Postpartum Depression Symptoms: Prevalence, Perception, Help-Seeking Behaviors, Risk Factor, and Mistreatment during Childbirth in a Palestinian Context: A Mixed Method Study

أعراض اكتئاب ما بعد الولادة: انتشارها، وإدراك الأم الفلسطينية لها ولطرق علاجها، والعوامل المؤثرة فيها، وعلاقتها بسوء معاملة الام خلال الولادة عن طريق بحث مختلط بين الكمي والنوعي

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This thesis was submitted in partial fulfillment of the requirement of a Master's degree in Community and Public Health from the Faculty of Graduate Studies at Birzeit University, Palestine

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الملخص

المقدمة: يُعتبر اكتئاب ما بعدِ الولادة مصدرُ قلقٍ عالميٍ، حيث يؤثرُ سلبًا على صحةِ الأمهاتِ وأطفالهِنّ وأسرهنّ. نجده منتشراً بشكلٍ أكبر َفي البلدانِ المنخفضةِ والمتوسطةِ الدخل، حيث يوجدُ محدوديةٌ في الأبحاثِ حولَ هذا الموضوعِ في تلك المناطقَ. تهدفُ هذه الدراسةُ إلى تقييمِ مدى انتشارِ اكتئابِ ما بعدَ الولادةِ، والعواملَ المرتبطةِ به، وارتباطِه بسوءِ معاملةِ الامهات أثناء الولادةِ على المستوى الوطني، وتهدفُ أيضاً إلى دراسةِ وجهاتِ نظرِ الأمهات فيما يتعلقُ باكتئابِ ما بعدَ الولادة، وتحديدِ سلوكياتِ الامهاتِ في طلبِ المساعدةِ لتشخيصهِ ومعالجتهِ.

المنهجية: تستخدمُ هذه الدراسةُ منهجًا مختلطًا; نهج كمي ونهج نوعي. يتضمن البحث الكمي تحليلاً ثانوياً لبياناتِ دراسةٍ مقطعيةٍ أجريت في الأرض الفلسطينية المحتلة، والتي شملت 745 مقابلةً هاتفيةً مع أمهاتٍ في الضفةِ الغربيةِ وقطاعَ غزة في غضون 2-4 أسابيع بعد الولادة. في حين يشتمل البحثُ النوعيُّ على ثلاثَ مجموعاتٍ بؤرية، أجريت كلٌّ منها تقريباً لمدة 50 دقيقةً، مع ما مجموعه سبعة عشر أمٍ اللواتي أنجبن اطفالا خلال الأشهر الستة الماضية، بحيثُ تم اختيارهن من ثلاث مناطق مختلفةٍ من محافظة بيت لحم، فلسطين .

النتائج: بلغت نسبةُ انتشارِ اكتئابِ ما بعد الولادةِ بين الأمهاتِ الفلسطينياتِ 12.6٪، مع انتشارٍ أعلى لُوحِظَ بين الأمهات اللائي يعشْنَ في قطاعِ غزّة، والتي هي منطقةٌ غيرُ مستقرةٍ سياسياً ولا اقتصادياً في فلسطين ، والأمهات الأكبر سناً والأمهات اللواتي تعرضن لسوءِ معاملةٍ أثناء الولادةِ في المستشفياتِ .

أما فيما يتعلق بوعي الأمهات لاكتئاب ما بعد الولادة; جميع الأمهات سمعن سابقا عن اكتئاب ما بعد الولادة كمفهوم، لكن لم يكنَّ كلهنّ يعتبرنه اضطرابًا نفسيًا؛ يعتبره البعضُ نتيجةَ سحرٍ أو حسدٍ. بالإضافة إلى ذلك، يتميزُ اكتئابُ ما بعدَ الولادةِ في الوسطِ الفلسطينيّ بضرورة اشتدادِ الاعراضِ كي يتم إدراكَهُ وطَلَبِ المساعدةِ للتخلصِ منه. من وجهة نظر الأمهات، الشعورُ بالوحدةِ وغيابُ الدعمِ المعرفيّ والعاطفيّ والعمليّ من عائلاتهن قد يكون مرتبطاً بظهور اكتئابِ ما بعدَ الولادةِ لدى السيدات. طلبُ

المساعدةِ من أفرادِ الأسرةِ هو الخيارُ الأولُ لجميعِ المشاركات؛ في بعض الأحيان، قد يكون الخيارُ الوحيدُ الذي يتبعنه للتخلصِ من الاكتئابِ. يمكن أن يكونَ طلبُ المساعدةِ من خارجِ الأسرةِ قراراً عائلياً؛ أي يتيحُ لعائلةِ الزوجِ والزوجةِ التدخلَ فيه ويسلبُ حقَّ الامِّ في حريةِ طلبِ المساعدةِ. يفضلنَ الأمهاتُ جلساتِ التعبير عن النفسِ والتي تشملُ أيضاً أخذِ المشورةِ في حين يرفضنَ الامهاتُ تناولَ الأدويةِ النفسيةِ .

قد لا تطلبُ الأمهاتُ المساعدةَ للتخلصِ من اكتئابِ ما بعدَ الولادةِ بسبب شعورهنَّ بالخجلِ أو وصمةِ العار المرتبطةِ بالمرضِ النفسيّ، أو عدم إدراكهنّ لقنواتِ الرعايةِ النفسيةِ المتاحة، أو بسبب اعتقاداتهن السلبية عن مقدمي الرعايةِ الصحيةِ، أو التكلفةِ العاليةِ للعلاجِ النفسيّ الكُفؤ .

الخلاصة: في الأراضِي الفلسطينيّةِ المحتلة، يبدو أن اكتئابَ ما بعدِ الولادةِ منتشرٌ، ولا يتمُّ تشخيصُه أو معالجتُه. لمعالجةِ هذه القضيّةِ، هناك حاجةٌ إلى نهجٍ شاملٍ، يتجاوزُ التدخلاتَ الطبيةَ، مع الأخذِ بعينِ الاعتبارِ الظروفَ السياسيةَ والاجتماعيةَ والثقافيةَ الصعبةَ التي تواجهها الأمهاتُ الفلسطينياتُ. تشملُ التدابيرَ الأساسيةَ تنفيذَ فحصٍ مسحيٍّ لاكتئابِ ما بعدَ الولادةِ لجميعِ الأمهات المنجبات، وإنشاءُ نظامِ تحويلٍ وعلاجٍ كفؤ، وضمانُ رعايةِ أمومةٍ عاليةَ الجودةِ وكريمةٍ ومحترمةٍ، ومكافحةُ وصمةِ العارِ المجتمعيةِ اتجاهَ الاضطراباتِ النفسيةِ. هذه الإجراءاتُ ضروريةٌ لتعزيزِ الصحةَ النفسيةَ للأمهاتِ الفلسطينياتِ.

Summary

Background: Postpartum depression (PPD) is a global concern that adversely affects the well-being of mothers, their children, and their families. It is particularly prevalent in low and middle-income countries, where limited research has been conducted on the subject. This study aimed to assess the prevalence of PPD, its risk factors, and its association with the mistreatment of mothers during childbirth at a national level, examine the perspectives of mothers regarding PPD, and identify their health-seeking behaviors or it's barriers among Palestinian mothers. **Methods:** This study utilized a mixed-methods approach consisting of quantitative and qualitative components. The quantitative part involved secondary data analysis from a cross-sectional study conducted in the occupied Palestinian territory (oPt). Telephone-based interviews were conducted with 745 mothers in the West Bank and the Gaza Strip within 2-4 weeks after childbirth. The qualitative part included three focus group discussions (FGDs), each conducted for about 50 minutes, with a total of 17 mothers who have given birth within the last six months in three different regions of the Bethlehem governorate, Palestine. **Results:** The prevalence of PPD among all selected Palestinian mothers was 12.6%, with a higher prevalence found among mothers living in the Gaza Strip, a politically and economically unstable region in Palestine, compared to mothers living in the West Bank (Adjusted Odd Ratio (AOD: 2.2, Confidence Interval (CI): 1.4-3.44). Older mothers were two times more likely to develop PPD compared to younger mothers (AOR: 2.03, CI: 1.070-3.84). Mothers who experienced

mistreatment in childbirth settings were more likely to report PPD than those who were not exposed to the mistreatment. Regarding the perception of PPD, all mothers in FGDs had heard about PPD as a concept, but not all perceived it as a mental disorder; some considered it as a result of magic or envy. Additionally, PPD had a high recognition threshold. Risk factors for PPD from the mother's perspective included feeling lonely and the absence of knowledgeable, emotional, and practical support from their families. Seeking help from family members was the first option for all participants; sometimes, it was the only method they considered. Seeking help from outside the family could also be a family decision process. However, mothers preferred venting sessions that included giving advice and refused to take psychotic medication. Mothers may not seek help because of the shyness and stigma associated with mental illness, not being aware of available channels of care, negative beliefs about healthcare providers, or the high cost of qualified psychological therapy. **Conclusion:** In oPt, PPD appears to be prevalent, underdiagnosed, and undertreated. To address this issue, a comprehensive approach beyond medical interventions is needed, considering the challenging political, social, and cultural circumstances faced by Palestinian mothers. Essential measures include implementing routine PPD screening, establishing a qualified referral system and treatment, ensuring high-quality, dignified, and respectful maternity care, and combating societal stigma

toward mental disorders. These measures are crucial for enhancing the mental health of Palestinian mothers.

Keywords: Postpartum depression, mistreatment, disrespect, abuse, childbirth, risk factors, mothers' perception, help-seeking behaviors, barriers, social support, culture, belief, cultural context, stigma

Chapter I: literature review

Introduction:

Childbirth and after childbirth are considered critical and vulnerable periods in any mother's life due to the physical, social, and emotional changes it carries. (American Psychiatric Association (APA), 2020). It is a time of rapid hormonal changes that make mothers vulnerable to mood disturbances (Miller, 2002). After childbirth, mothers require various forms of support, including practical, material, emotional, and informational, either from their families or healthcare providers. These forms of support are crucial in helping them overcome psychological distress and challenges they may experience post-childbirth (Chen et al., 2022; Nordbeck, 2022). These changes and increased needs during the postpartum period make mothers vulnerable to mood disturbances. These mood disturbances range from postpartum blues, which are milder, to a more intensive mood disturbance called postpartum depression (PPD), and in severe cases, they may escalate to postpartum psychosis (Miller, 2002).

Postpartum blues (baby blues) affect 50% of mothers and peak within three to five days post-childbirth; postpartum blues is considered a normal hypersensitivity emotional state; it is represented by crying easily but is accompanied by a feeling of happiness (Miller, 2002).

Postpartum Depression (PPD)

Postpartum depression (PPD) has been a significant public health problem in the last few years (Chen et al., 2022). PPD is a type of major depression that emerges within 12 weeks after childbirth, and it includes a wide range of symptoms, like feelings of guilt, sadness, sleep disturbances, difficulties in concentration (Dennis & Dowswell, 2013), fatigue, irritability, impaired daily functioning, loss of interest, and even thoughts related to maternal suicide or infanticide (Miller, 2002). Although it can persist for up to the first-year post-childbirth, not all mothers experience a full recovery within the first year after childbirth; approximately 8% of mothers continue to have depression post this year (Dennis &Dowswell, 2013), it also has a high recurrence rate, about 40% of mother will experience depression in the subsequent times (Chen et al., 2022).

PPD not only has a detrimental impact on the well-being of the mother, but it also negatively affects the mother's relationship with her husband and impairs family functioning. Additionally, it has significant consequences for the growing child's development (Chen et al., 2022). PPD occurs during a critical period when the child is entirely reliant on their mother and the quality of their interaction. Numerous studies conducted worldwide consistently demonstrate that PPD has detrimental effects on offspring. Children of depressed mothers exhibit reduced attachment to their mothers, higher levels of temperament and behavioral problems, long-term adverse

developmental outcomes, lower self-esteem, diminished academic performance, and delayed motor development compared to non-depressed mothers (Dennis & Dowswell, 2013).

According to a qualitative systematic review, PPD has a negative impact on breastfeeding, adversely influencing its initiation, efficiency, and duration (Dennis & McQueen, 2009). Furthermore, if PPD is left undiagnosed and untreated, depression can worsen, potentially leading to suicide. Maternal suicide is recognized as one of the causes of maternal mortality in the UK (Dennis & Dowswell, 2013).

The PPD screen can be made using screening tools such as the Edinburgh Postnatal Depression Scale (EPDS) or the Patient Health Questionnaire Depression Scale (PHQ-9). The PHQ-9 has demonstrated high specificity and sensitivity in detecting PPD, with a specificity of 84% and a sensitivity of 81% (Wang, Kroenke, Stump & Monahan, 2021). Using these tools in screening and research is advantageous due to their ease of use, cost-effectiveness, simplicity, and ability to enhance research productivity (Horwitz & Wakefield, 2007). However, it is essential to note that the PHQ-9 may have lower specificity than the EPDS because it includes items related to common and normal postnatal experiences (Heck, 2018).

PPD Prevalence

PPD is a global problem that affects about 11.9% of mothers all over the world (Woody et al., 2017). However, its prevalence varies from one country to another and within the same country. This variation can be attributed to several factors, including differences in cultural norms, perceptions of mental distress, associated stigmas, reporting methods, socioeconomic environments, and biological vulnerabilities, all of which influence the occurrence of PPD (Halbreich & Karkun, 2006). PPD prevalence was 12% and 8% in the USA and Canada, respectively (Haque et al., 2015). The prevalence was high, around 19%, in low- and middle-income countries (Ayoub, 2020). The prevalence of PPD in the neighboring countries was 25% in Jordan, a relatively politically stable country (Safadi et al., 2016), compared to 28% in Syria, a country currently facing a devastating humanitarian crisis (Roumieh et al., 2019). Among a few small-scale studies that reported PPD in the occupied Palestinian Territory (oPt), a study conducted in the Nablus district, which utilized different scales and definitions, showed a PPD prevalence of about 17% (Ayoub, 2014). Further, the prevalence of PDD among Palestinian mothers living inside the apartheid wall was 20.8% which is considered a higher prevalence than Israelis immigrant mothers by more than 2 times (9%), and non-immigrant Israelis mothers by 3 times (6.2%) (Daoud et al., 2019).

PPD Risk Factors:

Although the precise causes of PPD are not fully understood, it is widely recognized that multiple factors influence the development of PPD. Identifying mothers at risk for PPD is crucial for its prevention and treatment, as recommended by Cochrane (Dennis & Dowswell, 2013). Various factors have been associated with PPD, including sociodemographic factors, personal and family history, social factors, baby-related factors, and factors related to the childbirth facility. Here is a concise overview of these factors:

Sociodemographic Factors:

Single or divorced mothers face an increased risk of experiencing PPD (Ayoub, 2014). A systematic review conducted in the Arab world revealed that mothers with low income are more than 1.5 times more likely to report PPD (Alshikh Ahmad et al., 2021; Ayoub et al., 2020; Daoud et al., 2019). Furthermore, studies have shown a positive association between PPD and factors such as low education and young age (Alshikh Ahmad et al., 2021; Daoud et al., 2019), while another study indicated that mothers above the age of 40 years are also higher risk of developing PPD (Adler et al., 2019). However, the impact of employment status on PPD is not consistent, as some studies find a correlation while others do not (Chen et al., 2022).

Personal and Family History:

Mothers with a history of mental illness or antenatal depression are at a higher risk of developing PPD (Ayoub et al., 2020; Dennis & Dowswell, 2013). Additionally, mothers who have poor body image are also more susceptible to developing PPD (Ghubash & Eapen, 2009). Moreover, mothers with a physical illness such as anemia or diabetes during their last pregnancy are at an increased risk of developing PPD (Adler et al., 2019). There is also growing evidence suggesting that refugee and migrant mothers face a heightened risk of PPD (Dennis & Dowswell, 2013).

Furthermore, the quality of mother-baby interaction plays a crucial role, as mothers with low parenting competence or poor attachment with their children are more vulnerable to developing PPD (Chen et al., 2022). Additionally, mothers who have experienced adverse events are at a higher risk of developing PPD (Chen et al., 2022; Ayoub et al., 2020; Dennis & Dowswell, 2013).

Babies Factors:

An unwanted pregnancy or having an ill baby, as well as the absence of breastfeeding, are factors associated with a higher risk of PPD (Ayoub et al., 2020; Hamdan and Tamim, 2012). Concerns about the baby's temperament or the experience of complicated childbirth negatively affect the mental well-being of the mother (Ghubash & Eapen, 2009).

While the gender of the baby is often considered a controversial issue, and it can be influenced by factors such as the number of children a family already has and their gender (Ghubash & Eapen, 2009).

Social Support:

The mental well-being of mothers during the postpartum period is significantly influenced by cultures and the level of social support received (Ekpenyong & Munshitha, 2023). In a study conducted in Saudi Arabia, partner support was assessed using specialized scales that included emotional support, practical support in child-rearing, and financial support as perceived by the mother. The findings indicated that 16% of Saudi mothers reported poor partner support and were at a higher risk of developing PPD (Almutairi, 2017). These findings are consistent with systematic reviews and meta-analyses that suggest receiving support from husbands or mothers can reduce the likelihood of experiencing PPD (Ekpenyong & Munshitha, 2023; Dennis & Dowswell, 2013).

Conflict with husbands or in-laws and lack of support from family members are also associated with an increased risk of PPD (Ayoub et al., 2020; Dennis & Dowswell, 2013; Ghubash & Eapen, 2009). Mothers with low satisfaction in the partner relationship or experiencing physical abuse are at a higher risk of PPD (Ayoub, 2014). In a study conducted in oPt, it was found that Arabic women had lower levels

of social support compared to Jewish mothers, and they were more likely to experience intimate partner violence (Shwartz, O'Rourke, & Daoud, 2022). Experiencing such violence not only directly increases the likelihood of PPD but also indirectly affects mothers by increasing chronic stress and reducing social support, leading to a higher incidence of PPD (Shwartz et al., 2022).

Mistreatment during Childbirth:

In addition to the classical factors mentioned above, recent studies worldwide are dedicated to exploring the relationship between mistreatment during childbirth settings and the physical and psychological health of mothers, including PPD (Silveira et al., 2019; Nyirenda et al., 2020; Souza et al., 2017). Mistreatment during childbirth refers to the inadequate interaction between the mother and healthcare personnel in a childbirth facility. It can be categorized into several main themes: (a) abuse, including physical, verbal, or sexual abuse, (b) stigma and discrimination, (c) failure of healthcare personnel to meet professional standards such as informed consent, confidentiality, physical procedures, and negligence or abandonment, (d) poor rapport between women and providers, such as communication issues, the absence of a birth companion, and a loss of autonomy, and (e) facility conditions, represented by the culture and available resources (Bohren et al., 2015).

However, studies on mistreatment during childbirth in the Arab world are limited, and there are no standardized tools to measure it. Each study has its own terminology for mistreatment, making it challenging to compare mistreatment in childbirth settings among Arab countries in terms of risk factors, occurrence, and consequences (Awad & Abu-Rmeileh, 2020).

Despite these limitations, available studies have revealed suboptimal maternity care in the Arab world (Awad & Abu-Rmeileh, 2020). Factors such as the lack of a birth companion, being young, primiparous, having a low education level, having a low family income, and undergoing assisted vaginal birth are all considered risk factors for mistreatment during childbirth (Awad & Abu-Rmeileh, 2020).

A study conducted in an Arabic country, Iraq, revealed that the day of childbirth holds significant importance for mothers, leaving a lasting impact on their memories. Mothers can intensively recall the words and actions of each healthcare provider involved. The mother's overall experience during childbirth greatly influences her emotions and well-being. When she receives respectful and supportive care, she retains a positive memory of the experience, leading to better self-esteem and a sense of mental well-being (Fares & Ahmed, 2021).

The abusive and disrespectful behaviors exhibited during childbirth have a wide range of negative effects on both the mother and her baby. These effects include

feelings of fear, disrespect, and insecurity for the mother. In some cases, the consequences can even escalate to life-threatening conditions if there is negligence or major symptoms are ignored (Awad, 2020). Experiencing mistreatment during childbirth can adversely affect a mother's mental health, potentially resulting in psychological distress and an elevated risk of PPD (Fares & Ahmed, 2021).

Mistreatment during childbirth as a risk factor for PPD

Among the limited number of studies that employed the standardized tool for assessing mother mistreatment during childbirth developed by Bohren, research conducted in Brazil has revealed a significant correlation between specific forms of mistreatment, such as physical and verbal abuse during childbirth, and increased likelihood of mothers reporting PPD by two and seven times, respectively (Silveira et al., 2019; Souza et al., 2017). Furthermore, mothers who experienced three or more types of mistreatment behaviors during childbirth were found to be four times more likely to have PPD compared to those who did not experience mistreatment (Silveira et al., 2019). Negligence by healthcare providers during childbirth also significantly increased the risk of mothers reporting PPD by seven times (OR 7.66, CI 6.37-9.23). On the other hand, the presence of supportive care during childbirth, such as allowing a childbirth companion, was identified as a protective factor against PPD. The presence of a childbirth companion reduced the mother's risk of developing PPD (OR 0.39, CI: 0.30–0.34) (Souza et al., 2017).

A study conducted in Iraq showed that women who experience disrespect and abuse during childbirth are at a higher risk of reporting PPD. For instance, the study found a positive association between ineffective communication during childbirth and PPD (Fares & Ahmed, 2021).

Mothers' Perception of the Postpartum Period and PPD:

The limited understanding of mothers' perceptions regarding PPD in the Arabic world is a significant concern. Among these limited studies, focus group discussions conducted in the Arabian Gulf revealed the existence of strange myths and beliefs within the Arabic context surrounding the postpartum period. For instance, during these discussions, one grandmother emphasized that after childbirth, mothers are believed to be more vulnerable to supernatural forces, such as jinn, due to the presence of puerperal discharge (bleeding) (Ghubash & Eapen, 2009). Interestingly, most participants attributed PPD to these myths and beliefs, such as the influence of evils and jinn, rather than recognizing it as a mental disorder. Only a small number of mothers acknowledge PPD as a mental health problem (Ghubash & Eapen, 2009).

Regarding social support, mothers post childbirth require social support to meet their various needs. This support fulfills their requirements for seeking advice (informational support), feeling loved and cared for (emotional support), and

receiving assistance with child-rearing and household tasks (practical support) (Nordbeck, 2022). Arabic mothers place significant importance on the support they receive from their spouses and families in addressing and resolving PPD (Ghubash & Eapen, 2009). Arabic women have high expectations regarding the support they receive during the postpartum period, influenced by a cultural practice observed in Arab communities where mothers are advised to rest for 40 days after childbirth and rely on the assistance of their mothers, mothers-in-law, sisters, and sisters-in-law during this recovery period (Bina, 2008).

A qualitative study conducted in Western culture revealed that many depressed mothers commonly experience emotions such as loneliness, fear, sadness, disappointment, guilt, worry, and a sense of failure (Nordbeck, 2022). In comparison, some Arabic mothers perceived PPD as psychological disturbances characterized by worries, tension, and anxiety. Furthermore, they also perceived it as a behavioral disturbance, such as neglecting their baby (Ghubash & Eapen, 2009).

However, mothers experiencing PPD often perceive it as a sign of being an inadequate mother, which leads to the fear of being labeled as a bad mother compared to seemingly well-adjusted mothers. This fear of stigma prevents depressed mothers from openly discussing their struggles, as they find the negative judgment attached to being labeled as a bad mother more distressing than the label of depression itself (Hadfield & Wittkowski, 2017).

Help-Seeking Behaviors:

It is important to acknowledge that cultural norms and local beliefs play a significant role in shaping the management and help-seeking behaviors of PPD (PPD) (Ghubash & Eapen, 2009; Bina, 2008).

Psychosocial interventions are highly effective in managing PPD. They are often described as vital in the recovery process, acting as a "lifeline" towards a better life. Mothers prefer these effective psychosocial interventions because they contribute to increasing their knowledge about PPD, improving mother-child attachment, enhancing relationships with family members, developing better communication skills, enabling effective problem-solving, and fostering a more realistic outlook (Hadfield & Wittkowski, 2017).

Regarding preferred methods of treating PPD, mothers worldwide tend to lean towards talking therapy with someone who can understand them rather than relying solely on medication (Nordbeck, 2022; Hadfield & Wittkowski, 2017; Dennis et al.,2006). Furthermore, mothers also prefer seeking help through online services and find value in exploring other women's experiences with PPD, as it helps enhance their understanding of the condition (Nordbeck, 2022).

On the other hand, when it comes to the use of psychotropic medication, a comprehensive literature review of qualitative studies conducted in the United

Kingdom, Canada, Japan, and Australia consistently indicates that mothers perceive medication as an unfavorable treatment option for PPD. These studies reveal that many mothers express feelings of shame and stigma associated with taking medication for postpartum depression (Hadfield & Wittkowski, 2017).

Regarding traditional therapy, a study conducted among Arabic mothers in the Arabian Gulf observed that mothers often sought to treat PPD through traditional therapies. These traditional approaches included consuming specific herbal foods, using special materials for bathing, or seeking assistance from religious individuals who perform unusual practices, such as cauterizing the mother's forehead. Additionally, they may rely on practices like reading the Holy Quran (Ghubash & Eapen, 2009).

Barriers to Help-Seeking Behaviors:

Despite PPD is a prevalent and significant public concern, many mothers do not actively seek help to address it. This is concerning because the absence or delay in receiving effective treatment can have adverse consequences on the mother and her entire family, especially the growing child. Therefore, early detection of PPD is crucial.

Based on the findings of qualitative systematic reviews, meta-analyses, and studies conducted in both Arabic and non-Arabic contexts, mothers were found to

have a tendency not to disclose their suffering and may hesitate to seek help for postpartum depression (PPD) due to various reasons. These reasons include a lack of knowledge about PPD and the presence of myths surrounding it (Dennis & Chung-Lee, 2006), feelings of stigma, embarrassment, and shame associated with being depressed (Hadfield & Wittkowski, 2017; Nordbeck, 2022), mothers perception of PPD as a sign of maternal failure (Hadfield & Wittkowski, 2017), the mothers desire to keep their suffering a secret, the absence of a trusted social support network (Nordbeck, 2022), the lack of time mothers have to address their concerns and fulfill numerous responsibilities towards their children (Hadfield & Wittkowski, 2017; Nordbeck, 2022), mother fear of being labeled as inadequate mothers or being judged (Nordbeck, 2022), and the inadequate responses from others when mothers express their suffering (Dennis & Chung-Lee, 2006) all contribute to their reluctance to seek help.

Mothers also fear that disclosing their experience of PPD may negatively affect their body image and how they are perceived by others (Hadfield & Wittkowski, 2017). Additionally, they may lack awareness about the availability of services or have low expectations regarding the quality of care provided, particularly in under-resourced settings. Challenges related to transportation and concerns about their children being taken away from them further contribute to their reluctance to seek help for PPD (Hadfield & Wittkowski, 2017).

Demographics and Health Service System in oPt:

Palestinians represent a fertile population, as indicated by the total fertility rate (TFR) in the oPt between 2017 and 2019. The TFR was 3.8 for the West Bank and 3.9 for the Gaza Strip. Notably, the rural areas of the oPt exhibited a significantly higher TFR of 4.4 (Palestinian Central Bureau of Statistics (PCBS, 2021).

The average age at first marriage among Palestinian women is 21.1 years, with no significant difference observed between the West Bank and Gaza Strip (PCBS, 2021). Additionally, the adolescent birth rate is 43 per 1000 childbirths and is more prevalent among girls with lower socioeconomic status and basic education (PCBS, 2021). Regarding income disparity, the West Bank demonstrates higher average household expenditure, amounting to $1500 for a family of five, compared to the Gaza Strip's average of $730 (PCBS, 2021).

The utilization of health facilities for childbirth among women in oPt is high, with 99.4% of births occurring in such facilities. Among these, 60% occur in governmental hospitals, 33.7% in private hospitals, 0.8% in UNRWA facilities, and 2.4% in non-governmental organizations (NGOs). The cesarean section rate for these childbirths is 25.8% (PCBS, 2021).

However, postnatal care visits are less frequent, with only 50% of mothers seeking such care (PCBS, 2021).

Ultimately, Postpartum depression (PPD) is a global health issue that affects mothers and offspring worldwide, with a higher prevalence observed in developing countries. While the exact causes of PPD are not fully understood, it is clear that its occurrence and management are greatly influenced by the social, cultural, economic, and political context in which it takes place. As evidenced by research findings, numerous barriers related to help-seeking behaviors contribute to the underdiagnosis and undertreatment of PPD.

Despite oPt being a fertile community, research on maternal mental well-being post-childbirth has been limited in oPt. As well as, there was a lack of studies specifically examining the perception of PPD, help-seeking behaviors, and the barriers associated with PPD in Arabic regions. Furthermore, research exploring the correlation between PPD and the mistreatment of mothers during childbirth in healthcare facilities was limited worldwide, especially by using a standardized tool of the mistreatment, highlighting the need for more studies in this area. So, this study focused on investigating the prevalence of PPD, its risk factors, and its association with mistreatment during childbirth in oPt. Additionally, the study aimed to explore the understanding of PPD within the Palestinian context, shedding light on its unique aspects in Palestinian society. By conducting this study, we aimed to fill this knowledge gap and provide valuable insights into the prevalence and factors influencing PPD among Palestinian women, also we examined similarities and

differences between the experiences of PPD in Palestinian culture, other Arabic cultures, and Western societies. This research aimed to provide valuable insights for healthcare providers and policymakers. These insights can contribute to the development of appropriate mental health services tailored to the needs of mothers in Palestinian society. In addition, it aimed to contribute to the existing body of knowledge by exploring the association between PPD and the mistreatment of mothers during childbirth within the Palestinian context. And this research will be a valuable addition to the emerging body of research in this area globally.

Statement of Significance:

This study holds significant importance due to several reasons. Firstly, in light of the lack of adequate national studies in oPt that accurately reflect the prevalence of postpartum depression (PPD) and its risk factors among Palestinian mothers. By conducting this study, we aimed to fill this knowledge gap and provide valuable insights into the prevalence and factors influencing PPD among Palestinian women.

Secondly, limited global research examined the association between the mistreatment of mothers during childbirth and PPD, especially using standardized tools. Our study aimed to contribute to the existing body of knowledge by exploring this relationship within the Palestinian context. And this research will be a valuable addition to the emerging body of research in this area globally.

Thirdly, within Arab and Muslim societies, there was a scarcity of studies focusing on mothers' perceptions of PPD, its risk factors, protective factors from the mother's point of view, and barriers to formal or informal help-seeking behaviors. Additionally, this study acknowledges the influence of cultural beliefs and practices on PPD, recognizing that each culture uniquely impacts mental health.

By including qualitative and quantitative data in our study, we aimed to comprehensively understand PPD, it's influencing factors (both at the community and facility levels), and help-seeking behaviors in an Arabic-Palestinian context. And we aim to provide valuable data for the Palestinian Ministry of Health, policymakers, and

healthcare providers to enable them to develop targeted and effective strategies for PPD management and support; considering Palestinian women's specific needs and cultural context.

Furthermore, this study emphasizes the importance of activating mothers' participation through focus group discussions (FGDs), ensuring their voices are heard and their experiences are considered. By involving mothers directly, we can gain a deeper understanding of their feelings, complaints, and the causes behind their emotional experiences.

Lastly, by the qualitative part of this study, we avoided a blinded use of Western mental distress screening tools. We can preserve the integrity of local knowledge and cultural perspectives, preventing false-positive diagnoses of PPD that may arise from applying Western assessment tools.

Research Question, Hypotheses, and Objectives

Main Research Questions:

Is there an association between developing postpartum depression (PPD) and the mistreatment of mothers during childbirth?

What are the mother's perceptions, help-seeking behaviors, and help-seeking barriers related to postpartum depression (PPD) in the Palestinian context?

Research Questions: Obtained from the Quantitative Study

- What is the prevalence of PPD among mothers in the Gaza Strip and the West Bank?
- Are sociodemographic factors (such as the mother's age, marital status, level of education, employment, family income, and locality) associated with PPD?
- Are obstetric history (such as mode of childbirth, breastfeeding status, or parity) associated with PPD?
- Is there an association between experiencing mistreatment in health facilities during childbirth by mothers and developing PPD?

Research Questions: Obtained from the Qualitative Study

- What is PPD from Palestinian mothers' perception?
- What are the possible risk factors and protective factors for PPD from the perspective of Palestinian mothers?
- What are the help-seeking behaviors of Palestinian mothers in managing PPD?
- What are the barriers to help-seeking behaviors among Palestinian mothers?
- Does the PHQ-9 pathologize normal findings in the postpartum period from the perspective of mothers?

Quantitative Study Alternative Hypotheses:

- PPD is associated with factors such as the mother's age, marital status, level of education, employment, family income, or locality.

- Mothers who have experienced any form of physical abuse, verbal abuse, or discrimination during childbirth are at a higher risk of developing PPD.
- Neglected or abandoned mothers during childbirth are also at a higher risk of developing PPD.
- Mothers who have experienced inadequate pain management during childbirth are at an increased risk of developing PPD.
- Women who are not allowed to have a labor companion during childbirth are at a higher risk of developing PPD.
- The invasion of mothers' privacy during childbirth has been found to increase the risk of developing PPD.

Objectives:

Objectives of the Quantitative Study

- Determine the prevalence of PPD among mothers in the Gaza Strip and the West Bank.
- Examine the association between sociodemographic factors (such as the mother's age, marital status, level of education, employment, family income, and locality) and PPD.
- Investigate the correlation between experiencing mistreatment in health facilities during childbirth by mothers and developing PPD.

Objectives of the qualitative study

- Explore the perception of PPD from the perspective of Palestinian mothers.
- Identify the potential risk factors and protective factors for PPD as perceived by Palestinian mothers.
- Examine the help-seeking behaviors of Palestinian mothers in managing PPD.
- Investigate the barriers to help-seeking behaviors among Palestinian mothers.
- Formulate an initial understanding of the potential causes of the symptoms mentioned in the PHQ-9 within a Palestinian context, considering that the PHQ-9 was already utilized in the quantitative portion.
- Articulate our local understanding of tradition to determine the nature of PPD in the Palestinian context.

Chapter II: Methodology

This study used a mixed methods approach consisting of quantitative and qualitative components. The quantitative component involved secondary data analysis of a cross-sectional study conducted in the occupied Palestinian territory (oPt), which took place between 2020 and 2021, by Dr. Niveen Abu Rmeileh and her colleagues in coordination with the World Health Organization (WHO). This analysis explored the prevalence of PPD, possible risk factors, and its association with the experiences of Palestinian mothers during childbirth in health facilities. A standardized tool widely recognized worldwide was used to assess these factors.

While the qualitative component of the study involved three focus group discussions (FGDs) with mothers who had recently given birth, these FGDs were conducted in three different residential areas within the Bethlehem governorate of the oPt. The qualitative component aimed to capture Palestinian mothers' perspectives on postpartum depression and their help-seeking behaviors.

By incorporating both quantitative and qualitative methods, this study sought to provide a comprehensive understanding of PPD within the Palestinian context, taking into account Palestinian mothers' unique perspectives and experiences.

Methods of Quantitative Part:

Study Design:

This study was based on secondary data analysis from a cross-sectional study in the occupied Palestinian territory (oPt) that aimed to explore women's experiences during childbirth in health facilities. The survey was conducted from July 2020 to February 2021, during the COVID-19 pandemic, so telephone-based interviews were used. Each interview was done within 2-4 weeks post-childbirth for women who delivered their babies in five childbirth facilities distributed in the West Bank and the Gaza Strip (Abu-Rmeileh et al., 2022).

Data Collection

Participants:

A total of 745 women participated in the study. Mothers were selected based on the following inclusion criteria: (1) ≥18 years old; (2) Living within 15km from the hospital; (3) willing and providing consent to participate; (4) mothers who were admitted for childbirth. Mothers who were excluded from the study were: (1) first-degree relative to someone who works in the selected childbirth facilities; (2) admitted to the facility for reasons other than childbirth; (3) unable to provide consent due to distress, or (4) did not have clear contact channel.

Ethical Consideration:

The research design was reviewed by the World Health Organization (WHO) Research Ethics Review Committee on the 24th of July, 2019, the approval number is A65880. Also, it was reviewed by the Institute of Community and Public Health/ Birzeit University research ethics committee on the 26th of September, 2018, the approval number is 9-2018. All mothers provided oral informed consent after the nature of the investigation had been fully explained. The approval for using oral informed consent was obtained from both the WHO Research Ethics Review Committee and the Institute of Community and Public Health/ Birzeit University research ethics committee. It is important to note that this study did not involve human participants who were under 18 years old. The research design is committed to the principle of the Helsinki Declaration of 1989.

Instrument / Questionnaire:

The used survey tool included sections about sociodemographics, obstetric history, screening tools for PPD, and mistreatment during childbirth tool. The survey followed the master survey of the WHO multi-country study on Childbirth Experiences. In the master survey, the Patient Health Questionnaire -9 (PHQ-9) was used as a screening tool for PPD, and they used a standardized and validated tool for mistreatment during childbirth in health facilities.

PPD Screening Tool:

The Patient Health Questionnaire (PHQ-9) was used in this study as a PPD screening tool. It's a quick screening tool for depression. Its items correspond with the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria for diagnosing depression in general (Sawaya et al, 2016). It is a valid and reliable tool for general depression detection in the Arabian context (AlHadi et al., 2017; Al-Qadhi et al., 2014), and its Cronbach's alpha was 0.857 (AlHadi et al., 2017).

Mistreatment during childbirth in health facilities Tool:

The tool was developed by Bohren and colleagues (Bohren et al., 2015). The mistreatment types included in this secondary analysis were the only ones that were logical and applicable for all mothers who gave birth by normal vaginal birth or via cesarean section. The included mistreatment types were (1) physical abuse, verbal abuse, stigma or discrimination, (2) negligence and abandonments, (3) poor pain management, (4) ineffective communication, and (5) lack of supportive emotional care from healthcare providers, (6) lack of privacy, and (7) the absence of a childbirth companion. The mistreatment typologies were measured by building a scale for each type from other first-order themes. (Annex A and Annex B)

Statistical Analysis

The dependent variable was PPD which was measured by using PHQ-9. We used a summed items score of PHQ-9 for PPD diagnosis and a score of ≥ 10 as the cut-off point. Mothers with a summed score of 10 or above were considered to have PPD, and mothers with a score of 9 or less had no depression. This cut-off point was selected based on literature reviews since it has a sensitivity and specificity of 88% for detecting PPD (Bineid et al., 2022; Psychological Assessment Resources (PAR) Staff, 2020; Kroenke et al., 2001).

The independent variables were the sociodemographic and obstetric history, which includes age, educational level, employment status, income, gravidity (# of pregnancy), parity (# of childbirth), mode of childbirth, current breastfeeding status, and breastfeeding initiation time, besides the mistreatment behaviors in health setting during childbirth as classified and grouping in table 2 and table 5.

The univariate analysis, represented by frequencies and proportions, was used for the total sample and was also conducted separately for the Gaza Strip and the West Bank regions. **Bivariate analysis** is also accomplished by using Chi-Square tests (Pearson Chi-square, Fisher's Exact Test, and Linear-by-Linear Association) to assess the associations between mothers developing PPD and sociodemographic characteristics, obstetric history, and exposure to mistreatment behavior during

childbirth. **Multiple Logistic Regression**, odds ratio, and adjusted odds ratio were used to control for possible confounders like the mother's age, educational level, region, parity, and mode of childbirth. Data analysis was done using the Statistical Package for Social Science (SPSS), using a confidence level of 95%.

Methodology of the Qualitative Part:

This qualitative study aimed to explore the perspectives of Palestinian mothers on PPD. Three focus group discussions (FGDs) were conducted with a total of 17 mothers. The FGDs took place in different locations within Bethlehem governorate; oPt, included a camp, a city, and a town. Each FGD lasted approximately 50 minutes, and all of them were conducted in January 2023. The camp FGD consisted of four participants, the city FGD included eight participants, and the town FGD involved five participants, as shown in Table 1.

Table 1: Properties of the FGDs.

Group	1	2	3
Location	**Aida Camp**	**Bethlehem city**	**Al-Obaidya town**
Duration of FGD	60 minutes	50 minutes	45 minutes
Date of FGD	19-Jan-23	23-Jan-23	30-Jan-23
Number of participants	4	8	5

Recruitment:

FGDs were conducted in three different residential areas, -city, town, and camp-; to ensure diversity in the sample; and to take the opinions of women from

diverse backgrounds. These FGDs were conducted in two primary health care clinics, a town clinic and a city clinic at Bethlehem governorate. The third FGD was conducted in a community foundation in a camp within Bethlehem governorate.

The participants of the FGDs, which were conducted in the primary health care clinics, were recruited at the time Bacille Calmette-Guerin (BCG) vaccine for their babies. The BCG vaccine is given to newborns within the first month of childbirth to give them protection against meningococcal and tuberculosis (Preventive Medicine in Palestine, 2021). FGD participants were recruited during the BCG vaccine administration, as primary health care clinics offer the vaccine on a specific day each week, resulting in a high attendance of recent postpartum mothers, besides, this time was deemed suitable for screening for PPD.

Women who attended the clinic for their babies' vaccinations were invited to participate in the FGD. The FGD took place in a private room in the clinic between 9-10 am. This was the time when women registered and waited to vaccinate their babies.

The participants of the third FGD were invited by the community foundation employees in the camp utilizing the snowballing approach to identify women who gave birth during the last 6 months.

Eligibility

Eligibility criteria were established to ensure that participant women could reflect their perception of PPD freely and to avoid recall bias.

Inclusion criteria: mothers who gave birth during the last six months. Regardless of their age or number of births they had.

Exclusion criteria: women who cannot participate in FGD without their relatives.

Instruments:

Focus group discussions were conducted with probes about (1) Palestinian mothers' thoughts about PPD symptoms, (2) possible PPD risk factors and protective factors from Palestinian mothers' point of view, (3) when, how, and where to seek assistance, (4) Possible barriers for help-seeking behaviors, (5) discussing possible normal postnatal symptoms present in the PPD tool, PHQ-9 (The guiding questions for the FGDs can be found in Annex C). A small questionnaire about the mother's demographic and obstetric information was used (mother's age, residential area, level of education, employment status, parity, and date of last childbirth) (see Annex E).

Ethical issue

The ethical research approval was obtained from the research ethics committee at the Institute of Community and Public Health/Birzeit University (Annex F). Also, approval for implementing the study was taken from the Palestinian Ministry

of Health and the involved clinics (Annex D). Written informed consent was obtained from participating mothers after the researcher explained the objectives of the FGD to women (Annex E). All FGDs were tape-recorded after all women provided their consent to record; also, the researcher took notes manually.

It is important to note that this study did not involve human participants who were under 18 years old.

When conducting FGDs, the confidentiality of the information was emphasized on the part of the researchers. It was explained to the participating women that the confidentiality of information from other participating women is not guaranteed. So, the researcher emphasized that women should speak without mentioning names and without attributing the speech to the speaker.

Qualitative analysis:

The FGDs data was analyzed based on the thematic analysis described by Braun and Clarke, which includes the researcher familiarizing with FGDs data, creating initial codes and themes, reviewing others' themes, defining the final theme, and writing up the manuscript (Kiger and Varpio, 2020). Analysis steps are as follows:

The first step: the researcher's thoughts and field notes were written immediately after each FGD, and then the researcher prepared and organized the raw data by transcribing the FGDs.

The second step: the researcher read all the data and developed ideas and impressions from participants saying. Further notes are written, and the related phrases are highlighted.

The third step: The researcher wrote a list of major topics, which mainly seem like sub-research questions. Each of these major topics is considered a theme that includes many topics, sub-themes, and codes.

The fourth step: the phrases were colored based on their related topic, and the related phrases were set together in a table that includes 4 columns (phrase, codes, sub-theme, and theme).

The fifth step, the coding process, takes place by finding the most descriptive words for each highlighted phrase in the adjusted columns; then, the researcher categorized codes in sub-themes and then related sub-themes grouped into themes.

The sixth step: all three researchers read all the data independently, developed further ideas and codes, rearranged codes and sub-themes in this step, and then the manuscript was written up. Note that there is no significant disagreement among analysts.

Chapter III: Results

Results of the Quantitative Part:

Sociodemographic and Obstetric Characteristics of Participant Mothers:

A total of 745 mothers participated in this study, 475/745 (63.8%) of mothers were from the West Bank and they were equally distributed among Ramallah and Hebron governorates, while 270/745 (36.2%) of mothers were from the Gaza strip. The mean age of participants was 27 years; the youngest mother was 18 years old, while the oldest one was 45. A third (34.4%) (256/745) of respondents attained secondary education, some college, or vocational, while only 161/745 (21.6%) of the mothers hadn't attained secondary education, with a higher percentage among mothers from the Gaza Strip. Most mothers (647/745) (86.8%) were unemployed outside their homes. In the Gaza Strip, 264/270 (97.7%) of the mothers had an income of less than 2000 New Israeli Shekel (NIS)/month (around 620 $ /month), and none had a monthly income of more than 4,000 NIS/month (1,240 $/month). While in the West Bank, 81/475 (17.1%) of mothers had a monthly family income of fewer than 2000 NIS/month (620$/month), and only 77/475 (16.2%) had a monthly family income of more than 4000NIS/month (1,240 $/month). The majority of participants, accounting for 542/745 (72.8%) had vaginal childbirth. Most mothers, specifically 693/745 (93%) of mothers were current breastfeeders, and 471/745 (65%) of participants initiated breastfeeding within the first hour. Almost a fourth of the

mothers (23.9%) (178/745) this was their first pregnancy. About half of the mothers (50.8%) (373/745) had one or two children, as shown in Table 2.

Table 2: Distribution of participants' sociodemographic and obstetric characteristics as total in oPt and split by region.

Characteristic	West Bank N(%) n=475	Gaza N (%) n=270	Total oPt N(%) n=745
Mother's age (years)			
<23	105 (22.1%)	66 (24.4%)	171 (22.9%)
23-29.9	206 (43.4%)	124 (45.9%)	330 (44.3%)
≥30	164 (34.5%)	80 (29.6%)	244 (32.8%)
Educational level			
Less than secondary education	83 (17.5%)	78 (28.9%)	161 (21.6%)
Secondary education, some college, or vocational	164 (34.5%)	92 (34.1%)	256 (34.4%)
Bachelor's degree or more	228 (48.0%)	100 (37.0%)	328 (44.0%)
Marital status			
Married	474 (99.8%)	268 (99.3%)	742 (99.6%)
Divorced or separated	1(0.2%)	2 (0.7%)	3 (0.4%)
Employment			
No work or student	388 (81.7%)	259 (95.9%)	647 (86.8%)
Employed (full or Part)	87 (18.3%)	11 (4.1%)	98 (13.2%)
Family income (New Israeli Shekel (NIS/ month) *			
<2000	81(17.1%)	264 (97.7%)	345 (46.3%)
2000-2999	202(42.5%)	5 (1.9%)	207 (27.8%)
3000-3999	115(24.2%)	1 (0.4%)	116 (15.6%)
4000 ≤	77 (16.2%)	0	77 (10.3%)
Gravidity			
First pregnancy	104 (21.9%)	74(27.4%)	178 (23.9%)
2-3	201 (42.3%)	86 (31.9%)	287 (38.5%)
4-5	115 (24.2%)	63 (23.3%)	178 (23.9%)
6≤	55 (11.6%)	47 (17.4%)	102 (13.7%)
Parity			
1	118 (25%)	84 (31.1%)	202 (27.4%)
2	125 (26.4%)	49 (18.3%)	174 (23.4%)
3-4	160 (33.8%)	89 (33.2%)	249 (33.4%)
At least 5	72 (15.2%)	48 (17.9%)	120 (16.1%)

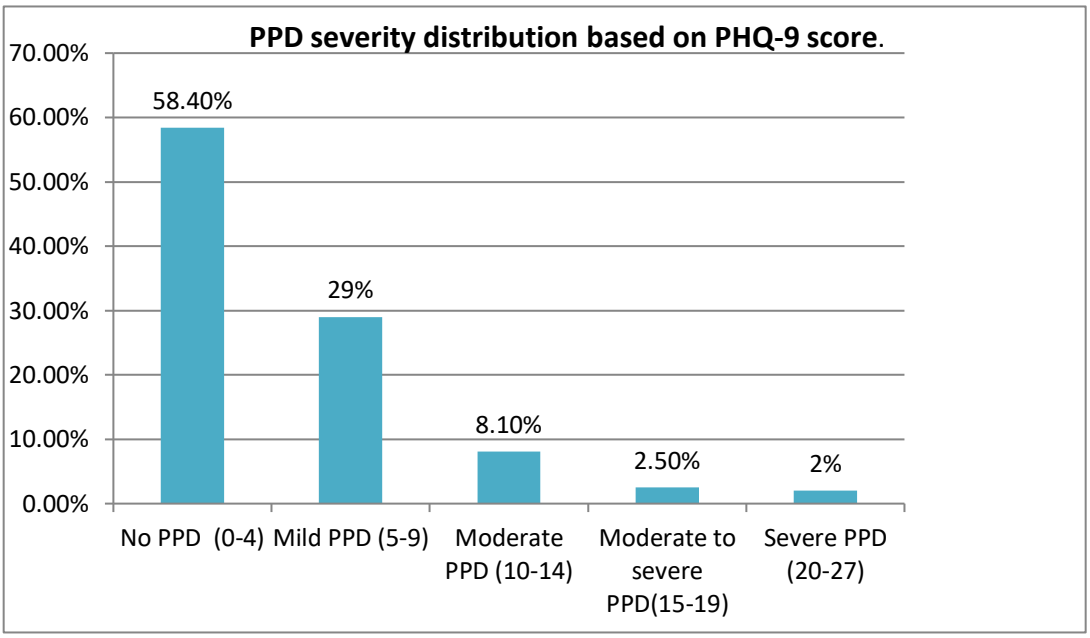
Mode of childbirth			
Vaginal childbirth	340 (71.6%)	202 (74.8%)	542 (72.8%)
Cesarean section	135 (28.4%)	68 (25.2%)	203 (27.2%)
Current Breastfeeder			
yes	434 (91.4%)	259 (95.9%)	693 (93.0%)
no	41 (8.6%)	11 (4.1%)	52 (7.0%)
Time of breastfeeding initiation time	n=457	n=263	n=720**
Within 1-hour post-childbirth	306 (67.0%)	165 (62.7%)	471 (65.4%)
More than 1-hour-post childbirth	151 (33.0%)	98 (37.3%)	249 (34.6%)
*: New Israeli Shekel (NIS) is a currency used in the occupied Palestinian territories (oPt).			
**: Missing 25/745 members.			

Post-Partum Depression (PPD):

PPD prevalence and severity:

Based on using the PHQ-9 score and ten as a cut-off point that indicates a positive screening for PPD, 12.6% of participants had a positive screening test, in other words, we consider the test positive if the mother had moderate PPD or more. Figure 1 shows the distribution of PPD severity based on PHQ-9 score, 435/745 (58.4%) of mothers had no depression. The prevalence of mild depression, moderate depression, and severe depression were 29% (216/745), 8.1% (60/745), and 4.6% (34/745), respectively.

Figure 1: PPD severity distribution based on PHQ-9 score.



PHQ-9 Reliability in the Palestinian context:

As shown in Table 3, the item "Feeling tired or having little energy" has the highest frequency, while the item "Thought of suicidal attempts or hurting herself" has the lowest frequency. Cronbach's alpha, including all items, was 0.827. Only one item, "thought of hurting herself or thought of suicidal," If deleted, Cronbach's alpha will slightly be increased to 0.832. So the used scale, PHQ9, is considered highly reliable because Cronbach's alpha of 0.9-0.7 is considered statistically acceptable (Tavakol &Dennick, 2011). Further, all items have a good correlation since the item-total correlation of >0.2 was considered statistically acceptable (Tavako l&Dennick, 2011). In this study, the inter-item correlations range from 0.679 to 0.329.

Table 3: PHQ-9 Scale reliability coefficient and its items in our study.

PHQ-9 Items	Mean	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Little interest or pleasure in doing things.	0.503	0.641	0.798
Feeling down, depressed, or despaired.	0.542	0.679	0.792
Problems with sleeping, staying asleep, or sleeping a lot.	0.836	0.540	0.814
Feeling tired or having little energy.	0.923	0.656	0.794
A poor appetite or eating too much.	0.776	0.519	0.816
Feeling bad about yourself - or thinking that you are a failure or a burden on your family.	0.232	0.638	0.804
Problems focusing on things, such as reading a newspaper or watching TV.	0.295	0.559	0.808
Moving or speaking slowly where other people have noticed or the opposite, feeling restless to the extent you start to wander off.	0.259	0.406	0.822
The thoughts that you would be better off dying or harming yourself in some way.	0.047	0.329	0.832

The prevalence of postpartum depression and sociodemographic characteristics.

Table 4 presents the PPD prevalence based on mothers' characteristics by using crosstab. A higher prevalence of PPD was among mothers living in the Gaza Strip, 17.8% (48/270), compared to mothers living in the west bank 9.7% (46/475). PPD prevalence was high among older women; the prevalence of PPD is 8.8% among

mothers younger than 23 years old, 12.4% among mothers aged 23-29, and significantly higher at 15.6% among mothers older than 30 years old. Its prevalence was higher among women with low income (an income of less than 2000 NIS/month) or high-income mothers (an income of more than 4000 NIS/month) than mothers with middle income (2000-4000 NIS/month) in general. But the prevalence of PPD in the West Bank, which exhibits income disparity, increases among women reporting higher income. PPD prevalence was high among mothers who were not breastfeeders at the time of the survey and is higher among mothers who gave birth by cesarean section than mothers who gave birth by vaginal childbirth. Still, these two correlations (breastfeeding with PPD and mode of childbirth and PPD) were not statistically significant in the total sample. The mode of childbirth was significantly associated with PPD only in the Gaza Strip. Mothers in Gaza who gave birth by cesarean section were significantly more likely to develop PPD than mothers who gave birth by vaginal childbirth. The prevalence of PPD among mothers who initiated breastfeeding within the first hour of childbirth was significantly less than among mothers who did not initiate it during the first hour. By contrast, educational level, employment status, gravidity, or parity were not associated with PPD.

Table 4: The prevalence of postpartum depression and sociodemographic characteristics. a

Mothers' characteristics	West Bank (Depressed) N=46	Gaza Strip (Depressed) N=48	Total (Depressed) N=94
Mother's age (years) n=745			
<23	7 (6.7%) *a	8 (12.1%)	15 (8.8%) *
23-29.9	16 (7.8%) *	25 (20.2%)	41 (12.4%) *
≥30	23 (14.0%) *	15 (18.8%)	38 (15.6%) *
Educational level n=745			
Less than secondary education	5 (6.0%)	14 (17.9%)	19 (11.8%)
Secondary education, some college, or vocational	13 (7.9%)	19 (20.7%)	32 (12.5%)
bachelor's degree or more	28 (12.3%)	15 (15.0%)	43 (13.1 %)
Family income (NIS/month) n=745			
<2000	6 (7.4%)	48 (18.2%)	54 (15.7%) *
2000-2999	13 (6.4%)	0	13 (6.3%)
3000-3999	15 (13.0%)	0	15 (12.9%)
4000 ≤	12 (15.6%) *	0	12 (15.6%) *
Employment n=745			
No work/student	36 (9.3%)	46 (17.8%)	82 (12.7%)
Employed (full or Part)	10 (11.5%)	2 (18.2%)	12 (12.2%)
Gravidity n=745			
First pregnancy	9 (8.7%)	11 (14.9%)	20 (11.2%)
2-3	19 (9.5%)	18 (20.9%)	37 (12.9%)
4-5	14 (12.2%)	7 (11.1%)	21 (11.8%)
6≤	4 (7.3%)	12 (25.5%)	16 (15.7%)
Number of babies at home n=472			
One baby only at home	9 (7.7%)	14 (17.1%)	23 (11.6%)
2	11 (8.8%)	13 (26.5%)	24 (13.8%)
3-4	18 (11.3%)	10 (11.2%)	28 (11.2%)
At least 5	8 (11.1%)	11 (22.9%)	19 (15.8%)
Mode of childbirth n=745			
Vaginal childbirth	34 (10.0%)	28 (13.9%)	62 (11.4%)
Cesarean section	12 (8.9%)	20 (29.4%) **	32 (15.8%)
Current Breast feeder N=745			

yes	40 (9.2%)	45 (17.4%)	85 (12.3%)
no	6 (14.6%)	3 (27.3%)	9 (17.3%)
Time of breastfeeding initiation time =745			
Within 1-hour post-childbirth	28 (9.2%)	20 (12.1%)	48 (10.2%)
more than 1-hour	14 (9.3%)	26 (26.5%) **	40 (16.1%) *
* P<0.05, ** P<0.01.PPD was assessed by using the PHQ-9 scale, and 10 points as a cut-off point that indicates a positive screening for PPD).			
a: The percentages in each box represent the percentage of depressed mothers in each category. For example, 6.7% of mothers aged less than 23 years old developed PPD.			

The prevalence of mistreatment during childbirth among Palestinian mothers.

Table 5 provides information on the prevalence of mistreatment items specifically applicable to mothers who gave birth by vaginal birth and mothers who had a cesarean section, to include all sample sizes. Note that these results were based on a secondary data analysis conducted by the researcher of this study, using the raw data of previous research that examined the prevalence of mistreatment during childbirth in the West Bank and Gaza Strip which was conducted by Abu-Rmeileh and her colleagues.

Any physical abuse, verbal abuse, discrimination, or stigma was reported by 140/745 (18.8%) of mothers, and it had a slightly higher prevalence in the Gaza Strip (62/270) (23%) compared to the West Bank (78/745) (16.4%). The most common form of abuse was verbal abuse which was reported by 122 /745 (16.4%) mothers, with a slightly higher prevalence in the Gaza Strip, around (20%) (53/270), than in the west bank (14.5%) 69/475). Physical abuse and Stigma or discrimination were reported by

25/745 (3.4%) of mothers and 5/745 (0.7%) of mothers, respectively, with a higher prevalence of physical abuse in the Gaza Strip (5.2%) (14/270). Regarding failure to meet the professional standard of care, 415/740 (56.1%) mothers had pain and ordered pain relief or were deprived of pain relief while in the hospital. Also, 281/745 (37.7%) mothers had been neglected and abandoned by health care providers; it had a higher prevalence in the Gaza Strip (47.4%) (128/270) compared to the West Bank (32.3%) (153/475). For the poor rapport between mothers and health providers, 165/736 (22.4%) mothers had been communicated ineffectively, and the prevalence of ineffective communication in the Gaza Strip (34%) (90/265) was double its prevalence in the West Bank (16%) (75/471). 98/744 (13.2%) mothers hadn't a companion during the childbirth process; the percentage was higher in the Gaza Strip (22.2%) (60/270) compared to the West Bank (8%) (38/744). At the same time, 210 /745 (28.2%) mothers hadn't received emotional support from employees. Regarding privacy, 35/745 (4.7%) of mothers felt that their privacy wasn't respected during checks, exams, and treatments, while 52/743 (7%) reported a loss of privacy tools like curtains.

Table 5: The Prevalence of mistreatment during childbirth split by the West Bank and Gaza Strip.

Mistreatment types	West Bank (%) n=475	Gaza Strip (%) n=270	Total oPt (%) n=745
Abuse			
Any physical abuse, verbal abuse, stigma, or discrimination n=745	78 (16.4%)	62 (23.0%)	140 (18.8%)
Physical abuse n=745	11 (2.3%)	14 (5.2%)	25 (3.4%)
verbal abuse n=745	69 (14.5%)	53 (19.6%)	122 (16.4%)
Stigma or discrimination n=745	4 (0.8%)	1(0.4%)	5 (0.7%)
Failure to meet the professional standard of care			
Poor pain management. n=739	291 (61.3%)	124 (46.4%)	415 (56.1%)
Negligence and abandonment scale n=745	153 (32.2%)	128 (47.4%)	281(37.7%)
The poor rapport between women and providers			
Ineffective Communication. n=736	75 (16.0%)	90 (34.0%)	165 (22.4%)
Time of birth companion presence (before, during, or post-childbirth**)** n=744			
No companion at any stage	38 (8.0%)	61 (22.2%)	99 (13.3%
Companion present at one of the stages mentioned above	58 (12.2%)	24 (8.9%)	82 (11.0%)
Companion present at two stages	224 (47.2%)	164 (60.7%)	388 (52.2%)
Companion present at all stages	154 (32.5%)	21 (7.8%)	175 (23.5%)
The mother is not supported emotionally by the employee. n=745	118 (24.8%)	92 (34.1%)	210 (28.2%)
Health facility culture, condition, and constraints			
The mother felt that her privacy wasn't respected during checks, exams, and treatments. n=745	23 (4.8%)	12 (4.4%)	35 (4.7%)

Lack of resources: loss of Privacy tools (Curtains, dividers, or other measures used to provide the mother with privacy from other patients, family members, health workers, or employees). n=743	35 (7.4%)	17 (6.3%)	52 (7.0%)

Table 6 shows the association between reports of mistreatment during childbirth and PPD. It shows that the prevalence of PPD increased among mothers who experienced any physical abuse, verbal abuse, or discrimination, in both the West Bank and Gaza Strip, at a p-value <0.001. As well as the prevalence of PPD was higher among mothers who experienced poor pain management or negligence and abandonment. Similarly, PPD prevalence was positively and significantly associated with the absence of emotional support from employees during childbirth and ineffective communication between health providers and mothers during childbirth. Although the prevalence of PPD was less among mothers who had a birth companion during the childbirth process, 11.8% (76/646), than among mothers who hadn't a childbirth companion 18.4% (18/98), the correlation was not statistically significant since the p-value was 0.067. But, as long as a birth companion presents during the labor process, the mother was less likely to develop PPD, and this correlation was statistically significant (p-value<0.01). For example, the prevalence of PPD among mothers who had a birth companion at all stages (before, during, and after childbirth) was 8% (14/175). Meanwhile, its prevalence among mothers who hadn't a birth

companion at any stage was 18.2% (18/99). Concerning the state and limitations of health facilities, the association between the lack of privacy tools during childbirth and the development of PPD among mothers couldn't be evaluated due to the limited number of cases in this category.

Table 6: The association between mistreatment behaviors during childbirth and PPD.

Mistreatment types	West Bank (Depressed) a(b)	Gaza Strip (Depressed) a(b)	Total (Depressed) a(b)
Abuse			
Any physical abuse, verbal abuse, stigma, or discrimination	15 (19.2%) **	17 (27.4%) *	32 (22.9%) ***
verbal abuse	13(18.6%) **	14 (25.9%)	27 (22.1%) ***
Failure to meet the professional standard of care			
The poor pain management scale	35 (12.0%) *	30 (24.2%) **	65 (15.7%) **
Negligence and abandonment scale	21 (13.7%) *	28 (21.9%)	49 (17.4%) **
The poor rapport between women and providers			
Ineffective Communication	9 (12.0%)	24 (26.7%) **	33 (20%) ***
Mothers not supported emotionally by employees	11 (9.3%)	24 (26.1%) **	35 (16.7%) *
No Presence of a birth companion during the childbirth process	4 (10.5%)	14 (23.3%)	18 (18.4%)
Time of birth companion presence (before, during, or post-childbirth)			
No companion at any stage	4 (10.5%)	14 (23.0%)	18 (18.2%) **
Companion present at one of the above-mentioned stages	6 (10.3%)	6 (25.0%)	12 (14.6%)
Companion present at two stages	23 (10.3%)	27 (16.5%)	50 (12.9%)
Companion present at all stages	13 (8.4%)	1 (4.8%)	14 (8.0%)
Health facility conditions and constraints			
Absence of Privacy tools (curtains, dividers, or other measures were not used to provide mothers with privacy from other patients, family	7 (20.0%)	1 (5.9%)	8 (15.4%)

members of patients, health workers, or employees
* P<0.05, ** P<0.01, ***P<0.001,
a: The counts mentioned in the table represent the number of mothers who developed PPD and experienced mistreatment in childbirth settings.
b: The percentages used represent the prevalence of PPD among mothers who only experience certain mistreatment behaviors in childbirth settings.

Table 7 shows the odds of having PPD according to the mother's sociodemographic characteristics, mother obstetric history, and experiencing mistreatment behaviors during childbirth after making adjustments for possible confounders. Mothers living in the Gaza Strip were 2.2 times more likely to develop PPD than those living in the West Bank by adjusting for age, education, and parity (Adjusted Odds Ratio (AOR): 2.2, Confidence Interval (CI):1.4 -3.44). Older mothers (Mothers aged 30 years and above) were two times more likely to develop PPD compared to young mothers (aged less than 23 years old) when adjusting for the region (AOR: 2.03, CI: 1.070-3.84). Mothers who didn't initiate breastfeeding within the first hour of childbirth were at a higher risk of developing PPD than mothers who did (Odds Ratio (OR):1.69, CI: 1.07-2.65), But, when controlling for possible confounders like region, age, education, mode of delivery and parity, this correlation no longer exists (AOR:1.57, CI: 0.87-2.85).

Regarding mistreatment during childbirth and after adjusting for possible confounders such as region, age, education, parity, and mode of childbirth, the results indicate that mothers who experienced any form of abuse (physical, verbal, stigma, or discrimination) were 2.73 times more likely to report PPD (AOR: 2.73, CI: 1.675-4.48). Similarly, mothers who experienced negligence were 1.85 times more likely to report PPD (AOR: 1.85, CI: 1.18-2.9), those who experienced ineffective communication were 2.06 times more likely to report PPD (AOR: 2.06, CI: 1.25-3.38), and those who received poor pain management were 2.1 times more likely to report PPD (AOR: 2.1, CI: 1.27-3.49). These findings suggest a significant association between mistreatment during childbirth and the likelihood of experiencing PPD.

Mothers who didn't have a childbirth companion at any stage of childbirth were 2.5 times more likely to develop PPD than mothers who had a childbirth companion at all childbirth stages (OR= 2.56, 95% CI:1.2-5.4). Still, when adjusting for possible confounders, this correlation was not statistically significant (AOR=1.77, 95% CI:0.79-4). Also, when controlling for possible confounders, lack of emotional support from healthcare providers during childbirth was not associated with reporting PPD by mothers.

Table 7:PPD Adjusted and unadjusted odds ratios at 95% confidence intervals by selected factors.

Variable	Unadjusted OR	95% CI	Adjusted OR	95% CI
demographic				
Age[1] (Years)				
<23	ref		ref	
23-29.9	1.48	0.79-2.75	1.5	0.799-2.8
≥30	**1.92***	**1.02-3.6**	**2.03***	**1.070-3.84**
Educational level[2]				
Less than secondary education	0.89	0.5-1.58	0.85	0.47-1.55
Secondary education, some college, or vocational	0.95	0.58-1.55	1.03	0.617-1.71
Bachelor's degree or more	Ref 1		Ref 1	
Employment[3]				
No work/student	Ref 1		Ref 1	
Employed (full or Part)	0.96	0.50-1.84	0.99	0.48-2.06
Region[4]				
West Bank	ref		ref	
Gaza	**2.02***	**1.30-3.12**	**2.2***	**1.4-3.44**
Governorate[4]				
Ramallah	Ref		Ref	
Hebron	1.33	0.721-2.46	1.43	0.76-2.68
Gaza	**2.35***	**1.35- 4.08**	**2.65***	**1.5-4.69**
Obstetric history				
Parity[5]				
1	ref		ref	
2	1.22	0.66-2.26	1.2	0.63-2.3
3-4	0.97	0.54-1.74	0.68	0.34-1.37
At least 5	1.44	0.75-2.77	0.83	0.35-1.98
Mode of childbirth[6]				
Vaginal childbirth	ref		ref	
Cesarean section	1.45	0.91-2.3	1.28	0.78-2.08
Breastfeeding initiation time[7]				

Within 1-hour post-childbirth	ref		ref	
More than 1-hour post-childbirth	**1.69***	**1.07-2.65**	1.57	0.87-2.85
Mistreatment practices during childbirt[h7]				
Any abuse	**2.65***	**1.65-4.27**	**2.73***	**1.67-4.48**
Negligence and abandonment	**1.97***	**1.27-3.04**	**1.85***	**1.18-2.9**
ineffective communication	**2.21***	**1.38-3.53**	**2.06***	**1.25-3.38**
Companion time of the present				
No companion at any stage	**2.56***	**1.2-5.4**	1.77	0.79- 4
Companion present at one of the childbirth stages	1.97	0.87-4.48	1.6	.68-3.78
Companion present at two stages	1.7	0.91-3.17	1.24	0.63-2.44
Companion present at all stages	ref		ref	
Poor pain management	**1.97***	**1.23 -3.15**	**2.1***	**1.27-3.49**
Lack of emotional support from employee	**1.61***	**1.03-2.54**	1.55	0.97-2.48

[1] Adjusted for the region, [2] Adjusted for region and age, [3] Adjusted for the region, age, education, and parity, [4] adjusted for age, education, and parity, [5] adjusted for age, education, and parity, [6] adjusted for region, age, education, and parity, [7] adjusted for region, age, education, mode of delivery and parity. *p-value < 0.05

Result of Qualitative Part:

Study population:

As shown in Table 8, the ages of the participants ranged from 20 to 41 years old. 5/17 participants live in camps, 7/17 live in towns or neighboring villages, and 5/17 live in cities. The participant's level of education ranged from secondary school (Tawjihi) to a bachelor's degree. Only one mother was employed. All of them gave birth during the last 6 months, and their parity ranged from one to seven children. Six out of 17 participants ever suffered psychological distress post-childbirth, while only three out of 17 mothers were ever screened for PPD before. It is important to note that during these FGDs, the mothers discussed their psychological experiences during their current and previous births.

Table 8: Focus Group Discussions (FGDs) participants properties.

Characteristics	Aida Camp	Bethlehem city	Al-Obaidya town
Number of participants	4	8	5
Residency	All live in camp	5/8 from Bethlehem city 1/8 lives in a camp 2/8 live in town or neighboring villages	All live in the town or neighboring villages
Range of age	28-41	22-40	20-33
Duration since last birth	3-6 months	3 days-4 months	2 weeks-4 months
Range of parity	two-seven	two-six	one- three
Level of education	2/4 bachelor degree 2/4 secondary school(Tawjihi)	5/8 bachelor degree 3/8 had secondary school degree (Tawjihi)	2/5 bachelor 3/5 Tawjihi
Employment status	1/4 employed	All are unemployed	All are unemployed
Ever suffered psychological distress post-childbirth	3/4 suffered	1/8 suffered	2/5 suffered
Ever Screened for PPD	2/4	1/8	0/5

Postpartum depression perception in the Palestinian context:

Mothers' perceptions and their families and the community's perceptions were identified as the main themes related to PPD perception in the Palestinian context that would have a misperception and a wrong belief.

Mothers' perception

From the focus group discussions (FGDs), it was found that all participant mothers had heard about PPD before, and **some mothers had a good perception and understanding of it.** They emphasized that evil spirits do not cause PPD. However, during the FGDs, it was revealed that some mothers were aware of the time of onset of PPD, which could occur antenatally.

"I know it's a mental illness, and we never suspected it to be magic." A Participant mother- from a camp.

"Mothers are more sensitive in the pregnancy and post-childbirth periods, so, she is at higher risk to develop depression in these periods." Many participant mothers -from camps, cities, and villages.

On the other hand, **a few women became aware of PPD only after they were affected by it.**

"When I was depressed, I was suffering, but I didn't know that this was depression" Two participant mothers, one from a camp and another from a village.

But unfortunately, the **misperception of PPD** as a marital problem was identified.

“Depression is a marital problem that increases after childbirth because the husband can’t bear it. You know the husband is ignored, observes the distress in young children, he gets angry when he returns home from work tired and finds the children still awake. This is my problem.” A participant mother- from a camp.

Mothers’ families and the community's perception

Families and communities misperceive PPD as the magic of separating couples or as a result of envy. Therefore, their preferred treatment for PPD was to visit a Sheikh (religious leader).

"People say about depressed mother that she is envied or bewitched.” Three participant mothers, each from different residential areas: camp, town, and city

“My family and my family-in-law thought that magic of separating couples was done to me, so they took me to the Sheikh; I was suffering while I was being treated with the Sheikh”. A participant mother- from a village.

Also, **some families justified PPD as a pre-existing illness in women that occurs before marriage** and is unrelated to pregnancy or childbirth. **They ignored the uniqueness of each mother's childbirth experience and underestimated the unique needs of mothers.**

“My in-laws do not know what postpartum depression is and nor that every mother is at risk of experiencing what happens to me. They talked about me and that I was mentally ill before marriage”. A participant mother - from a camp.

"People around us say that all women give birth, not just you."a participant mother – from a camp.

Postpartum depression among Palestinians is characterized by a high recognition threshold.

As long as mothers were suffering silently and not hurting anyone, their families and husbands may not know their real problems. They may become aware when the daily living of the entire family is impaired or when the mother starts to hurt her children or herself.

"I was suffering all the time, my mood was not good, and once a day I said to my mother-in-law, 'What I have is enough for me," And my mother-in-law replied to me, "You are OK, what are you doing?" A participant mother - from a camp.

"People surrounding me recognized I was not okay when I became completely helpless; I couldn't take care of my house or my children," Participant mothers – from a camp.

"Around me, felt something was wrong when I tried to harm my children and myself," Participant mother – from a village.

The stigma associated with PPD:

Unfortunately, women explained that our community likes to **stigmatize depressed mothers** and label these mothers as unsound and mad persons. Also, the

community may react negatively toward the depressed mother **by isolating this mother, avoiding interaction with her, and gossiping about her.**

"They look at the depressed mothers as mad. There is no awareness for people about the psychological condition of the pregnant mother and the childbirth mother," a participant mother – from a city.

"We are a community that labeled depressed ones as crazy, and they used to say "Don't go to her" a participant mother – from a village.

"When we heard about this woman who killed her children, people began to compose stories about her. "A participant mother – from a city.

A participant's mother from a city labeled her depressed cousin as "mad," saying, *"When my cousin is depressed postnatally, she becomes so mad that she wants to harm her baby."*

Factors worsen mother's mental status post-childbirth, from the perspective of Palestinian mothers:

1. **Absence of emotional and practical support from mothers' family members**

Participant mothers reported additional risk factors for PPD, which included a lack of practical support in household chores and childcare, a lack of emotional support or outlets for expressing emotions, and a lack of respect for the mother's needs. The lack of respect for the mother's needs was exemplified by the presence of visitors who engaged in unwanted behaviors such as kissing the newborn, visiting at

inappropriate times, or staying for extended hours. This was also mentioned as a burden on the mother's physical and mental well-being. *"The problem is that no one gave you attention, you feel not like a mother and gave birth, they make you feel like a servant." A participant mother – from a village.*

"Unable to vent makes you depressed." Many *participant mothers- from different residential areas: camps, towns, and cities.*

"The visitor used to kiss the neonate, and I don't like this behavior; my child had low immunity." Two participant mothers- from a camp and a town.

Unsupported husband

The absence of support from the husband has a negative impact on the mother's mental well-being after childbirth. For example, if a husband lacks awareness about the issue of baby gender mismatch, it can result in marital problems and the threat of him marrying another woman.

"When we know the sex of the baby, many problems with my husband start, it's really suffering…… My mother-in-law told me he wanted to get married to have boys". A participant mother – from a camp.

2. An unsupported husband family:

An unsupported husband's family was characterized by **their control over decision-making** and **their negative comments about the mother or her baby**.

Husband family control over decision-making against the mother's will and depriving the mother of her autonomy in her affairs and those of her children hurt the mother's mental well-being. For example, some husbands' family controls the decision to have new children, the sex of the baby, or giving the child breastfeeding from other than its mother against its mother's will.

"Once, I was trying to breastfeed my two-day-old son, but no milk came out. My husband's family took the baby from me and gave it to my sister-in-law to breastfeed him, and she did; I felt suffocated. They didn't ask for my permission, and I would disagree that my sister-in-law breastfed my son. Honestly, I don't feel like I could decide anything about my family." A participant mother – from a camp.

Negative talk about the mother or her child, and comparing the child with his peers irrespectively to the uniqueness of each child's growth, all make the mother feel incompetent and guilt.

"A word from those around us can make us upset; for example, someone comes and says "Why do you feed your baby artificial formula, thus his immunity will be low; this milk is what makes him sick" I try not to think about these negative talks, then someone else comes and says the same thing "as the son of so-and-so feeds artificial formula and every two days he gets sick," Instead of motivating me, they make me go backward." A participant mother – from a village.

"When my daughter frequently fell ill, they would say, "She is sick because of you. If you had breastfed her, she wouldn't have gotten sick." Despite my best efforts to breastfeed her." A participant mother – from a camp.

3. **Lonely mother**: Not being surrounded by her family has a negative impact on a mother's mental well-being."

"Factors that lead to depression are being confined at home and staying alone." A participant mother – from a city.

4. Unpleasant childbirth experience:

Women reported several factors related to childbirth experience that might increase the risk for PPD. **Pain associated with childbirth, having a preterm baby, and baby admission to intensive care units (ICU)** worsens the mother's mental status.

"I was depressed maybe because I was in pain, I gave birth via cesarean section and had stitches. Nevertheless, although I am in pain, I used to go to the hospital because the baby was admitted to ICU" Participant mother – from a camp.

5. **Lack of preparation for motherhood and childrearing** was another important factor mentioned by the mothers; post-childbirth, mother sees themselves in front of new roles and responsibilities toward their growing child. Some mothers felt restricted and confined at home. These unexpected changes due to lack of motherhood and childrearing orientation pose additional stress to mothers and their mental well-being.

"Facing a huge and unexpected responsibility post-childbirth and no one prepared you for this responsibility, especially for us in Palestine. No one comes to tell you that there is a course on how to become a new mother, a course on modern childrearing, or how to deal with a child." A participant mother – from a camp.

"I used to live freely, but when the baby was born, I became tied to it all day." A participant mother – from a city.

6. **Baby-related factors**

Postnatally, another risk factor for mental distress is a grumpy child. *"When I see my baby sleeping and relaxed, I feel happy and relaxed, but when he starts crying and I don't know what to do, I start crying."* Many *participant mothers- from different residential areas: camps, villages, and cities.*

Protective factors against PPD from the perspective of Palestinian mothers:

1. **Provision of peer support:**

As we found from FGDs, the support received from the mother of the woman is considered peer support because her mother underwent the same experience, childbirth. So, most FGDs participants consider their mothers the most supportive family members because the mothers of women can help women psychologically and understand their feelings.

"I feel that I want someone who I can talk to and who can contain and understand me, my mother is the right person for this issue because my mother feels

like me and she was going through the same experience that I went through. My husband does not understand me, even the pain he cannot feel it." A participant mother – from a village.

"The mother is the closest person to me, even closer than the sisters." A participant mother – from a city.

2. Supportive Family

Many mothers emphasized the importance of the emotional, practical, and informational support received from their family members, including their husbands, mothers, sisters, mother–in–law, and sisters-in-law. The emotional support can be through guiding the mother, giving her insurance, inspiring and motivating her for a better future, relief mother's suffering through touch therapy, making her feel cared for and interested, and encouraging her to vent. While practical support can be through helping the mother in her duties of caring for her children, cooking, and housekeeping, their presence beside the mother prevents PPD complications. Whereas, informational support can be provided by guiding the mothers.

"When the baby's sleep was difficult and needed frequent care and changing diapers, they used to tell me that this is a period that will pass away, tomorrow (refer to future) the baby's sleeping hours will be programmed, and the baby will be better, so I programmed myself with their words, and they helped me to understand my baby better". A participant mother – from a camp.

“My mother and mother-in-law used to come to me, and my husband if had off duty, I feel safe while they are with me.” Three Participant mothers, each from a different residential: camp, town, and city.

"When people around me helped with the household chores and cared for my girl, I felt a sense of relief and burden lifted off me." A participant mother – from a city.

“My mother used to stay with me all the time, for fear that I would harm my girl or myself.” A participant mother – from a camp.

“The presence of your family and husband around you helps relieve depression and sadness, and guides the mother on how to behave.” A participant mother – from a city.

3. The internalization of a mother toward her growing child

After the first three months, the child starts to interact and sleep better, allowing the mother to develop a deeper understanding of her growing child. This familiarity with the child brings the mother a sense of connection and fulfillment.

"Before this period, there was little interaction with the child, and it felt like they were just a passive presence. But after three months, you begin to establish a bond, understand their needs, and anticipate their actions. You become accustomed to their sleep patterns, diaper changes, and feeding cues. As time passes and the initial three months are behind you, everything falls into place more smoothly." A participant mother – from a city.

4. Mothers' factors:

As reported by mothers in the FGDs, certain factors related to the mother have a positive impact on her mental well-being after childbirth. These factors can be physical, such as her ability to breastfeed her child, as well as spiritual, such as being a believer and feeling close to God. Additionally, having dedicated time and space for the mother to pursue her own interests and desires contributes to her well-being.

"The ability to breastfeed naturally enables the mother to interact better with her child, as she doesn't need to make any extra effort to prepare milk. This availability of milk at all times also helps reduce the child's distress. Furthermore, breastfeeding strengthens the bond between the mother and child and alleviates feelings of inadequacy or guilt." A participant mother – from a village.

"It is normal for a mother to feel good feelings, and if she is close to our God, God gives her support". A participant mother – from a village.

"Things that protect the mother from depression are that she does what she loves and makes time for herself". A participant mother – from a city.

PPD Management:

During the FGDs, participants revealed that their preferred help-seeking behaviors varied, including venting their feelings, seeking advice or consultation, seeking help from charlatans and religious persons, or engaging in spiritual rituals. While the mothers refuse pharmacological treatment.

- **Venting sessions**

As seen by FGDs some mothers prefer to use venting sessions to relieve their psychological suffering, these venting sessions can be through crying or speaking comfortably and frankly with others. The mothers talked thoroughly about their negative feelings, discomfort, and suffering, but they refused to label themselves as a depressed mother or take psychiatric medications.

"Nothing can relieve my unpleasant feeling and comfort me except crying" Participant mother – from a camp.

"The right treatment for postpartum depression wasn't through psychiatric medication, but through being heard, unfortunately, no one heard me, but they described a psychiatric medication to me" A participant mother – from a village.

"I feel that I need someone to talk with, and complain to him, someone who can understand me, give me support" A participant mother – from a camp.

" *I feel I want to talk with another person about my feelings" A participant mother – from a city.*

However, engaging in venting sessions and seeking support from an expert psychologist can be helpful for distressed mothers. The treatment of PPD is not complicated or impossible; in fact, it can be quite straightforward when the depressed mother receives the appropriate psychological therapy.

“I benefited a lot when a psychologist came to the hospital and talked to us while I was staying there with my baby who was admitted to the neonatal ICU. After only one session, my psychological condition improved a lot, and I am currently excellent.” a participant mother – from a camp.

- **Seeking Advice or Consultation:**

Based on the findings from the FGDs, the following observations were made regarding the help-seeking behaviors of mothers in terms of seeking advice:

- The mothers tend to seek advice and assistance from others, particularly their relatives, especially their mother and sisters, after childbirth. They value the guidance and support provided by their family members during this period.

"The mother after childbirth needs her mother or sisters to be beside her to guide and help her." Three participant mothers – from a village, camp, a city.

"I trust my mother a lot, and she is educated and always guides me in the right way because of her experiences in life." A participant mother – from a camp.

- However, a participant preferred to seek advice through online psychological support sessions, in order to avoid spatial presence in such clinics. She believed a specialized person could guide her on the right path, provide comfort, and offer valuable insights to overcome her unpleasant feelings.

"I wanted a specialized person to guide me on the right path, comfort me, and tell me what is right. So, I tried to seek help from a specialist on social media who provides sessions. I was sure that the specialist would assist me in overcoming my unpleasant feelings." A participant mother – from a camp.

"Seeking guidance and support for postpartum depression online enabled you to ensure that no one would witness you going to a psychological clinic" A participant mother – from a camp.

- **Traditional therapy (charlatans and religious persons(AlShiekh)):** FGDs showed that seeking help for PPD through traditional therapy like charlatans and religious persons is still found in the Palestinian context. Seeking help with this method, the mother's mental status was worsening, consuming time, and impairing healing, also it was obstructing and delaying the correct treatment and management to take place.

"Going to the Sheikh was one of the most important obstacles in my treatment, as I took a long time in treatment with the Sheikh without any benefits, as he used to read the holy Qur'an to me; it was a very bad period, as I did not bear these rituals of treatment" A participant mother – from a village.

- **Refusal of Pharmacological treatment**

Women could not acknowledge the positive effect of psychiatric medication despite its well-established improvement on the mother's mental health, for example,

a depressed mother emphasized that when she stopped the psychiatric medication her unpleasant depression symptoms returned, but the same mother also emphasized in another place that the medication has no effect.

"At that time, the doctor wrote me a medicine, and I felt this medicine was of no use, and I do not advise anyone to take the medicine because I am not benefiting from the medicine." Although on another site, the same mother said *"When I stopped the psychiatric drug, my symptoms of depression rebounded". A participant mother – from a village.*

- **Spiritual rituals:**

  Mothers may tend to relieve their mental discomfort by reading the Holy Quran, prayer, and supplication especially if mothers believe that their mental suffering is a result of envy

"A depressed mother may say, what I faced may be due to envy, so the mother will read the holy Qur'an, pray, and invoke God to relieve her suffering". A participant mother – from a city.

Characteristics of help-seeking behaviors in Palestine:

Mothers used to seek help for PPD from family members but to a lesser degree from healthcare providers or friends.

All participants unanimously agreed that **the first line of seeking help is their family members,** like their mothers and their husbands in the first place, followed by

other family members like their sisters, their family-in-law, and very less their close friends. (As shown in previous quotes).

"The first choice of help is my husband, then my mother, if their support isn't enough, I will ask for help privately by going to a private psychiatric without anyone known except my husband and my mother." A participant mother – from a city.

While some mothers seek help from their family-in-law, other mothers **don't prefer to seek help from their family-in-law** and they find it difficult to express their feelings to their family-in-law due to fear of gossip, distorting the women's image in from of their family-in-law, or fear of memorizing this bad experience when seeing these people.

"if I get mentally distressed post-childbirth, I will go to a specialist, because the specialist is a stranger because the stranger hears you and passes through your life unnoticed, but if I tell my mother-in-law about my problem, the whole neighborhood (family-in-law) will talk in my problem" A participant mother – from a village.

"I Imagine, if you tell your problem to your family-in-law, every time you see your family-in-law, you will remember what you told them about your unpleasant feelings, your tears, and you will still feel broken and weak in front of them". A participant mother – from a village.

However many participant mothers expressed their reluctance to seek help from professionals if they experience postnatal depression.

"I will not seek help for postpartum depression from outside my family, because the problem will grow" A participant mother – from a city.

"My family and my family-in-law thought that magic of separating couples was done to me, so they took me to the sheik; I was suffering while I was being treated with the Sheikh. Going to the Sheikh was one of the most important obstacles in my treatment, as I took a long time in treatment with the Sheikh without any benefits, as he used to read the holy Qur'an to me; it was a very bad period, as I did not bear these rituals of treatment" A participant mother – from a village.

Healthcare Provider Support:

Based on FGDs, among those who report accepting professional help, they preferred seeking help from a psychologist or social worker to seeking help from a psychiatrist. The main difference between a psychologist and a psychiatrist, it the second was trained in medical school and can describe medications (Healthdirect, 2021). That is because mothers need to talk about themselves only and don't prefer to take the psychotic medication that the psychiatrist prescribes, some mothers think that the psychiatrist only prescribes medication and nothing else.

"If I get depressed, No, I don't ask assistance from a psychiatrist, I see seeking help from a psychiatrist is heavy" A participant mother – from a city.

"The social worker improves the mother's sense of psychological expression, they talk to each other like this, and the term of a social worker is kinder than a doctor, and the image of the mother is better." A participant mother – from a village.

However, only two out of 17 mothers emphasize that there is no problem in going to a psychiatrist as a last resort if they are affected by PPD. *"If I get depressed, going to the psychiatrist and taking psychotic medications is my last choice" Two Participant mothers – from a city.*

The mother's role in decision-making regarding help-seeking behavior was limited.

Help-seeking behaviors for PPD was a family decision-making process involving both the mother's family and her husband's family. So, this decision was influenced by the mother's perception of PPD and also by the level of awareness within her family and her husband's family regarding PPD.

"When I was depressed, my family and my family-in-law scattered me. They treated me with a Sheikh (religious leader), despite I wouldn't prefer to go to the Sheikh. But my family took me to the Sheikh forcibly and against my will, It was a wrong period in my life". A participant mother – from a village.

Poor diagnosis of PPD:

Based on the results of the FGDs, we identified a lack of proper diagnosis among Palestinian mothers, which may be attributed to the **Poor screening process**

and a lack of recognition among the mother and her surroundings regarding the presence of PPD.

Based on the FGDs with participant mothers, The screening process used in oPt was poor due to its lack of effectiveness and confidentiality. **The screening is ineffective because it is not available for all mothers**; only 3 out of 17 mothers were offered and filled out this screening test; we recognized that **the diagnosis of PPD among two depressed participants was due to chance**. Additionally, a mother who did fill out the screening reported that it **invaded her privacy and undermined her credibility.** This is because the questionnaire was filled out orally in the presence of other mothers in the same clinic, causing her to lose credibility in her responses and compromising her privacy.

"The nurses in the clinic knew about my illness when my mother took my son, age one year and a half, to vaccinate him in the clinic, and on the next day my mother-in-law took my other son ages 1 month to vaccinate him, at this point, the nurses got curious and ask my mother-in-law about me, then my mother-in-law till the nurse that I am suffering at home and couldn't take care of my children, at that time, the nurse recognized that I may have depression so they give me an urgent referral to the psychiatrist". A participant mother – from a village.

"I have never completed the Postpartum Depression screening tool" 14 out of 17 participant mothers from three different residential areas- camp, city, and village.

"The nurse used to have us fill out the questionnaire orally and loudly, within earshot of other mothers in the same clinic. The nurse's inappropriate behavior could impact the mother's credibility in her responses and potentially expose her if she is experiencing depression. I would prefer if the questionnaire could be filled out privately, just between me and the nurse, without the presence of other mothers." A participant mother – from a city.

lack of recognition among the mother and her surroundings for the presence of mental distress:

Some mothers may not aware they are experiencing mental distress or not aware they are experiencing abnormal behavior so they do not go to the next step which is seeking assistance, this may lead to a **high threshold and delayed seeking help;** help-seeking behaviors resume when the whole family's daily living activities were severely impaired as a result of the mother's psychological distress. One participant with a confirmed diagnosis of PPD reported that her family sought a solution to the mother's problems when she became severely disabled and the whole family's daily activities were impaired.

"When I was depressed, I didn't love my daughter, nor care for her, I didn't know that I had depression, but my mother's friend, when she saw me by chance, told my mother that I have postpartum depression, and I didn't know that I was going through this depression". A participant mother – from a camp.

"My family decided to treat me when I was suffering that I could not sit in my home, I hated my house, I was restlessness, I was not able to take care of the house nor my children." A participant mother – from a village.

In addition, mothers did not intend to seek help in case of mild to moderate daily life impairment, for example, two participant mothers emphasized that they have severe sadness, helplessness, and the inability to complete the house tasks, but they were patient and did not think about asking for help yet.

"I am very sad and helpless, always I feel lost, don't know what to do, and sometimes I cannot take care of the house and the baby together. I need practical help, but I never thought of asking for psychological help". A participant mother – from a village.

Barriers that hinder mothers from seeking needed professional assistance regarding PPD:

Barriers that impede mothers from seeking needed help for their depression symptoms can be classified into four subthemes as follows; maternal barriers, family and community barriers, or health professionals' barriers.

Maternal barriers

Many of FGDs participants reported that **they do not have personal time to meet their needs**, many responsibilities are on the shoulders of the mother, especially a mother with a large family, they used to take care of their children with no

assistance, and no one can take care of her children while she was in the clinic for treatment, that because of not the availability of kindergarten in their areas or may due to negative involvement of family members like her mother-in-law in the decision of sending their children to kindergarten.

"I was so busy with my little baby, it never occurred to me to ask for help". Two participant mothers from a village and a camp.

" I cannot go to the clinic because where I live there's no confidential kindergarten that I can put my children in while I am in the clinic".A participant mother– from a camp.

"However, when I tried to put my child in kindergarten, I faced a great objection from my family-in-law, who told me "Why do you want to put your child in kindergarten while you are not an employee?"." A participant mother – from a camp.

Some **mothers preferred to be patient, tolerant, and suffer silently** rather than seek help. While a participant mother **claimed self-sufficiency** in facing PPD, as a mother said: *"If I get depressed I will treat myself by myself, I will not seek help?*" A p*articipant mother – from a city.*

Mothers' **hostile attitude toward mental disorders**, based on FGDs results, mothers felt shy and ashamed of mental disorders, they considered mental distress a personal weakness that disturbs their image, and they looked at mental distress as a taboo subject that prohibits people from uttering it to others, diagnose it, or treat it.

All these negative attitudes toward mental distress prohibit the mother from seeking needed professional help.

"Shyness can prevent a mother from seeking treatment, I will not ask for help because I may feel strange." A participant mother – from a village.

"I am mentally tired, and this is the first time I talk about it in front of someone, I used to not talk about it in front of others, I used to talk about it only between myself and myself." A participant mother – from a camp.

The denial of PPD and the avoidance of acknowledging its presence impeded mothers from seeking the necessary help they needed. This was because seeking professional help would require them to acknowledge the existence of this mental disorder, which some mothers believe may accompany them throughout life if they choose to acknowledge it.

"The issue is that going to a psychiatrist is not considered normal, and people around you will start talking about you and labeling you as crazy or using other unpleasant terms. It's not just about people talking; you also start feeling like a stranger. If you seek help from your family, you can stay on the right path, and things are easier. However, if you decide to go to a doctor or psychiatrist, it may indicate that this mental distress will stay with you for the rest of your life." A participant mother – from a village.

Family and Community Barriers:

People around the mothers may misperceive or underestimate the psychological suffering as well as psychological therapy,

"I will not go to psychological therapy, even if the health professional offered a private, secret, and confidential session, because people around me will blame me for going to therapy, for example, when I told my mother-in-law I am psychologically tired, she said " No, you are ok, why you are complaining". A participant mother – from a camp.

"While I was crying, my family members underestimated my feelings. They used to say" Why are you crying? There is nothing wrong with you". A participant mother – from a camp.

And since the other family members share in the decision-making regarding help-seeking behavior, the help-seeking behaviors will be affected by their perception of PPD. As long as we are a **society that misperceives mental illness as an evil spirit and Jenn,** this will prevent mothers from seeking professional help. As mentioned in previous quotes.

"If I decide to go to psychological sessions, my family and family-in-law will tell me " Take care of your children and cook a meal for them instead of going to these sessions, it will be better for you if you cook a meal or wash dishes". A participant mother – from a village.

The mother fears that people will become aware of her PPD and her help-seeking behaviors, which could subsequently result in negative reactions toward her. people's reaction could be as follows:

- Gossip on the mothers.
- Stigmatization and labeling the depressed mother with unpleasant names as mad, bewitched, and haunted
- The rejection of the depressed mother and isolate her,
- The husband's family's misperception of PPD as a mental distress exists before marriage.

"But there are many mothers who may not seek professional help because they are afraid of their family-in-law talks, who may say "We took the woman from her father's house already has mental disorders". The one who criticizes my situation the most is my mother-in-law, who said that they took me mentally distress from my father's house." A participant mother – from a camp.

"If I got depressed postnatally, I would not ask for help. Because our problem is with people's view of us, and we are a small community, we know each other and talk on each other, we think a lot about people's view of us." A participant mother – from a city.

"If the mother is going to be treated for postpartum depression, they will say that she is crazy". A participant mother – from a village.

" If you tell someone that you are depressed and want to receive treatment for depression, he will treat you like mad, and he will be afraid of you, and they will start to talk that you are bewitched, they will isolate you and not come to you." A participant mother – from a village.

Health Professionals and Health Settings Barriers:

Based on the discussion with mothers, mothers stated many barriers to seeking help related to health professionals which are as follows:

- **Mothers did not have a clear channel of care and were unaware** of any local mental health services to seek help from if they experienced depression.

  "I did not think to ask for help, from whom do I want to ask for help"

- Mothers had **low expectations and negative beliefs about health professionals**, **based on past experiences, including concerns about low confidentiality and privacy.**

  "When I was depressed, my relatives told me that the psychologist wanted to see me, but I didn't want to see her." A participant mother – from a camp.

This breach of privacy regarding their mental health is particularly sensitive in a community and society that views mental health cautiously.

"There is a counselor unit in our primary health centers. People advised me to visit her during this post-childbirth, but I didn't go because I felt uncomfortable with

anyone. I told the doctor that I didn't want to see the counselor. All my mental suffering due to the sex of the fetus, what could she do to help me with this matter?" A participant's mother – from a camp.

- **The high cost of qualified psychological therapy prevented the mother from seeking help for PPD**.

"When I decided to take an online psychological session, and when I entered the website and saw the fee was 300 dollars, I said if I had money and the financial situation was better, I would register, so I cannot register" A participant mother – from a camp.

- **Missing qualified, professional, and motivated health professionals including psychiatrists,** for example, a mother reported that the psychologist blamed her for her depressed feeling.

"The psychologist used to ask questions and talk like any family member, she told me "Why do you feel down, look around many people are worse than you and their mental health is better, why do you want to work when you still gave birth a while ago, instead of thinking in yourself, think about your son, thank your God that your family is around you" so thank your Lord instead of being upset" but this is not what I want to hear" another probably depressed mother. A participant mother – from a camp.

"For example, when I went to this specialist, she began to tell me, "Why did you give birth your children followed each other, why did you give birth to this seventh child, why do you give birth after 6 years of childlessness?" I mean, the questions are not good, the specialist increase my depression and make me feel guilty and I am the cause of the problem".another mother. A participant mother – from a camp.

Facilitator to Professional Help-Seeking Behaviors:

Based on the FGDs, participant mothers had suggested criteria for mental health services to be acceptable and for them to seek assistance for PPD. They believed that mental health services should be **beneficial and provide a high level of privacy and confidentiality**. To ensure privacy, they suggested implementing online psychological services instead of physical presence in psychological clinics. Additionally, some mothers proposed that mental health assessment and therapy should be integrated into childcare clinics, making it a routine part of care for all women. Furthermore, they recommend **promoting mental health and sharing success stories** of those who have benefited from the provided services.

"I am willing to pay 200 NIS (around 60 $) if the treatment I receive could benefit me. "A participant mother – from a camp.

"I do not ask for help from outside my family, I do not see anyone here who is qualified. If there is a qualified specialist, I would go to him." A participant mother – from a camp.

"But if I get depressed postnatally, God forbid, I will go to a very secret and private psychological clinic so that no one knows because we are a scandalous society, an unjust society, and if people know about my depression, they will talk about me that I am mad" a not depressed mother. A participant mother – from a city.

"For example, if the dispensary had a mental health clinic next to the child vaccination room, all mothers would have to enter. It would be better, and it would be an obligation on all mothers, so you feel accessing this clinic is a normal event". A participant mother – from a village.

"I would prefer online psychological sessions, to avoid the spatial presence in a psychological clinic." A participant mother – from a camp.

"I would prefer to hear and see success stories from these mental clinics before seeking help". A participant mother – from a camp.

PHQ-9 in the Palestinian context:

The PHQ-9 is the screening tool utilized in the quantitative portion of this study. Still, in the literature review, it was established that PHQ-9 includes symptoms of depression that can manifest as normal experiences among mothers after

childbirth. These symptoms include difficulties with sleep, eating problems, and concentration issues. To further understand the causes behind these symptoms, discussions were held with the participants during FGDs, resulting in the following findings:

- **Shortened sleep duration could be considered a normal or abnormal response among mothers during this period**, normal if attributed to factors related to the baby and baby-mother interaction; the mother being awake during the night to tend to the growing child's needs such as breastfeeding, diaper changes, or fussy baby. These issues typically resolve within a few weeks after childbirth. On the other hand, the findings from the FGDs **indicated that short sleeping hours could be attributed to mothers' psychological distress**. Some women experienced difficulty sleeping even when their baby was calm, as they were overthinking and worrying about the baby's well-being.
- Regarding the loss of concentration, not all mothers experience this postnatally. **Most of the mothers reported that they did not have difficulties in concentration.** A participant mother, who experienced concentration difficulties emphasized that it could **arise as a normal response to sleeping difficulties and the increased responsibilities placed on them as mothers**. This could lead to disorganization and a temporarily messy home environment

until the mother becomes familiar with her growing infant. By contrast, A participant's mother who experienced the loss of concentration emphasized that **postnatally losing concentration could result from PPD.** Another mother highlighted that she struggled with concentration due to repetitive thoughts about giving birth to girls only. These repetitive thoughts, known as rumination, significantly affected her daily life and impaired her ability to focus on tasks.

- Based on the results of the FGDs, mothers' postnatal eating problems can manifest as eating less or overeating. **Eating less may be attributed to the mother's preoccupation with her children or a manifestation of psychological distress.** According to the opinions of some participant mothers, **overeating postnatally can be attributed to psychological distress, increasing physiological needs, or cultural habits**. In some cultures, family members often prepare an abundance of dishes for new mothers, and there is an encouragement to consume sweets to increase breast milk production. These cultural practices and social influences can contribute to overeating among postnatal mothers.

PPD Symptoms Reported by Palestinian Mothers in Comparison with PHQ-9 items:

During the FGDs, Palestinian mothers reported several symptoms of PPD that may be experienced by them. These symptoms align with the items listed in the PHQ-

9, as indicated in Table 9. As we can see, PHQ-9 asks about symptoms in general, while there are specific symptoms experienced by depressed mothers in the post-childbirth period, as reported by Palestinian participants. These participants reported specific symptoms and additional symptoms of PPD, encompassing a range of emotional, behavioral, and intellectual experiences. Behavioral symptoms included isolation, unusual behavior, difficulties in caring for the child, cessation of breastfeeding, and frequent crying. Crying was the most commonly reported behavior among mentally distressed mothers during the FGDs. Emotional symptoms encompassed the mother's feelings of helplessness, guilt, loneliness, intolerance, insecurity, loss, sadness, or irritability. Intellectual symptoms included thoughts of the baby rejecting the mother and persistent rumination.

Table 9: The items in the PHQ-9 questionnaire, as well as the symptoms of PPD reported by Palestinian mothers, were compared as follows:

PHQ-9 item	Its counterpart reported by participants of FGDs
little interests	little pleasure in doing things, e.g. cessation of breastfeeding
feeling down/depressed, hopeless	Feeling depressed, despaired, sad
Sleep difficulties	Sleeping less
Feeling tired, little energy	Low energy and tiredness
Poor appetite/ overeating	Eating less or eating more
feeling bad about herself/ failure	Feeling unable to be a good mother, experiencing helplessness, and feeling guilt
Concentration problems	Loss of concentration, persistent rumination
Restless/ doing things slowly	Restlessness, irritability, and difficulty calming down
thoughts of hurting herself	Thoughts of hurting herself, the baby (infanticide), or other family members

Despite experiencing these symptoms, the FGD participants emphasized that being an affectionate mother and feeling love and closeness towards their growing child were normal.

Chapter IV: Discussion

Objective Achieved:

To the best of our knowledge, this study represents one of the few conducted to assess the prevalence of postpartum depression (PPD) and its potential risk factors in the occupied Palestinian territory (oPt), which includes both the West Bank and the Gaza Strip. Additionally, it stands as one of the few investigations exploring the connection between PPD and maternal mistreatment during childbirth on a national level. Moreover, this study is unique in oPt and one of the few within the Arabic world to offer a comprehensive understanding of mothers' perspectives on PPD, their help-seeking behaviors, and the obstacles they face. Notably, it actively engaged mothers as key stakeholders, fostering their meaningful participation in the research process

The Summary of the main findings:

The Quantitative Part

- The reported prevalence of Post Partum Depression in the oPt was 12.6%, with a double prevalence among mothers living in the Gaza Strip compared to those living in the West Bank.
- Older women were two times more likely to develop PPD than young mothers.
- Mothers who have encountered disrespectful childbirth care were more likely to report PPD than those who have not experienced any

disrespect. Specifically, mothers who have suffered from abuse, negligence, abandonment, ineffective communication, or inadequate pain management during childbirth are at a higher risk of reporting PPD than those who have not been subjected to disrespect.

The Qualitative Part:

- **PPD perception in the Palestinian context:**

- PPD from mother perception:

All mothers have heard about PPD as a concept, but not all perceive it as a mental disorder; some perceive it as a marital problem or as a result of envy, while other women only become aware of PPD after they have been personally affected by it.

- PPD from family perception:

Some families justified PPD as supernatural forces like magic and envy, or as a pre-existing illness in women that occurs before marriage and was not correlated to pregnancy or childbirth. They ignored the uniqueness of each mother's mental experience after childbirth and underestimated the special needs of mothers.

PPD in oPt has a high recognition threshold. Families may detect it when the daily functioning of the entire family is impaired or when the mother starts to harm her children or herself.

- PPD from community perception:

Stigmatization of depressed mothers was prevalent in the community. Depressed mothers may face negative reactions such as isolation, avoiding interaction, and gossiping about them.

- **Factors that impaired a mother's mental well-being from the perspective of Palestinian mothers** included mother loneliness, unpleasant childbirth experience, lack of preparation for motherhood and childrearing, absence of guidance, lack of emotional and practical support from family members, lack of support from the husband, mother's or husband's family control over decision making, negative talk about the mother or her child, dealing with a grumpy child, mismatch in preference regarding the sex of the child, and not breastfeeding.
- **According to the opinions of Palestinian mothers, certain protective factors can help safeguard their mental well-being. These factors include the following:**

- Receiving knowledgeable, emotional, and practical support from their family members. Knowledgeable support can be through guiding the mother; emotional support includes providing reassurance, inspiration, touch therapy, making her feel cared for and interested, and encouraging her to vent. Practical support encompasses assistance with child care, cooking, and

housekeeping. The presence of family members also serves as a preventive measure against complications related to PPD.

- Receiving support from other women, mainly from her mothers, mother-of-mother support is considered an ideal form of peer support.
- Mothers experience a sense of internalization and develop a deeper understanding of their growing child and the journey of motherhood.
- The ability to breastfeed the child.
- Being a believer in God, and feeling a close connection to spirituality.
- Having free time for the mother to pursue her interests and engage in activities that bring her fulfillment.

- **The preferred methods of help-seeking behavior** included venting sessions, seeking advice and consultation from relatives or through online sessions, or engaging in spiritual rituals.
- **Seeking help from family members was the first option for all participants; sometimes, it was the only method they considered**. A significant number of participants were reluctant to seek help from professionals, especially psychiatrists, as they may fear being prescribed psychotic medication, which mothers refuse.
- Help-seeking methods involved a **family decision-making** process.

- Palestinian mothers in oPt had a **poor diagnosis of PPD** due to inadequate screening and a lack of recognition of PPD symptoms among both mothers and their families.
- **Barriers to professional help-seeking behaviors:**

1. Negative attitudes of mothers towards mental disorders, feeling shy and ashamed, or considering it a personal weakness and a taboo subject.
2. Negative reactions and stigma from the community towards mental illness.
3. Society misperceives mental illness as caused by evil spirits or supernatural beings.
4. Underestimation of psychological suffering and the effectiveness of psychological therapy by people around the mothers.
5. Negative beliefs about healthcare providers based on past experiences, including concerns about qualifications and low confidentiality.
6. Lack of clear channels for accessing care and support.
7. High cost of qualified psychological therapy.
8. Lack of personal time and multiple responsibilities towards home, husband, and children.

Discussion

In this study, the prevalence of postpartum depression (PPD) using the Patient Health Questionnaire (PHQ-9) was determined to be 12.6%, which falls within or below the prevalence rates reported in other studies conducted in the Arab world using different screening tools.

PPD prevalence and risk factors:

The observed prevalence of postpartum depression (PPD) in the oPt was 12.6%, with a double prevalence among mothers living in the Gaza Strip compared to those living in the West Bank. Older women were two times more likely to develop PPD than young mothers. This study also shows that mothers who experienced disrespectful childbirth care were more likely to report PPD than those not exposed to any disrespect.

However, despite the high prevalence of 12.6% of mothers affected by PPD in oPt compared to the developed countries, 12% and 8% in the US and Canada, respectively (Haque et al., 2015), diagnosing this condition remains challenging in oPt. Our FGDs highlighted the lack of effective screening and poor recognition of mental distress by both mothers and their families, resulting in cases being identified by chance. However, the observed PPD prevalence in this study was relatively low compared to the reported pooled prevalence in the Middle East (ME) (27%). In ME, the prevalence range was between (The highest:56 %) in Kermanshah City, Iran, and

(The lowest: 10%) in the United Arab Emirates, which is a region of high income (Alshikh Ahmad et al., 2021). PPD prevalence was also relatively lower than its counterpart in the neighboring countries, namely Jordan and Egypt, in which PPD ranges between 20% to 22% (Ayoub et al., 2020). This variation in results can be attributed to the use of a different screen tool for PPD. Almost all of the research in ME used the Edinburgh Postnatal Depression Scale (EPDS), while our study used the Patient Health Questionnaire (PHQ-9). But, compared to a study that used the same screening tool (PHQ-9), a study was conducted in Ghana, a low-income country in Africa; the PPD prevalence there was 7%; the prevalence in our study shows a relatively higher PPD compared to their findings (Anokye et al.,2018).

However, PHQ-9 demonstrated good reliability in this study, with a Cronbach's alpha of 0.827. The inter-item correlations ranged from 0.679 to 0.329. It is worth noting that a Cronbach's alpha of 0.7-0.9 and inter-item correlations of 0.2 or higher are considered statistically acceptable (Tavakol & Dennick, 2011). Future studies are encouraged to investigate the sensitivity and specificity of the PHQ-9 in screening for PPD among mothers in the Palestinian context and similar settings.

However, the relatively high PPD prevalence in oPt can be due to prolonged political and economic instability in oPt since another study in oPt emphasized that the mental health of Palestinians is inextricably intertwined with political, economic, and social factors (Marie et al., 2016). The effect of political and economic instability

also can be better explained by the regional variation in oPt; the prevalence of PPD in the Gaza Strip is 2.2 times more than in the West Bank. That can be explained by the fact that the Gaza Strip is the most suffering area in oPt politically, and its residents have suffered a siege since 2006 and multiple targeted attacks. All of these latter factors result in devastating consequences on the economic situation of the Gazan people, represented by high poverty rates and high unemployment rates (Hammoudeh et al., 2020; Marie et al., 2016). Furthermore, Gazan people lack basic human needs; their movement is restricted, and they feel unsecured and traumatized, so mothers residing in this conflict zone are vulnerable to mental distress and suffer cumulative stressors (Marie et al., 2016).

However, mothers in the Gaza Strip, who experienced traumatic war events characterized by losses, material destruction, and horrors, were at a higher level of mental distress, during pregnancy or post-childbirth. In turn, this devastating effect on the mother's mental well-being mediates the negative impact of war on infant development, for instance, children of mothers mentally distress due to war were at higher risk for motor developmental delay (Punamäki et al., 2018).

Furthermore, as revealed by this study, mothers in Gaza reported experiencing higher levels of mistreatment in childbirth settings. Specifically, they experienced more instances of physical and verbal abuse, negligence, abandonment,

ineffective communication, and less attendance of companions during childbirth compared to their counterparts in the West Bank.

In oPt, researchers investigated the factors contributing to mistreatment during childbirth in health facilities. They found that the main underlying reason is the long-term political and financial instability effect on health facilities, manifested by a shortage of equipment, poor infrastructure, understaffing, limited staff development, and overwhelming workload in childbirth settings. These factors negatively affect the well-being of the staff and consequently hinder their ability to provide respectful, satisfactory, and safe care (Dwekat et al., 2021; Wick, Mikki, Giacaman, Abdul-Rahim, 2005).

Furthermore, the condition of health settings is worse in the Gaza Strip, as Gaza experiences a more deteriorated and prolonged socio-economic situation, conflict, and siege compared to the West Bank. In addition to the above-mentioned consequences of wars on Palestinian health facilities, health facilities in Gaza have also been adversely affected by impaired access to medical equipment, limited training opportunities, and frequent electricity cuts. These challenges have significantly weakened health facilities, the services provided, and the overall health of the population in Palestine and especially Gaza (United Nation Relief and Work Agency for Palestine Refugee in the Neat East (UNRWA), n.d.)

These findings, combined with the challenging circumstances in Gaza, help to explain why mothers in Gaza are at a higher risk for PPD.

Although a strong association between poor economic status and PPD exists in the Arab world (Alshikh Ahmad et al., 2021), this study did not find a similar association. One possible explanation is that the study was conducted during the COVID-19 pandemic, which had economic implications for the entire population (Hammoudeh et al., 2020; Sudhinaraset et al., 2022). Furthermore, there was a significant disparity in reported monthly income between women residing in the West Bank, where income was higher, and women in the Gaza Strip. Additionally, the income variable classification used in this study lacked sensitivity to detect variations in income among Gazan mothers, with most mothers being classified in the first category (income < 2000 NIS/month). Therefore, further in-depth economic studies are necessary for Gaza, considering factors such as employment rate, income, and other economic considerations.

Regarding the mother's age, previous research (Alshikh Ahmad et al., 2021; Souza et al., 2017; Dennis & Dowswell, 2013) suggests that younger mothers are at a higher risk of developing PPD. However, the results obtained in our study were contrary to these findings.

PPD and mistreatment of mothers in childbirth settings:

Generally, mothers who have experienced abuse from any party face a heightened risk of reporting postpartum depression (PPD) (Dennis & Dowswell, 2013). In the context of mistreatment during childbirth, a prior study in the West Bank and Gaza Strip outlined the various forms and levels of mistreatment occurring in childbirth settings (Abu-Rmeileh et al., 2022). Our study further documented the association between mistreatment during childbirth and PPD. Notably, our findings aligned with similar research conducted in Brazil and Iraq, indicating that women who encounter disrespect and abuse during childbirth had an increased likelihood of reporting PPD, regardless of the difference in setting (Fares & Ahmed, 2021; Paiz et al., 2021).

Our study's findings regarding abuse during childbirth aligned with similar research conducted in Brazil, indicating that women who experience verbal or physical abuse during childbirth were at a higher risk of developing PPD (Silvera et al., 2019; Souza et al., 2017).

Regarding negligence and abandonment during childbirth, our findings were congruent with Souza and colleagues' findings that being neglected as a mother during childbirth positively correlates with an increased likelihood of developing PPD (Souza et al.,2017). Moreover, the findings of the Iraqi study were consistent with

ours, for we found a positive association between ineffective communication during childbirth and PPD (Fares & Ahmed, 2021).

Regarding childbirth companions, our study findings and others' findings in Brazil revealed that childbirth companions worked as a protective factor against PPD (Souza et al.,2017); this may be because the presence of a childbirth companion protected the mother from abusive behavior from healthcare providers and achieved a better childbirth experience (Wahdan & Abu- Rmaileh, 2023).

In terms of pain experienced during and post-childbirth, our study findings align with previous research, highlighting that mothers who receive inadequate pain management during this period are at a heightened risk of developing PPD (Chen et al., 2022).

In addition, this study was conducted during the COVID-19 pandemic, when many studies emphasized its impact on maternal health, including increasing social isolation and overwhelming health systems (Brophy et al., 2021; Chen et al., 2022). Health professionals, suffering from heavy workloads, stress, understaffing, and burnout, may exhibit disrespectful behaviors when providing maternity care (Awad & Abu Rmeileh, 2020).

PPD perception:

Based on the findings from FGDs, it is revealed that the perception of PPD among mothers in oPt varies. While most mothers recognize PPD as a mental

disorder, their families may misperceive it as a result of supernatural forces and envy. The family's misperception significantly impacts depressed mothers, and the community tends to stigmatize them.

Consistent with existing studies conducted in Western culture, our findings support the notion that the mother's experience with PPD is not only influenced by her understanding of PPD but also by the awareness of her husband and family members (Hadfield & Wittkowski, 2017). These results highlighted the significance of considering the broader support network surrounding a mother in understanding and addressing PPD.

Regarding the perception of PPD, in our study, similar to the findings in the Arabian Gulf region, we encountered the presence of strange myths and beliefs related to supernatural forces that impact the well-being of mothers after childbirth. In the Arabian Gulf, there is a myth called "um AlSibyan," meaning the mother of sons, which is believed to influence maternal well-being negatively. This myth aligns with the concept of "The magic of separating couples" found in our study when describing PPD, highlighting the existence of supernatural forces affecting postpartum women (Ghubash & Eapen, 2009).

PPD protective factors from participant mothers' perception:

On the other hand, the FGDs also shed light on the protective factors that can help safeguard the mental well-being of Palestinian mothers. Nearly all of the

participating mothers emphasized the significant positive effect of family support. Mothers classified the necessary support from them as knowledgeable, emotional, and practical support. They also preferred the support they received from their mothers, which is considered an ideal form of peer support.

Our findings highlighted the importance of our social support in preventing and treating PPD, aligning with studies conducted in Western contexts (Dennis & Dowswell, 2013; Bina, 2008).

The type of support Palestinian mothers need to cope with psychological distress and challenges during the postpartum period is similar to those mothers in non-western cultures require. This support included practical assistance with child-rearing and household tasks, access to resources, emotional support to foster feelings of love and care, and informational support through guidance and advice (Chen et al., 2022; Nordbeck, 2022). These findings emphasized the importance of providing comprehensive support to mothers in the postpartum period.

In both our study and a study conducted in the USA (Nordbeck, 2022), there was a similarity in the preferred person for disclosure among mothers. It was found that mothers in both studies preferred disclosing their feelings to their mothers. This preference stems from the understanding and empathy they receive from someone who has undergone the same experience of motherhood.

PPD Risk Factors from Participant Mothers' Perception:

Based on the findings from FGDs, it had been revealed that factors impairing the well-being of mothers from the perspective of Palestinian mothers included loneliness, absence of guidance and support from family members, and mismatched preferences regarding the child's sex.

Consistent with prior research and supported by our study findings, experiencing loneliness and insufficient social support increased the mother's likelihood of developing PPD (Hadfield & Wittkowski, 2017; Dennis & Dowswell, 2013; Ghubash & Eapen, 2009). In today's society, many couples miss the traditional support and assistance that their own family and in-laws would have provided because they live independently and away from their extended families. This shift can be attributed to the transition from agricultural to industrial societies (Bina, 2008). So, we found that mothers living in geographically distant areas from their families (Ayoub, 2014) and migrant mothers are at a higher risk for PPD (Dennis & Dowswell, 2013).

As observed in this study, the political situation in oPt results in the spatial separation of family members, causing mothers to miss the presence of their supportive family. This sense of loneliness adversely affects their mental well-being.

In line with our findings on the association between baby sex agreement and the risk of PPD, a study conducted in the Emirates, an Arabic region, supports our results by highlighting that the birth of multiple girls without any boys may lead

husbands to consider marrying additional women. This circumstance can result in marital conflicts, ultimately contributing to the mother's experience of depression (Ghubash & Eapen, 2009). Therefore, we can infer that the impact of a baby mismatch on the mother is linked to the awareness and reaction of the husband toward this situation.

Help-Seeking Behaviors:

Based on the results of the FGDs, it was found that seeking help from family members was the first and sometimes the only option considered by the participants. There was a notable reluctance to seek professional help, mainly due to concerns about stigma and being prescribed medication. The preferred methods of seeking help among Palestinian mothers included venting sessions, exposure to success stories of other depressed mothers, online platforms, or engaging in spiritual rituals. However, the decision-making process for seeking help typically involves the entire family.

Addressing help-seeking behaviors and their barriers is crucial to ensure appropriate healthcare services to mothers that consider their cultural and social context (Hadfield & Wittkowski, 2017).

Themes relating to help-seeking behaviors in the Palestinian context have standard features with previous literature in Eastern and Western culture, which light the significance of stigma toward PPD (Dennis & Dowswell, 2013; Nordbeck, 2022;

Hadfield & Wittkowski, 2017; Ghubash & Eapen, 2009). The stigma surrounding PPD is not unique to Arabic communities; it is also prevalent in other communities, including the United States (Nordbeck, 2022).

In our study, we observed a similarity to Nordbeck's findings (2022) regarding help-seeking behaviors. Nordbeck emphasized that in cultures with a stigma associated with mental illnesses, mothers may refrain from seeking help and choose not to disclose their struggles, thus suffering in silence.

Based on studies conducted in Western cultures, the feelings of stigma among mothers towards PPD were often attributed to perceiving it as a sign of maternal failure (Hadfield & Wittkowski, 2017) or may be due to their high unrealistic expectations associated with motherhood (Nordbeck, 2022).

Regarding expectations surrounding motherhood, participants in the FGDs highlighted that a lack of preparedness for the responsibilities of motherhood and childcare could negatively impact their mental well-being. Our study aligned with the findings of Ghubash and Eapen (2009), as mothers expressed a significant desire for education on perinatal changes (Ghubash & Eapen, 2009).

Our study revealed that the mothers' perspective on the medical model of PPD, particularly regarding medication use, aligns with mothers' views in the United Kingdom, Canada, Japan, and Australia (Hadfield& Wittkowski, 2017) similar to our findings; mothers in these regions also expressed reluctance to take medication due

to feelings of shame and psychotic medication-associated stigma. This similarity suggests that the cultural perception of PPD and its treatment approaches transcends geographical boundaries and highlights the importance of addressing the stigma surrounding medication as a treatment option.

During our study, we found that sharing and expressing one's feelings with others and venting sessions significantly positively impact depressed mothers. This observation was consistent with a study conducted in the United States, which highlighted the importance of discussing difficult emotions to alleviate their impact on overall well-being (Nordbeck, 2022).

In line with our study results, which revealed that mothers feel motivated and experience improved mental well-being when exposed to success stories of other depressed mothers, there was a similarity with a study conducted in the United States. The study in the United States showed mothers preferred seeking support through conversations with other women who had experienced similar situations, as it positively impacted their emotional state (Nordbeck, 2022).

We observed a similarity between the seeking behavior of depressed Arabic mothers living in Arabian golf and the Palestinian mothers in this study. Both groups primarily sought help from their family members, with a lesser degree of reliance on friends, while they considered seeking professional help as a last choice (Ghubash & Eapen, 2009).

In our study, regarding the lack of autonomy of mothers in their help-seeking behaviors, all women expressed that their initial response when seeking help was to turn to their family. None of them preferred consulting a health professional as their first step. Additionally, a few mothers indicated the interference of their husbands' families in the decision-making process. This phenomenon can be attributed to the societal expectation among Arabs that women seek guidance from their husbands and families before taking action.

Based on the result of FGDs, mothers who feel coerced or forced into help-seeking behaviors tend to experience adverse outcomes. This aligned with the findings of Hadfield and Wittkowski (2017); this highlights the importance of allowing mothers to have autonomy and control in their decision-making process regarding seeking help, which can positively impact their well-being (Hadfield & Wittkowski, 2017).

Help-Seeking Behaviors Barriers:

The FGDs also highlighted various barriers that hinder help-seeking behaviors among Palestinian mothers. These barriers included adverse reactions and stigma from the community towards mental illness, which was the most frequently reported theme by the mothers. Additionally, negative attitudes towards mental disorders result in feelings of shame and considering them as personal weaknesses or taboo subjects. Also, these barriers included societal misperceptions of mental illness

caused by evil spirits or supernatural beings. Limited access to clear channels for care and support was also a significant barrier. Furthermore, negative beliefs about healthcare providers based on past experiences, such as concerns about qualifications, confidentiality, and privacy, further compound the challenges.

The barriers towards professional help-seeking behaviors among Palestinian mothers were similar to those found among non-Arabic women. Many mothers expressed concerns about being stigmatized or judged for seeking therapy. Additionally, mothers had numerous responsibilities towards their children; mothers often felt overwhelmed with childcare duties and found it challenging to prioritize their mental health needs (Hadfield & Wittkowski, 2017).

In terms of barriers related to health professionals, our study's findings are consistent with previous research conducted in non-Arabic areas, which suggests that mothers may be hesitant to seek professional help due to limited awareness of available services or having low expectations regarding the quality of care provided (Hadfield & Wittkowski, 2017). Similar to our study, certain conditions must be met for a mother to seek professional help, such as a non-judgmental, safe, and confidential environment that enables them to enhance their ability to deal with their problems (Hadfield & Wittkowski, 2017).

Patient Health Questionnaire (PHQ-9) in the Palestinian Context:

Regarding the qualitative analysis of the PHQ-9 tool, it appeared to be suitable for screening PPD among Palestinian mothers. These findings contradict the results of Heck and colleagues, who suggest that the PHQ-9 may have lower specificity than the EPDS due to its inclusion of items related to common and normal postnatal experiences (Heck, 2018). However, in our FGDs with mothers, we discovered that these symptoms, including sleeping problems, poor appetite, and loss of concentration, can serve as potential indicators of psychological distress experienced by mothers. While few Palestinian mothers expressed concerns that the PHQ-9 may pathologize normal postpartum experiences to a minimal extent.

But the results of this study aligned with findings from other regions, highlighting that the PHQ-9 demonstrates acceptable sensitivity (82%) and specificity (84%) for screening PPD (Gjerdingen et al., 2009). However, by including a cutoff point of ten, the tool seems to be able to identify depression even when mothers exhibit symptoms within the normal range.

Further studies about the reliability of PHQ-9 in detecting PPD among Arabic and Palestinian mothers are still needed.

Conclusion:

In conclusion, our study has revealed a high prevalence of postpartum depression (PPD) among Palestinian mothers, particularly those who have experienced mistreatment during childbirth or reside in politically and economically unstable regions. The lack of social support has emerged as a significant contributing factor. These findings underscore the underdiagnosis and undertreatment of PPD, resulting from insufficient screening, inadequate PPD recognition by both mothers and their families, poor help-seeking behaviors, and the stigma associated with PPD. Based on the FGDs, it was observed that most of the participants overestimate the importance of family support as the sole and most significant factor in treating PPD. However, the FGD results also indicated that some mothers' families are unaware of PPD, its symptoms, or how to address it effectively. In such cases, professional interventions are often necessary.

Additionally, various methods of seeking help have been documented, including beneficial and ineffective approaches. Moreover, significant barriers to accessing professional help for PPD have been identified. These findings emphasize the immediate need for improved screening, recognition, and availability of appropriate support and treatment for PPD in Palestinian communities, considering the unique needs of the mothers involved.

The prevention and treatment of PPD require a comprehensive approach that goes beyond solely medical interventions. Considering the challenging political, social, and cultural circumstances faced by Palestinian mothers, the unfavorable political, social, and economic pressures, significantly impact the mental well-being of Palestinian mothers and their families. So, adopting political, social, and cultural strategies to address PPD effectively is crucial.

To enhance Palestinian mothers' mental health, systemic and individual efforts are necessary. Implementing a clear policy for routine PPD screening among Palestinian mothers is vital. A well-defined referral system should accompany this screening to ensure access to appropriate treatment. Furthermore, given the stigma associated with PPD, it is essential to combat the societal stigmatization of mental disorders. One effective method to tackle this stigma is through creating and disseminating documentary films; Documentary films can be powerful tools to raise awareness about PPD, encourage active participation in screening, and promote help-seeking behaviors among mothers.

Additionally, it is important to prioritize the prevention of disrespect and abusive behavior in childbirth settings. Ensuring high-quality, dignified, and respectful maternity care is crucial for the well-being of mothers and can contribute to the prevention and management of PPD.

By adopting these multifaceted approaches, encompassing political, social, and cultural aspects, it is possible to make significant strides in preventing and treating PPD among Palestinian mothers, ultimately improving their overall mental health and well-being.

General and Detailed Overall Recommendations:

Based on the insights gained from this study, we can propose significant general and detailed recommendations:

General Recommendations:

- **Improve health care policies and adopt policies that enhance effective and confidential PPD screening for all Palestinian mothers**. This screening process can occur within primary healthcare settings or through online platforms. Accompany this effective screening with a well-defined referral channel, enabling access to confidential, effective, suitable, high-quality treatment. **Consider the existing capacity of mental health services and expanding mental health services to ensure the ability to provide effective treatment to all women who may require therapeutic intervention**. In addition to **promotion campaigns about existing mental health services** to raise awareness about the availability of qualified mental health services. This will ensure that all mothers access the needed care.

- **Ensuring ongoing training for healthcare professionals to enhance their knowledge and practice in the early identification of PPD and the management of maternal psychological distress, Accompanied by rigorous monitoring of the quality of mental care provided for mothers.**
- **Prioritizing efforts in promoting a professional relationship between mothers and healthcare providers:** Based on the findings of these studies, it is observed that mothers often regard seeking social support from professionals as a last choice, despite their expertise in addressing PPD. Therefore, it is crucial to prioritize efforts in promoting a professional relationship between mothers and healthcare providers, emphasizing active listening, empathy, trust, and respect. This approach can enhance help-seeking behaviors from professionals.
- **Offer respectful care for Palestinian mothers during childbirth:** More investments in the healthcare system are needed to make it well-equipped. Furthermore, it is necessary to support healthcare providers, who are part of the suffering Palestinians from hopelessness, fear, fatigue, and inconsistent salaries (Marie et al., 2016). Respectful care can be done through less workload, incentives, motivation, and training for healthcare providers to eliminate disrespect and abusive behaviors and enhance effective communication with mothers (Marie et al., 2016).

- **Combat the stigma surrounding mental disorders:** This can be done through awareness programs in schools, universities, and clinics, as well as by creating documentary films (Marie, Hannigan, and Jone, 2016). Such interventions can be powerful tools to raise awareness, motivate mothers to actively participate in screening, and encourage them to seek help when needed.
- **Implement social educational initiatives to educate mothers and their families about the signs and symptoms of PPD and how, when, and where to seek appropriate therapy,** because seeking help for PPD is often a family decision within our community.
- **Provide sufficient information to mothers about motherhood during the prenatal period,** strategies for coping with changes and effectively caring for their growing child. Doing so can help prevent feelings of confusion, guilt, and helplessness in mothers.
- **Encourage future studies** to investigate the validity and reliability of PHQ-9 in screening for PPD among mothers in Palestinian and similar settings, and in-depth economic studies to explore the correlation between economic factors and mental well-being.
- **Incorporating technology with healthcare interventions,** like online PPD screening tools, online therapeutic sessions, or creating a secure online platform where mothers can openly share their concerns under the guidance

of professionals. This platform could take the form of a private Facebook group. This platform aims to promote unity among mothers and facilitate their mutual support for one another.

- **Implementing preventive measures in addition to therapeutic measures**.

Detailed Recommendations about improving health care policies regarding screening, referral, and treatment:

- **Incorporate PPD screening with childcare clinics:** In oPt, a higher proportion of mothers attend children's clinics compared to maternal clinics, prioritizing essential tasks such as vaccinating their children or conducting necessary baby tests like phenylketonuria screening (PCBS, 2021). This presents a valuable opportunity to integrate PPD screening into these clinics. To ensure the evaluation of maternal mental well-being, it is crucial to inquire about the mother's presence alongside her child and assess her well-being during the visit. It should be emphasized that it is not acceptable for the child to attend alone with another family member, as this may hinder accurate assessment and support for the mother's mental health.
- **The adoption of midwife-led continuity of care:** It is a model that involves providing comprehensive care to mothers during the perinatal period by the same midwife or a small team of midwives (Alba et al., 2019). According to a

Cochrane review, this model has efficiently supported high-risk mothers (Dennis & Dowswell, 2013).

- **Postnatal home visits by healthcare professionals:** These home visits are recommended by Cochrane. As observed through a literature review, only 50% of Palestinian mothers attend postnatal clinic visits, so these home visits will serve not only for screening for PPD, but also for assessing any postpartum complications, promoting maternal well-being, encouraging breastfeeding, and fostering the mother-child relationship.
- **Identifying and targeting interventions toward high-risk groups:** According to Cochrane, targeting interventions toward high-risk groups is feasible and brings significant benefits (Dennis & Dowswell, 2013). Based on the findings of this study, the identified high-risk groups include mothers with limited family support, mothers with marital conflicts, mothers who have experienced mistreatment during childbirth, older mothers, or those residing in politically unstable areas. Identifying high-risk mothers could take place during the perinatal period when mothers attend perinatal visits, using a screening tool to assess these mentioned risk factors. Interventions can be implemented prenatally and postnatally through clinics, telephone, or home visits, including prophylactic psychological intervention, screening for PPD, and referral.

Healthcare professionals such as midwives and social workers can carry out these interventions.

- **Adoption of psychosocial interventions as a preventive measure for PPD in high-risk groups and as a treatment approach for mothers experiencing PPDs:** This is a range of techniques, strategies, interpersonal interactions, and informative activities aimed at enhancing the mental well-being of individuals (England, Butler, & Gonzalez, 2015). Based on Cochrane's recommendation, Interpersonal psychotherapy has been identified as an effective approach to preventing and treating PPD (Dennis & Dowswell, 2013). It is highly recommended for managing PPD, often leading to recovery for mothers. It could increase mothers' knowledge about PPD, improve their communication skills, enhance their relationships with family members, improve mother-baby attachment, and enable better problem-solving abilities (Hadfield & Wittkowski, 2017). Furthermore, this therapeutic model holds potential benefits for Palestinian mothers, as indicated by their expressed preference for this form of treatment over medication, as revealed in the FGDs.

By implementing these practical recommendations, we can enhance mental health support for mothers, ensure they receive the necessary information, have

early identification of PPD, and proper care channels, and effectively engage their support networks in the process.

Study Strengths and Limitations:

Study Strengths:

This study has several strengths. Firstly, the quantitative part was conducted at the national level, encompassing both the Gaza Strip and the West Bank, enhancing the findings' generalizability. Additionally, the study had a sufficiently large sample size, which increased the statistical power and reliability of the results. The inclusion of mothers within 2-4 weeks post-childbirth helps minimize recall bias and is an optimal timeframe for detecting postpartum depression (PPD). Moreover, this study contributes to the limited existing research by using a comprehensive and standardized tool to assess the correlation between mistreatment during childbirth and PPD.

Another notable strength of this study is its qualitative component, which is the first of its kind in oPt and one of the few studies in the Arab world that explores a local understanding of PPD within an Arabic context. By considering the three variant residential areas of the city, camp, and village, the study captures diverse perspectives and experiences. The inclusion of patient participation further

enhances the study's validity and ensures that the voices of the individuals directly affected by PPD are heard.

The use of mixed methods is another strength of the study. By combining qualitative and quantitative approaches, the researchers can gain a more comprehensive understanding of PPD, taking into account both subjective experiences and measurable outcomes. This approach helps prevent the uncritical adoption of Western mental health concepts and standardized tools for depression, allowing the researchers to preserve the integrity of local knowledge and cultural perspectives.

Overall, these strengths contribute to a richer understanding of PPD in the Palestinian context, shedding light on the unique challenges and experiences faced by mothers in different residential areas in oPt and promoting culturally sensitive approaches to prevention and treatment.

Study limitations:

However, there are some limitations to consider. Firstly, the qualitative part includes purposive sampling, where all participants were recruited from Bethlehem Governorate due to its convenience for researchers. This limits the generalizability of results to all of the oPt. Another limitation of this study is the use of the PHQ-9, which is a non-definitive diagnostic tool for PPD; While a positive result on the PHQ-

9 indicates a potential presence of PPD, the study did not employ a clinical evaluation by healthcare professionals to confirm the diagnosis. In addition, it is important to note that the focus of the quantitative part was primarily on the childbirth process. As a result, other prenatal and antenatal factors that could potentially influence PPD were not included in the quantitative part. Another limitation is that the measurement of mistreatment relied on the subjective perception of mistreatment by the mothers. It is essential to acknowledge that the mother's perception may be influenced by her mental state and educational level, which could potentially lead to misreporting of mistreatment.

The limitations of the qualitative part include the fact that mothers not only discussed their most recent pregnancy, which was expected to be within the last six months but also shared experiences from all their pregnancies. Additionally, during focus group discussions, few mothers tended to judge the opinions of others, potentially hindering open and accessible conversation. Moreover, there were instances where mothers' personal experiences were reflected upon, compromising their privacy in front of other participants.

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Annexes:

Annex A: Bohren's Typology of Mothers' Mistreatment in Childbirth Facilities (Bohren et al., 2015).

Third-Order Themes	Second-Order Themes	First-Order Themes
Physical abuse	Use of force	Women beaten, slapped, kicked, or pinched during delivery
	Physical restraint	Women physically restrained to the bed or gagged during delivery
Sexual abuse	Sexual abuse	Sexual abuse or rape
Verbal abuse	Harsh language	Harsh or rude language
		Judgmental or accusatory comments
	Threats and blaming	Threats of withholding treatment or poor outcomes
		Blaming for poor outcomes
Stigma and discrimination	Discrimination based on sociodemographic characteristics	Discrimination based on ethnicity/race/religion
		Discrimination based on age
		Discrimination based on socioeconomic status
	Discrimination based on medical conditions	Discrimination based on HIV status
Failure to meet professional standards of care	Lack of informed consent and confidentiality	Lack of informed consent process
		Breaches of confidentiality
	Physical examinations and procedures	Painful vaginal exams
		Refusal to provide pain relief
		Performance of unconsented surgical operations
	Neglect and abandonment	Neglect, abandonment, or long delays
		Skilled attendant absent at time of delivery
Poor rapport between women and providers	Ineffective communication	Poor communication
		Dismissal of women's concerns
		Language and interpretation issues
		Poor staff attitudes
	Lack of supportive care	Lack of supportive care from health workers
		Denial or lack of birth companions
	Loss of autonomy	Women treated as passive participants during childbirth
		Denial of food, fluids, or mobility
		Lack of respect for women's preferred birth positions
		Denial of safe traditional practices
		Objectification of women
		Detainment in facilities
Health system conditions and constraints	Lack of resources	Physical condition of facilities
		Staffing constraints
		Staffing shortages
		Supply constraints
		Lack of privacy
	Lack of policies	Lack of redress
	Facility culture	Bribery and extortion
		Unclear fee structures
		Unreasonable requests of women by health workers

The typology presented in this table is an evidence-based classification system of how women are mistreated during childbirth in health facilities, based on the findings of the evidence syntheses. The first-order themes are identification criteria describing specific events or instances of mistreatment. The second- and third-order themes further classify these first-order themes into meaningful groups based on common attributes. The third-order themes are ordered from the level of interpersonal relations through the level of the health system.

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Annex B: Development of the scale for measuring mistreatment of mothers during childbirth

The **physical abuse scale** was developed based on the experience of any form of first-order themes, including pinching, kicking, slapping, punching, beating with a tool, muzzling, tying the mother to the hospital bed, forcefully holding the mother on the bed, forcefully applying pressure to the mother's abdominal area before giving birth, or any other form of physical abuse reported by the mothers. This scale was recorded as a binary variable (no physical abuse or at least one form of physical abuse). However, this scale showed weak reliability, with a Cronbach's alpha of 0.018.

The **verbal abuse scale** was developed based on the experience of any form of first-order themes, including screaming, insulting, telling the mother off, ridiculing or making fun of the mother, commenting negatively on the mother's physical appearance, commenting negatively on the baby's appearance, commenting negatively on the mother's sexual activity, threatening the mother with a medical procedure (such as a vaginal wound or a C-section), threatening the mother with physical violence, threatening the mother or her child with a poor outcome, threatening to withhold or stop care for the mother or her child, blaming the mother, silencing the mother (by saying "hush"), or other forms of verbal abuse. This scale was recorded as a binary variable (no verbal abuse or at least one form of verbal abuse). The scale showed acceptable reliability, with a Cronbach's alpha of 0.585. However,

when the items related to "Did any of the hospital staff or workers comment negatively regarding your sexual activity?" were deleted, the scale's reliability improved to 0.588. Since no mothers in our study reported experiencing this theme of verbal abuse, we deleted it from the scale. We also deleted the items related to "Did any of the hospital staff or workers comment negatively on your child's appearance (such as their outer appearance, gender, or other aspects of the child)?" as its deletion further improved the scale's reliability, Cronbach's alpha of 0.592.

The stigma scale developed based on whether health workers comment negatively about the mother's ethnic origin, lineage, village/ clan, culture, religion, age, marital status, level of education, economic status, or HIV status. This scale was recorded to be a binary variable (no stigma or at least experiencing one form of the above-mentioned stigma theme), this scale has weak reliability, with Cronbach's alpha -0.003.

The abuse scale was developed as a binary variable (yes/no) to assess whether mothers experienced any form of physical, verbal, or stigma-related abuse. The Cronbach's alpha coefficient for this abuse scale was 0.197**.**

The typology of "**Failure to meet a professional standard of care"** has many themes, of these themes are **negligence and abandonment, or poor pain management**.

The negligence and abandonment scale was constructed based on the following first-order themes:

1. Mother felt ignored by health workers

2. Mother felt neglected by health workers

3. The mother felt that her presence was an annoyance to health workers

4. The mother waited a long period before health staff acknowledged or prepared her in the hospital for labor

5. Absence of health workers at the time of the child's arrival

The negligence and abandonment scale developed as a binary variable (no any form of negligence and abandonment or at least one form of negligence or abandonment mentioned above, it Cronbach's alpha is 0.727, but It is 0.794 if the Items of “presence of health worker at the time of baby arrival” was deleted, so we used the modified scale which only contains the first four themes mentioned above.

Poor pain management developed as a binary variable (good pain management, or poor pain management which is represented by either being deprived of painkillers, ordering painkillers, or both.

The typology of poor rapport between mothers and health providers can be assessed through two themes: ineffective communication and lack of supportive care.

Lack of supportive care can be measured by considering the presence of a birth companion at any stage of the labor process, the availability of a companion during the hospital stay, or the mother's perception of emotional support from health workers.

The ineffective communication scale was developed as a dichotomous variable, distinguishing between effective communication and ineffective communication. Effective communication was defined as health workers kindly listening and responding to the mother's concerns and questions during her time in the childbirth setting. Ineffective communication refers to situations where health workers fail to listen or respond to the mother's concerns and questions. The Cronbach's alpha coefficient for the effective communication scale was 0.896.

Annex C: The Guiding Questions for the FGDs (in English and Arabic)

The probing questions for the FGDs (in English)

- What is postpartum depression from Palestinian Mothers' perception?
- Did you hear about postpartum depression? (How many mothers know it from the total number of participants in each focus group discussion?)
- What are PPD and its possible symptoms?
- What are the possible risk factors and protective factors for PPD?
- What health-seeking behaviors for managing PPD?
- What can Palestinian mothers do to confirm the diagnosis or treat postpartum depression?
- Have you ever been screened for postpartum depression? If yes, In your opinion, what are the problems with the used screening tool?
- Are mothers ready to seek help and find a solution to postpartum depression?
- Are there obstacles to seeking help? What are the obstacles to seeking help?
- When do mothers seek help?
- How do mothers seek help?
- Where mothers will go? Or if you know a mother with PPD, where they seek help? (Available channel of care)
- Does the mother know where mental health services are provided? Are there accessible, suitable, affordable, and available mental health services from their point of view?
- How do mothers respond to PHQ-9 items?

By discussing items of the postpartum depression-screening tool, PHQ-9, that are normally present in the postpartum, as follows:

- Can we consider the problem with sleeping (staying asleep or sleeping a lot) symptoms of PPD? And why?
- Can we consider poor appetite or eating too much a symptom of PPD? And why?
- Can we consider problem focusing on things like watching TV a symptom of PPD? And why?

The probing questions for the FGDs (in Arabic)

الأسئلة التوجيهية للحلقات البؤرية:

- ❖ هل سمعتن عن اكتئاب ما بعد الولادة؟ ماذا سمعتن؟ متى سمعتن عنه؟

(كم عدد الأمهات اللائي يعرفن ذلك من إجمالي المشاركين في كل مناقشة جماعية مركزة)

هل تعرفون أمهات مروا بهذه التجربة وماذا تعرفون عن تجربتهن؟ من ماذا كانوا يشكون؟

ما هي الاوضاع (تصرفات، مشاعر، علامات) التي تعتبرونها طبيعية واشياء تعتبرونها غير طبيعية وتتدل على وجود مشكلة؟

- ❖ بوجهة نظركم، ما هي الظروف/الأمور التي تحمي الام من الاكتئاب بعد الولادة؟ وما هي الظروف التي تؤدي بالأم إلى الاكتئاب؟
- ❖ برأيكم، إذا الام مرقت بهذه الاعراض، متى تطلب الام المساعدة؟
- ❖ هل الأمهات على استعداد لطلب المساعدة؟من ومين وكيف ممكن تطلب المساعدة؟
- ❖ ما الذي من ممكن أن يمنع الام من طلب المساعدة؟
- ❖ أين ستذهب الأمهات؟ أو إذا كنت تعرف أمًا مصابة باكتئاب ما بعد الولادة، فأين يطلبون المساعدة؟
- ❖ ما هي طريقة العلاج المتعارف عليها والمتاحة للأمهات؟
- ❖ من رأيكم، هل يوجد في فلسطين خدمات صحة نفسية يمكن الوصول إليها ومناسبة وميسورة التكلفة ومتاحة من وجهة نظرهم؟
- ❖ هل الاماكن التي تقدم خدمات صحة نفسية معروفة عند الامهات؟
- ❖ هل سبق طلب منكن أحد تعبئة مسح للاكتئاب بعد الولادة؟ هل قمتن بذلك؟ ما رأيكم به؟

يوجد مسح يقيس اكتئاب ما بعد الولادة استخدم في دول مجاورة، أريد أخذ وجهة نظركم في بعض البنود الموجودة في هذا المسج، ما إذا كانت تعكس الحالة النفسية للام.

- ❖ هل مشكلة النوم (البقاء مستيقظين أو النوم كثيرًا) يعكس وجود اكتئاب ما بعد الولادة؟ ولماذا؟
- ❖ هل ضعف الشهية أو الإفراط في تناول الطعام يعكس وجود اكتئاب ما بعد الولادة؟ ولماذا؟
- ❖ هل فقدان التركيز في المهام (مثلا عند حضور التلفاز، الطبخ..) يعكس وجود اكتئاب ما بعد الولادة؟ ولماذا؟

Annex D: Approval for Implementing FGDs in Governmental Primary Health Care Clinics.

State of Palestine Ministry of Health Education in Health and Scientific Research Unit	دولة فلسطين وزارة الصحة وحدة التعليم الصحي والبحث العلمي

Ref.: ....
Date:.................

الرقـــم: ٢٠٢١/٨٧/١٦٥
التـاريخ: ٢٠٢١/٨/١٦

عطوفة الوكيل المساعد لشؤون الصحة العامة وصحة الاسرة المحترم،،،

تحية واحترام...

الموضـــوع: تسهيل مهمة بحث

يرجى تسهيل مهمة الطالبة: بتول مطر – ماجستير صحة عامة/ جامعة بيرزيت،
وباشراف د. نيفين ابو ارميله، في عمل بحث بعنوان:

"اكتئاب ما بعد الولادة من منظور الامهات الفلسطينيات"

من خلال السماح للطالبة بجمع معلومات من الامهات المراجعات لعيادات تطعيم اطفالهن (بعد اخذ موافقتهن)، وذلك في:

- مديرية صحة بيت لحم– عيادات الصحة وصحة العبيدية

على ان يتم الالتزام باساليب واخلاقيات البحث العلمي. وعدم استخدام المعلومات الشخصية للمشاركات.
على ان يتم الالتزام بجميع تعليمات واجراءات الوقاية والسلامة الصادرة عن وزارة الصحة بخصوص جائحة كورونا.
على ان يتم تزويد الوزارة بنسخة PDF من نتائج البحث، التعهد بعدم النشر لحين الحصول على موافقة الوزارة على نتائج البحث.

مع الاحترام...

د. عبد الله القواسمي
رئيس وحدة التعليم الصحي والبحث العلمي

نسخة: مشرف الدراس المحترم/ جامعة بيرزيت

Telfax.:09-2333901 scientificresearch.dep@gmail.com تلفاكس: 09-2333901

Annex E: Consent Form for Participation in the Study

نموذج طلب موافقة على المشاركة في البحث العلمي

عنوان الدراسة: اكتئاب ما بعد الولادة: من منظور الأمهات الفلسطينيات

اسم الباحث الرئيسي: بتول محمد توفيق مطر /ماجستير الصحة العامة والمجتمعية/ جامعة بيرزيت
اسم المشرف على البحث: الدكتورة نيفين أبو رميلة

ملخص البحث:
هذا البحث جزء من رسالة الماجستير للطالبة بتول، حيث تهدف هذه الدراسة إلى (1) فحص وجهة نظر ووعي الأمهات الفلسطينيات حول اكتئاب ما بعد الولادة ، وأعراضه المحتملة ، والعوامل المؤدية له أو الحامية منه من وجهة نظر الأمهات ، (2) سلوكيات الأمهات الفلسطينيات للحصول على الرعاية الصحية من اجل علاج اضطراب الاكتئاب ما بعد الولادة أو ما هي عوائق طلب المساعدة (3) ومناقشة بعض الأعراض التي قد تشعر بها الأم الفلسطينية بعد الولادة ، ذلك من أجل تطوير أداة قياس اكتئاب ما بعد الولادة بحيث تكون ملائمة للقضايا الاجتماعية والاقتصادية والثقافية والسياسية السائدة في فلسطين. من أجل صحة أفضل للأمهات الفلسطينيات وعائلاتهن.

..

معلومات عن العينة المنتقاة والفترة الزمنية المقدرة لاستكمال المقابلة أو الاستبيان:
أخترتك للمشاركة في البحث لكونك أمُ منجبة حديثا (خلال اخر3 شهور) وهو وقت مناسب لتذكر حالة الام النفسية بعد الولادة، هذه المناقشة الجماعية من المتوقع أن تستغرق 40 دقيقة.
مشاركتك طوعية، وسيتم الحفاظ على سرية معلومات. لن يتم استخدام أي أسماء أثناء التحليل أو النتائج.
أنت حرة في رفض المشاركة أو عدم الإجابة على أي سؤال أو حتى الانسحاب في حال شعرت بعدم الارتياح أو الاحراج أثناء مشاركتك لفكرة أو قصة. لن يؤثر الرفض او الانسحاب عليك بأي شكل ولن يؤثر على استفادتك من الخدمات التي تقدمها العيادة في المستقبل.

.

المنافع المتوقعة:
لن تكون هناك فائدة شخصية مباشرة لك من خلال مشاركتك، ولكنك بشكل غير مباشر ستساعدين نساء فلسطينيات أخريات من أجل صحة نفسية أفضل بعد الولادة وستساعدين في تشخيصهن بالاكتئاب ان ووجد وفي حصولهن على العلاج الناجع والمناسب. حيث نتائج هذا البحث تساعد في فهم الصحة النفسية للام الفلسطينية بعد الولادة بشكل أفضل وناجع. وتساعدنا في تقديم توصيات إلى صانعي السياسات في وزارة الصحة والمستشفيات والمراكز الصحية الخاصة والجامعات والمعنيين بهذا الموضوع لتحسين الصحة النفسية للحوامل الوالدات من قبل الطاقم الصحي.

طريقة التواصل مع الباحث:
إذا كانت لديك بعض الأسئلة عن الدراسة، يمكنك التواصل مع الباحثة بتول مطر عن طريق رقم ال هاتف0522186341
عنوان البريد الإلكتروني : batoulmattar@gmail.com))

موافقة المشارك في البحث:
حصلت على شرح مفصل عن الدراسة وأهدافها وإجراءاتها، ومنافعها، والمخاطر المحتملة وعن الحرية الكاملة للمشاركة.
أفهم كل المعلومات التي قدمت ووصلتني إجابة على كل أسئلتي.
أوافق على أن أشارك في هذه الدراسة بطوعية وبدون أي نوع من الاجبار أو الضغوط. أفهم ان بإمكاني التوقف عن المشاركة في أي وقت.

الاسم:
توقيع الميسر:
توقيع الشاهد:
التاريخ:
تاريخ إنجاب أخر طفل:
عدد الاطفال بالأسرة:
الدرجة العلمية:
مكان السكن:
العمر:

الموافقة على تسجيل نقاش المجموعة البؤرية عن طريق تسجيل صوت:
نطلب إذنك لتسجيل حلقة النقاش، وليس بالضرورة أن توافقي على هذا الطلب، حيث في حال عدم موافقتك، سنقوم بتدوين حلقة النقاش يدويا. وفي حال موافقتك على التسجيل، بإمكانك طلب توقيف التسجيل في أي وقت أثناء الحديث والحديث بدون تسجيل لمشاركة قضايا معينة، وإعادة استكماله عندما ترغبين بذلك، ولك الحق في رفض استكمال التسجيل.
من خلال تسجيل المقابلة، يمكننا التأكد أن رأيك ينعكس بدقة وبشكل صحيح ودقيق. نؤكد لك أن تسجيلات او نص المقابلة ستبقى سرية ولن يتمكن سوى الباحثين من الوصول اليها وسيتم اتلافها بمجرد كتابة تفاصيل المقابلة واكتمال البحث. نرجو منك عدم ذكر أي اسماء اثناء التسجيل.
سوف نشارك نتائج هذا البحث معك عند اجراء أي نشاط لنشر النتائج إذا كنت ترغبين بذلك

أعلم أنّه سيتم تسجيلي بالصوت كجزء من هذه الدراسة.
أوافق على تسجيلي بالصوت بطوعية وبدون أي نوع من الاجبار أو الضغوط. أفهم ان بإمكاني التوقف عن المشاركة في أي وقت.

الاسم:
التوقيع الميسر:
التوقيع كاتب الجلسة:
التاريخ:

Annex F: Ethics Review Committee Decision

Institute of Community and Public Health

BIRZEIT UNIVERSITY

Institute of Community and Public Health – Birzeit University

Ethics Review Committee Decision

Date: January 10, 2023
Applicant's name: Niveen Abu-Rmeileh
Institution: Institute of Community and Public Health

Reference No:	**2023 (1 – 1)**
Project Title:	Postpartum Depression: From Palestinian Mothers' Perceptions
Names of contributing researchers, other than the Principal Investigator/ Applicant:	Batoul Mattar (MPH student)

Thank you for submitting your application for the ethics review of your research proposal. Your application was examined carefully, and discussed by the Ethics Review Committee during a meeting which took place on January 10, 2023. The following documents were reviewed:

1. Ethics Review Application Letter/Form
2. Consent Form
3. Project proposal

The ICPH-BZU Research Ethics Review Committee has approved your research proposal.
Approval is given for three years. Projects, which have not commenced within two years of original approval, must be re-submitted to the Ethics Review Committee. You must inform the Committee when the research has been completed. If you are unable to complete your research within the three year validation period, you will be required to write to the Ethics Review Committee to request an extension. You may also need to re-apply for approval by the Committee.
Any serious adverse events or significant changes which occur in connection with this study and/or which may alter its ethical considerations must be reported immediately to the Ethics Review Committee. On such an occasion, an "Amendment Form" must be submitted to the Committee for re-assessment.

Thank you,
Ethics Review Committee Coordinator
Maysaa Nemer, PhD

BIRZEIT UNIVERSITY
معهد الصحة العامة والمجتمعية
Institute of Community & Public Health

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