Husband related cause	12	a. Financial hardship to bear child.
		b. Lack of physical intercourse
		c. Losing of husband
		d. Relationship gap with husbands
4. Family related cause	6	a. In-laws’ involvement

	b. Violence with family members
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PPD's effects affected a mother and her child directly and her husband as well as her family indirectly. When a mother couldn't tell her situation to anyone and remained in trouble then this situation made her more dangerous. If she could come out from her situation, she would be trouble-free and if she couldn't then this situation created more mental pressure on her.

3.2.1.a New circumstance

Mothers said that things had not gone as planned when it came to the beginning of their new lives with their babies. They feel that the situation before and after having children is different which is causing them negative emotional. They spend their maximum time to bearing child. They didn't get time for any type of recreation. Some new mother worried to proper bathing, breast feeding technique, pampering of child, changing cloths etc.

Cultural attitudes and fear of stigma create barriers to discussing, diagnosing and treating depression in Dhaka. Based on their findings, they advocated for more mental health support options for low-income women in Dhaka (Williams et al., 2018).

3.2.1.b Physical weakness

Physical problems like insomnia, appetite, weakness, lack of concentration at work, irregular menstruation, hemorrhage during delivery and so on.

"I don't feel good from the pregnancy period. We are surviving poverty. I have a one and half year child. I don't feel good and feel trouble to maintain everything. I can't eat and sleep properly after delivery".

Shilpi, Age-32, IDI

"After delivery, I sense much hemorrhage which makes me more weakness to strength in physical activity. Even after, my baby is full breast-fed baby. Due to poverty, more nutritious food is not available for me. I am experiencing physical weakness".

Lipi, Age-32, IDI

Postpartum Hemorrhage (PPH) was found to be substantially associated with an increased risk of postpartum depression, according to a recent review and meta-analysis encompassing nine research. More precisely, women with PPH had a 27% higher risk of PPD than women without PPH (Schoretsanitis et al., 2023)

3.2.1.c Unable to go to workplace.

Mothers who work have a higher chance of developing postpartum depression. Features of maternity leave, such as duration, salary replacement, and job security, may have an impact on mothers' mental health.

"I was worked in a private school as a cleaner and I was bound to give my whole earning to my husband in every month. So, I couldn't spend money for myself."

Sumi, Age 28, IDI

3.2.2 Child related cause

3.2.2.a Gender

A male child is considered the lamp of the clan. Few or more gender inequalities are present in all countries. Male children are more precious for a family. Everyone thinks that only male child can protect and contribute to the family. Skin color, body stature, eye, nose all are looked by guardian.

Mothers are insulted by husband or in-laws' family member if she can't meet the demand of child gender. "My husband rarely talks to me. He thinks that I am inauspicious and says unnecessary words for me

always. This happens because of having all female children. Sometimes I can't tolerate anything and wish to go from here forever."

Momena, Age-27, IDI

According to Bangladesh perspective, a study found that postpartum depression is linked to gender and expectations of parenting, it is especially sensitive (1). The infant's gender and the mother's interpersonal behavior appear to act as moderators against the negative effects of postpartum depression on children's development (Mirhosseini et al., 2015)

3.2.2.b Physical abnormalities of child

Child's physical abnormalities, diseases after birth, pre-mature birth, and malnourished child, gender disparities of child, child's body color, and Child's health are the subdomain of child related causes of postpartum depression. Becoming mother is a delightful matter of a woman. Child is everything for her. But child related unpleasant situation makes her sad, feeling worried, repeated thinking and dilution on work and gradually depressed. This situation affects a mother more than any other family.

"Head injury of my child has occurred during my normal delivery. When I remember this, I feel very bad about myself. I have chosen normal delivery instead of caesarean delivery to save money but now I am bearing more money for my child's treatment. I am not sure that my child will be alright or not. The doctor suggests me to do some exercise to my child. I do that but my child doesn't respond as like a normal child at all."

Masuda, Age-29, IDI

A study reported that the impact of maternal depression on children's cognitive and emotional development was marginal yet noteworthy. Compared to children whose mothers had not experienced postpartum depression, children whose mothers had experienced postpartum depression showed more behavioral issues and lower cognitive functioning (Beck, 1998)

Findings of another study compared to infants whose mothers reported neither or only one condition, infants whose mothers reported depressed symptoms and thought their babies were irritable gained worse cognitive, motor, and orientation/engagement skills between the ages of 6 and 12 months (Black MM et al., 2007)

3.2.2.c Child getting insufficient breast milk

One of the most important parts of raising a child is feeding them; difficulties with breastfeeding may be quite stressful and leave a mother feeling inadequate or unfit for her new position as a mother.

"I am worried about my child all the time. My child was born before one month from the delivery date. My child was taken in incubator for being pre-mature. My child belongs to drowsiness. On the other hand, my child doesn't get proper breast milk. I buy processed dry milk from the market and feed it to my child. I feel sad and worried for my child"

Asha, Age-18, IDI

Research found that postpartum depressed mothers and their infants showed less optimal interaction behavior (T. , S. D. , G. R. , V.-L. N. , G. S. , & G. L. Field, 1985). Postpartum depression seems to affect various caregiving tasks such as feeding practices, particularly breastfeeding, sleep schedules, well-child appointments, immunizations, and safety measures (T. Field, 2010).

3.2.2.d Number of children

The number of children born out of poverty and raising them creates a kind of mental health problem of a mother.

"I don't know why this happens. Don't feel good without reason. Don't feel good speaking with anyone.

My husband works in a food hotel. He comes at night and goes in the morning. I stayed in home whole day. Sometimes I think how is possible to bring up five children together. I can't earn money as well".

Momotaj, Age-30, IDI

3.2.3 Husband related cause

3.2.3a financial hardship to bear child

Life is not easy to perform. Financial hardship is a challenge to peaceful life.

"My husband is a disabled person. He can't speak and hear fully. If work in his hand comes in one month, work doesn't come in another month. I worked before in a parlor but now I can't do it due to having the child".

Shirin, Age-19, IDI

3.2.3b Lack of physical intercourse

Partners intimacy is very much needed after delivery to support mothers' mental refreshment. Lack of partners presence or physical attachments creates mental stress like postpartum depression.

"My husband lives with his 2nd wife for a maximum of a month. During pregnancy and after delivery he spends very little time with me. Even physical intercourse has rarely occurred within us".

Masuda, Age-29, IDI

3.2.3c Losing of husband

husband's support is needed after delivery. Losing husband is very painful for any women. If it happens after baby delivery, the situation will go more miserable for mother.

"I lost my husband a month ago. I can't think of anything. What will I do? My baby's age is 5 months. Probably I have to go back to my father's house and works in land to survive. My life's moto is changed after his death. I can't properly take care of my baby".

Mira, Age -30, IDI

3.2.3 d Relationship gap with husbands

"I am the second wife of my husband. My husband spends more time with his first wife. Today my baby's age turned four months. My husband comes once a month and gives some money. I tell him that he should stay at least 10 days with me if he stays with his first wife for 20 days. After hearing this, he makes violence with me and goes out from here. My parents aren't no more, and my brothers and sisters are separated with themselves. I have no place to live here".

Rohima, Age-25, IDI

"There was no cash in my husband's hand. He wanted to start a business but could not start due to lack of money. I brought money from my father's house, but he left with a girl and all the money. Though I know about their relation, but what will I do. I thought everything would be alright if he gets the money. I wanted to leave here forever but my mother in-law and sister in-law forced me to stay. 7 days were gone."

Shapla, Age-27, IDI

3.2.4 Family related cause

3.2.4a In-laws' involvement

After delivery family support is more important for a mother and also child's growth and development. But lack of family support plays a trigger role to increase postpartum depression among mothers. Some families are stay in jointly, where in-laws and they are live together. Quarrels or fighting is a common

scenario in slums. The two concepts play a major role in family-related quarrels. Number one, the mother-in-law expects that, son will provide money for her family, and second is, the wife expects that, her husband expends all money to her family. This situation turns terrible effects after childbirth of a mother. In this period mother not only thinks about herself but also about her child as well. So, worried about the child's future and savings money.

"My mother in-law wants her son to send money to her. She also wants to join us with her join family. I feel anxious about these matters. My mother in-law hasn't come to see my child till now and doesn't give something for my child. Her son is disabled but her expectation to take from us is high always".

Shirin, Age-19, IDI

"My mother in-law maintains the family fully. My priority is very low. My main duty is to do the work of my family. Mother-in-law is a greedy person and gives advice to my husband to bring money/asset from my parent's house".

Momena, Age-27, IDI

3.2.4b Violence with family members

The husband plays a major role during maternal period. Father is the head of paternalistic family; father should have many responsibilities during and after pregnancy. A mother needs the full support of her husband during and after pregnancy. Intimate partner violence after childbirth, drug abuse of husband, irresponsibility of husband to child, extra-marital affair of husband, low income, sexual abuse, threat to divorce, stays separate with second wife are the main causes of violence that creates postpartum depression of a mother.

"My husband hasn't bought any clothes for his child till now and I am managing it by using my previous child's clothes Even during pregnancy and after delivery my husband beat me for very small matters".

Sumi, Age 28, IDI

Similar study was found that intimate partner violence and PPD had strong association and exposure to Intimate Partner Violence during pregnancy significantly increases the odds of PPD (Islam et al., 2017). Findings of another study was risk factor of Postpartum Depression could be predicted by history of past mental illness, depression in current pregnancy, perinatal death, poor relationship with mother-in-law and either the husband or the wife leaving home after a domestic quarrel (Gausia et al., 2009).

3.3 Behavioral Changes of Mother

Mothers felt lonely, worried, sad, irritated, hopeless. Gradually their behaviors were going to abnormal. Heavy crying was very common in every depressed mother. Infant breast-feeding problems, sleeping disturbance, eating disturbances also occurred. Some mothers took this situation easy and could overcome from it. But some could not overcome this situation and harmed thyself. Violence with husband occurred in a simple matter. Mother could not control her temper. In the severe situation PPD mother could commit suicide, kill her child or leave from husband family.

"When I remains in deep thought for everything then it seems to me that I have taken a lot of trouble in my life, but I can't take it anymore, I want to free from this. Then it seems that there is no way without suicide."

Hena, Age-29, IDI

A study found that compared to male infants, female infants seem to be better shielded from the harmful effects of PPD. Boys who have depressed mothers typically behave more aggressively and are cognitively much more delayed than girls (Sara Thurgood, 2009).

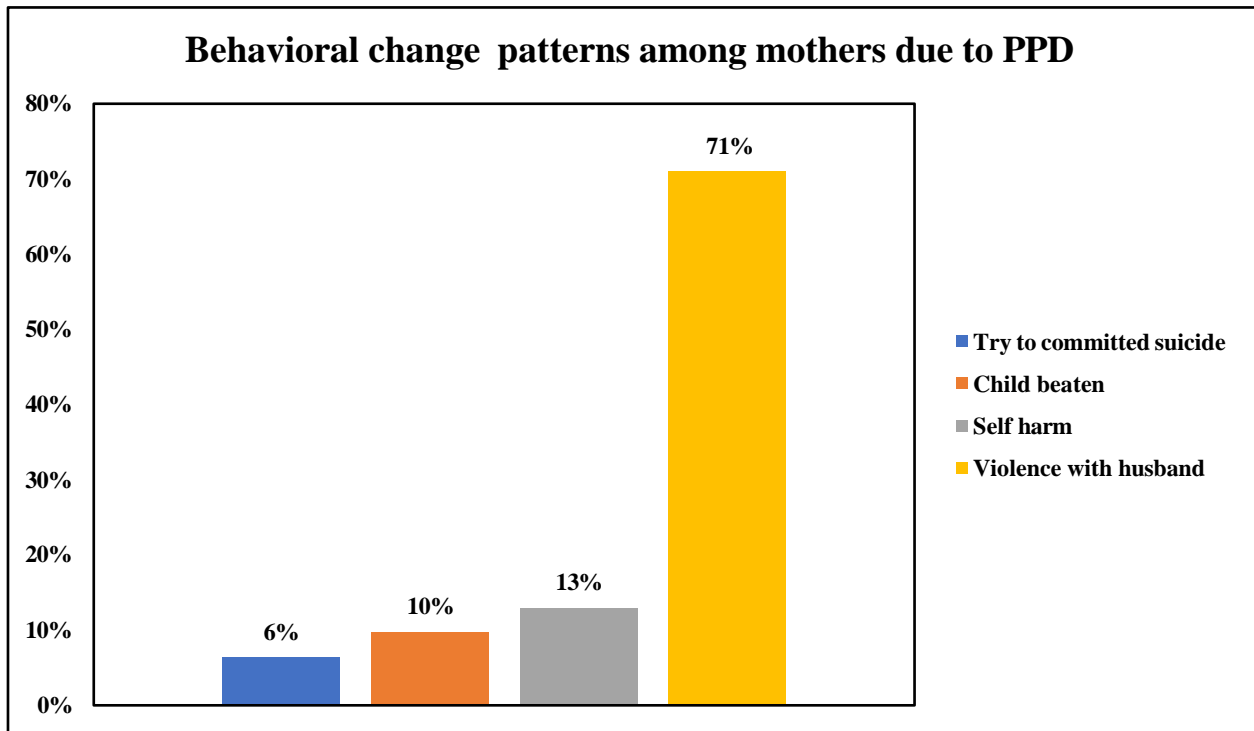


Figure:2: Behavioral change due to Postpartum depression among mothers

This graph represents the percentages of behavioral change among 31 depressed mothers. Where majority of the mothers (71%) behavior affects their conjugal life through violence with husband and minimum of mothers (6%) tried to commit suicide. Because of behavioral changes, others 10% of mothers misbehave with their children through less care, beaten and low concentration on child. Other 13% mother’s behavioral changes affect their own physical harms through injuring hands, starvation, not taking care oneself. These changing behavior affects their normal life adversely.

3.3.1 Effects of PPD

Long term experiences of PPD could negatively effect on herself, her child, husband and family. It created mental pressure and influenced abnormal activity. PPD effects were the harsh punishment on her child or herself, family suffering, obstacles to child growth and cognitive development, creating mental pressure on her family.

A study was found similar to the study that Poverty, low education, and intimate partner violence were all factors strongly associated with the mothers’ depressive symptoms and thus indirectly associated with the mothers’ ability to bond with their infants, even though these conditions did not directly negatively affect maternal bonding (Edhborg et al., 2011). A study found that compared to male infants, female infants seem to be better shielded from the harmful effects of PPD. Boys who have depressed mothers typically behave more aggressively and are cognitively much more delayed than girls (Sara Thurgood, 2009)

Recommendations:

- 1. Community-based Mental Health Support:** Provide targeted mental health services, such as support groups and counseling, to women living in impoverished communities.
- 2. Healthcare professionals' Training:** Give community health professionals the knowledge and abilities to recognize and treat postpartum depression.

3. **Government and NGO Collaboration:** Promote collaborations to exchange resources and information on maternal mental health between NGOs and public health authorities.
4. **Awareness Campaigns:** Implement public health initiatives to mitigate stigma in impoverished areas and increase knowledge about postpartum depression.
5. **Economic Support Programs:** Establish in place social and financial support networks to reduce the stress brought on by poverty, which makes PPD worse.

Conclusion:

The study emphasizes the extent to which postpartum depression (PPD) is as well as it affects mothers in the impoverished neighborhoods of Dhaka. These mothers' mental health issues are often exacerbated by social, economic, and environmental variables such deprivation, a lack of support, and unfavorable living conditions. The results highlight the critical need for focused interventions to address mental health concerns in marginalized groups.

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