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# The perceived mental health experiences and needs of postpartum mothers living in the United Arab Emirates : A focus group study



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ARTICLE INFO	A B S T R A C T
Keywords: Postpartum period Maternal mental health Social support Focus group discussions Healthcare United Arab Emirates	Background: After childbirth, mothers are particularly vulnerable to mental health problems including anxiety and depression, which often remain undetected and untreated. In the United Arab Emirates (UAE), recent figures revealed a substantial prevalence of postpartum depression. However, postpartum mental health remains largely understudied in the country's clinical and research settings. Therefore, given the paucity of literature in the UAE and building upon previous epidemiological findings, this study aimed to explore the perceived mental health experiences and needs of mothers during the postpartum period to guide the development of targeted in- terventions that address mothers' unique mental health challenges. <i>Methodology:</i> Four focus groups were conducted, involving a total of 27 Emirati and multicultural expatriate mothers aged $32.47 \pm 4.56$ years old, living in the UAE and within their first year postpartum. Descriptive interpretive thematic analysis was employed to analyze the data. <i>Analysis:</i> Six themes were generated that capture the mothers postpartum experiences and mental health needs: (1) distinct postpartum experiences of primiparous and multiparous mothers, (2) experiences of emotional distress in the initial postpartum stage, (3) multifaceted challenges in breastfeeding, (4) multifactorial influences on postpartum mental health, (5) postpartum social support resources and providers, and (6) the need for formal and informal resources. <i>Conclusions:</i> The findings highlight the importance of considering the unique cultural and societal factors that
	impact maternal mental health in the UAE, given its diverse population. A collaborative multidisciplinary approach, integrating culture sensitivity, is vital to address the mental health needs of postpartum mothers and to guide the development of tailored evidence-based interventions.

#### Introduction

The postpartum period represents a pivotal stage for young mothers, as they navigate a multitude of physical, emotional, and social changes (Asadi et al., 2022). Consequently, mothers are highly vulnerable to mental health problems. Postpartum depression is the most common psychiatric problem affecting one in seven women within the first year of childbirth, and it is globally recognized as a major public health challenge (American Psychological Association, 2022). However, despite the growing acknowledgment and research on postpartum depression, its multifactorial etiology, and treatment approaches across various communities, it still presents a largely undetected form of

maternal morbidity (Nicole et al., 2007), with over half of the women with postpartum depression left untreated (Centers for Disease Control and Prevention, 2022). This could have a detrimental impact on mothers' health, mother-infant bonding, infant development, overall family dynamics, and wellbeing, and thus, a significant economic burden at the national level (Epperson et al., 2020; Luca et al., 2020; Gedzyk-Nieman, 2021). Limited access to treatment could potentially be attributed to stigma and poor help-seeking behaviors of women with postpartum depression and anxiety, which hinder them from reporting their symptoms to health workers (World Health Organization (WHO) guidelines on maternal and newborn care for a positive postnatal experience, 2022). However, a recent synthesis of qualitative evidence

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Received 5 September 2023; Received in revised form 6 February 2024; Accepted 16 March 2024 Available online 18 March 2024 0266-6138/© 2024 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/). has revealed that numerous healthy women feel neglected or undervalued regarding their own care needs, particularly in receiving support from healthcare providers to process and manage difficult emotions during the postpartum period (Sacks et al., 2022). The study emphasized the need for more emotional and psychosocial support in addition to clinical care (Sacks et al., 2022). Therefore, the latter may imply unmet maternal mental health needs, posing a significant gap in addressing and treating maternal mental health problems in the postpartum period.

In the context of the UAE, the country reports the highest levels of depression among all countries in the Eastern Mediterranean region (Mohamed Ibrahim et al., 2020). However, in respect to postpartum mental health, there is a paucity in literature where a limited number of epidemiological studies have been carried out over the past decades. This is also reflected by the notable variation in the reported prevalence of postpartum depression, with rates varying widely from 12.5 to 33% (Abou-Saleh and Ghubash, 1997; Green et al., 2006; Hamdan and Tamim, 2011; Alhammadi et al., 2017). In addition, our recent prospective study findings (Hanach et al., 2023) (N = 457) indicate a 35% prevalence of postpartum depression, suggesting an evolving trend over the years. Moreover, the UAE is distinguished by its cultural heterogeneity, as it accommodates over 200 nationalities (The United Arab Emirates Government Portal, 2023), with the expatriate community significantly surpassing that of UAE nationals, representing 90% of the population (The UAE governmental portal, 2023). This cultural diversity is simultaneously associated with various beliefs, customs, practices, and language expressions, which naturally also extend to the healthcare system. As a result, it could influence mothers' postpartum mental health experiences, perception of the quality of care, as well as their attitudes towards seeking help. In a similarly culturally diverse context, in Saudi Arabia, Arab women revealed that linguistic diversity was a barrier in communication with healthcare professionals during pregnancy and after childbirth (Karout et al., 2013). Additionally, in the UAE, the role of religiosity has been demonstrated in mental health issues management and specifically in reducing depressive symptoms among Muslim women in the UAE, serving as a resilience factor (Suleiman et al., 2001; Thomas et al., 2016; Haque 2020). However, to the best of our knowledge, the exploration of mental health perceptions have not yet been expanded to women from different cultural background, particularly those in the postpartum period.

Given that this distinctive diversity of the UAE population could add complexity to the UAE mental healthcare infrastructure in its ability to address postpartum mental health, it is imperative to delve into the lived experiences of postpartum women. Understanding their unique mental health needs may serve as a foundational step to guide the design and implementation of tailored strategies and interventions, ultimately facilitating improved systems for supporting the mothers' mental health after childbirth. Therefore, this study aimed to provide exploratory insights into the experiences and perceptions of mothers concerning their mental health needs and available resources during the postpartum period.

## Methodology

## Study design

An exploratory, descriptive focus-group study was conducted between September 2022 and January 2023 to address the limited research landscape on maternal mental health in the UAE. This approach was chosen to effectively understand and describe the phenomena of interest (Stebbins, 2001; Sandelowski, 2010) and to explore mothers' postpartum experiences and perceived mental health needs, with a focus on identifying gaps in current practices in the UAE. Additionally, this method has been validated as suitable for social science and health researchers addressing sensitive topics targeting mothers (Skelton et al., 2018). Throughout the research process, a reflexive approach was adopted to enhance the credibility and dependability of the findings (Dodgson, 2019).Additionally, the study abides by Krueger and Casey's (2002) guidelines and adheres to standards for reporting qualitative research (Tong et al., 2007). The study received approval from the research ethics committees at the University of Sharjah (REC-22–08–29).

#### Study setting and sampling

The study participants were purposively recruited from various sources including maternity wards of two hospitals each in Dubai and Sharjah, where we approached mothers immediately after childbirth and informed them about the study. Mothers who showed interest, were contacted within 2 to 3 weeks to arrange their participations in the focus groups. Other used sources were social media platforms (e.g., Facebook and Instagram), and online communities that cater to mothers. Women who expressed interest in participating in the study through word-ofmouth referrals from other participating mothers, were also invited to attend the focus groups.

## Participants

Eligible participants included women aged 18–45 years, who had given birth within the past year and were either UAE nationals or residents of different nationalities. Women who gave birth prematurely (prior 37 weeks of pregnancy) or had their infants in the neonatal critical care unit during the study period were excluded. To establish an overview of the various postpartum experiences, there was no restriction on whether the mother had a singleton or multiple pregnancies. The eligible participants were informed about the aim and objectives of the study and their intended involvement process prior to receiving the information sheet and written informed consent. Out of 30 women, three dropped out due to unavailability and time conflicts.

#### Processes

#### Data collection

To obtain an overview of the participants characteristics, participants were invited to comple an online survey via Google Forms. Demographic and descriptive data including age, nationality, education, employment status, marital status, and financial status (represented by the family monthly income, perception of income, husband and mother employment statuses (Hanach et al., 2023), type of childbirth, infant sex, feeding practices, and social support were collected. The questionnaire also comprised the Edinburgh Postnatal Depression Scale (EPDS) to identify women experiencing postpartum depression symptoms at the time of the focus group discussions (Cox et al., 1987). The total score ranges from 0 to 30, with each item scored on a 4-point scale from 0 to 3. Higher scores indicate increased depression symptomatology. A cut-off point of > 12 indicates women with severe depression symptomatology; however, a cut-off point of > 9 has been suggested to increase sensitivity for the purposes of community screening (Murray and Carothers, 1990). A validated Arabic version of the EPDS with adequate psychometric properties (Abou-Saleh and Ghubash, 1997) was used with Arabic-speaking participants. To minimize any potential labeling harm mothers with high EPDS scores were assured about the non-diagnostic nature of the measure (Sheehan & McGee, 2013) and were advised to seek further assessment in clinical settings. Correspondingly, it was clearly communicated that confidentiality is strictly maintained at all times, and that depression scores are not disclosed or discussed in the focus groups, instead the emphasis is on the overall postpartum mental health challenges and needs during the postpartum period.

#### Focus group interviews

The focus group interviews were hosted through a computer video interface using Zoom Software (Zoom Video Communications, San Jose, CA), in accordance to the participating mothers' preferences, owing to their schedule constraints. Four focus groups were conducted, with two groups comprising six women each, while the remaining groups consisted of eight and seven women, respectively. The length of the focus group interviews ranged between 90 and 120 min, depending on the number of participants and the extent of discussion required to comprehensively address the emerging topics. Before participating in the online interviews, all participants were informed that the interviews would be video recorded. Participation was completely voluntary. Participants were also informed that they had the right to decline their involvement at any stage of the study or opt not to answer specific questions, and their decision would be respected without any consequences. The facilitator (NH) initiated each session by reviewing the informed consent form and outlining the ground rules for discussion. The facilitator emphasized the importance of the comfort and respect of all participants by affirming that every viewpoint is valid and there is no "right" or "wrong" answer. In each focus group, the facilitator (NH) introduced the cofacilitator (RS) and acknowledged their roles in the study. This was intended to encourage participants to share their experiences and perspectives openly. Participants were informed that the discussion and data collection were for research purposes and that all information would be kept strictly confidential. The research team (NH, NdV, HR, and RS) collectively developed a semi-structured interview guide based on existing literature and recent UAE research (Hanach et al., 2023). Given that mothers navigate through a multitude of challenges throughout the postpartum period, the interview guide posed a series of questions that transitioned from open questions about the mothers' perceived postpartum period and emotional experiences to more specific questions regarding the challenges and difficulties faced, accessible social support resources, and mental health needs (Supplemental file 1). Furthermore, the facilitator used probing questions and reflecting statements to deepen the discussion and clarify the participants' responses, such as "Could you further explain? Can you tell me more about this experience? Can you give me an example? Let me repeat what you have said:". At the end of each focus group session, the facilitator provided a brief summary of the key points that had been discussed. Participants were then invited to share any additional thoughts and encouraged to ask questions before concluding the session. A concurrent analysis was undertaken, and data collection continued until saturation was achieved, and no new themes were generated (Glaser and Strauss, 1967).

#### Data analysis

Descriptive quantitative analysis (frequency count and percentages) was performed using Statistical Package for the Social Sciences software version 26.0 (IBM Corp, New York, USA). Each interview was recorded and professionally transcribed verbatim, with an additional context provided by field notes taken by the co-facilitator. Thematic analysis was chosen as the method of analysis for the focus groups because of its versatility in accommodating both inductive (data-driven) and deductive (theory-driven) approaches (Boyatzis 1998). This allowed the identification of both anticipated and unanticipated themes. Six phases of Braun and Clarke's reflective thematic analysis were used (Braun and Clarke, 2022). Two researchers (NH and RS) independently analyzed and developed codes and themes. They read the transcripts multiple times and familiarized themselves with the data. A color-coding method was then applied within atlas.ti (v23.0.0) to identify distinct concepts and patterns and form initial codes. Related codes were collated to generate preliminary themes and sub-themes, and then reviewed by a third researcher (HR). Any discrepancies were resolved through discussions and consensus (systematic debriefings) among all the study researchers (NH, NdV, HR, WBI and RS), who were from different cultural backgrounds, age, sex, and parity status. This has facilitated rigorous and thorough analysis of the data by integrating diverse perspectives and interpretations, which in turn increased the reliability and validity of the study findings. The themes were then refined, defined,

and tabulated. The final phase involved writing the report, which provided further clarity to each theme.

#### Member checking

Member checking was performed to ensure the dependability and transferability of the results. After the completion of thematic analysis, each participant was given an opportunity to review the derived themes and sub-themes and provided additional insights. Findings were corroborated by all participants, who found them to be comprehensive and representative of their experiences, and nobody expressed any disagreement or refutation.

#### Analysis

Twenty-seven women, between 2 and 12 months postpartum at the time of the discussions, participated in one of the four focus groups. Overall, the majority (16/27) exhibited severe depressive symptoms at the time of discussions. Demographic and descriptive data for the participating women are presented in Table 1.

#### Themes and sub-themes

Six themes were constructed from the analysis of the focus group discussions: (1) distinct postpartum experiences of primiparous and multiparous mothers, (2) experiences of emotional distress in the initial postpartum stage, (3) multifaceted challenges in breastfeeding, (4) multifactorial influences on postpartum mental health, (5) postpartum social support resources and providers, and (6) the need for formal and informal resources. Table 2 illustrates selected examples of verbatim quotes for identified themes and sub-themes.

## Distinct postpartum experiences of primiparous and multiparous mothers

Mothers described their postpartum period with a predominately negative tone. Interestingly, their perceptions were shaped by their parity with varied experiences between primiparous and multiparous mothers.

# Transformative and shocking for primiparous mothers

Despite prior preparation and education on potential postpartum challenges, they found it to be unexpectedly demanding and chaotic. Additionally, some mothers conveyed feelings of uncertainty, low confidence, and anxiety stemming from their lack of prior experience in this phase of motherhood.

## Exhausting and handful for multiparous mothers

An evident comparison emerged between the current postpartum experience and previous experiences of multiparous mothers. These mothers demonstrated a sense of informed anticipation and recognized that the demands of this phase were temporary. Nevertheless, they described the postpartum period as challenging, exhausting, and tiring, particularly due to the added responsibility of caring for their other children as well.

#### Experiences of emotional distress in the initial postpartum stage

Mothers were subsequently prompted to provide detailed descriptions of their emotional experiences during the postpartum period. Mothers reported a wide range of ambivalent experiences ranging from negative emotions such as worry, sadness, anxiety, and fear to more positive and powerful emotions such as excitement, joy, happiness, and love. However, the mothers predominantly discussed the distressing emotions in the early phase of the postpartum period, described as the first few days to the first few months postpartum.

#### Table 1

Participants Characteristics.

		Ν	%
Focus group 1		6	-
Focus group 2		8	-
Focus group 3		6	-
Focus group 4		7	-
EPDS Score	Normal	8	29.6
	(EPDS<9)		
	Moderate depressive symptoms	3	11.1
	(EPDS 10–12)		
	Severe depressive symptoms	16	59.3
	(EPDS>12)		
Age	$32.47 \pm 4.56^{a}$		
Parity	Primiparous	14	51.9
	Multiparous	13	48.1
No. of Siblings	1 (0–3) <sup>b</sup>		
Nationality	Arab	14	51.9
	Western	9	33.3
	South Asian	4	14.8
Expatriate	Yes	24	88.9
	No	3	11.1
Highest Education Level	High school	3	11.1
	Technical Diploma	2	7.4
	University Degree	22	81.5
Employment Status	Not employed	9	33.3
	Part-time	3	11.1
	Full-time	12	44.4
	Self-employed	3	11.1
Husband's Employment Status	Not employed	1	3.7
	Full time	23	85.1
	Self employed	3	11.1
	Part-time	0	-
Family Monthy Income	5000 - <10,000 AED	2	7.4
	10,000 – 15, 000 AED	0	-
	>15,000 AED	25	92.5
Perception of Family Income	Not enough	3	11.1
	Enough	16	59.3
	More than enough	8	29.6
Infant Sex	Boy	15	55.5
	Girl	10	37
	Twin girls	2	7.4
Childbirth Type	Vaginal	8	29.6
	Cesarean	19	70.4
Current feeding practices	Breastfeeding	6	22.2
	Formula feeding	14	51.8
	Both	7	26
Primary childcare support	Father	8	29.6
	Family	3	11.1
	Nanny	16	59.3
Husband Support	Rarely	5	18.5
	Sometimes	6	22.2
	Usually	5	18.5
	Always	11	40.7

 $^{\rm a}\,$  Mean  $\pm$  SD.

<sup>b</sup> Median (range)

\*\*\*5000 - <10,000 AED  $\approx$  \$1361 - <\$2722 USD; >15,000 AED  $\approx$  >\$4087 USD.

# Feelings of guilt

Guilt was a prevalent emotion among the majority of participating mothers, with some attributing it to feelings of anger or frustration of the demanding nature of the postpartum period, missing their "pre-baby" life. or having to attend to their older children. Others felt guilty about their decision to return to work, however, over time, this guilt tended to diminish as they gradually found a sense of balance. Additionally, mothers who desired to discontinue breastfeeding have also experienced feelings of inadequacy and guilt.

## Lack of emotional responsiveness

Notably, several mothers shared their experiences of feeling emotionally numb or detached, which they perceived as more challenging than feelings of depression or anxiety. They went on to explain that they also felt a sense of confusion, struggling to identify or

## Table. 2

Theme	Sub-theme(s)	Verbatim quotes
Distinct postpartum experiences of primiparous and multiparous mothers	Transformative and shocking for primiparous mothers	"I just could not understand what was happening a lot of just feeling like, there's an uncertainty. I didn't know who this baby was, I didn't know if he'd ever stop crying or like, I didn't know what the next 10 min would hold." [Focus group 3; Western expatriate;]
	Exhausting and handful for multiparous mothers	"Since it's my third I knew exactly what to expect. It's definitely handful, especially with having two other kids. But yeah, definitely tring." [Focus group 1; Arab expatriate] "He had so much energy during the day and then I had another baby to take care of during all the night so it was really tiring for me. But now I know it's just a phase". [Focus group 2; Arab expatriate]
Experiences of emotional distress in the initial postpartum stage	Feelings of guilt	"Something crazy happens when you become a mom, like when something doesn't go the right way. So I would feel a lot of guilt, I would feel a lot of anxiety. I would feel a lot of sadness." [Focus group 3; Westerner] "And sometimes you also feel guilty, if you if you're angry, or if you're sad, like whatever emotion that you get you feel guilty about. So I think there was a lot of guilt from the beginning for me." [Focus group 2; Arab, Emirati]
	Lack of emotional responsiveness	"For the first, particularly the first month or two months, I'm like, Wow, I feel nothing. Like I feel no emotion right now." [Focus group 2; Westerner] "I feel numb. Like it hurts more, because you cannot express your feelings even to your spouse. I think it is harder than depression." [Focus group 4; Westerner]
Multifaceted challenges in breastfeeding	Breastfeeding difficulties	"My baby had difficulty latching but then we found out he had a tongue-tie and it needed to get fixedafter five months, I was confident that he was able to get enough milk just through breastfeeding and my mental health improved once I stopped pumping." [Focus group 4; Westerner]
	Emotional aspect of breastfeeding	"Breastfeeding was a big challenge. I always imagined that I would breastfeed my baby exclusively for the first year at least. But what happened was within two or three (continued on next page)

## Table. 2 (contin

Theme	Sub-theme(s)	Verbatim quotes
		months in, I had to start
		formula." [Focus group 2;
		South Asian]
		"I honestly think my journey
		would have been way
		smoother if I didn't have the
		breastfeeding problems that
		I had." [Focus group 4;
	Limited access to	Arab, expatriate] "And I tried everything you
	lactation guidance in the	can imagine. And I feel like
	UAE	we have a lack of lactation
		consultants in Abu Dhabi
		and insurance doesn't cover
		lactation consultants, so you
		have to pay privately for to
		see them" [Focus group 2;
		Arab expatriate]
		"I actually paid for a
		midwife to come do a home
		visit because I felt like that
		was quite beneficial. I
		wanted to make sure the
		baby was latching correctly.
		I've had a very positive experience with
		breastfeeding." [Focus
		group 1; Westerner]
Multifactorial	Lack of mental health and	"It''s more around the fact
influences on	emotional support from	that I feel like, almost all of
postpartum mental	family and healthcare	the attention is on the
health	providers	physical, and none of the
		attention is on the emotional
		or the mental kind of well-
		being. And you''re just
		expected to kind of just go
		on." [Focus group 1;
		Westerner]
		"No opportunity to deal
		with Postpartum period, as
		no adequate space or time is being given." [Focus group
		2; Westerner]
	Personal and societal	"I would say achieving, like
	expectations	this idea of being the perfect
	expectations	mom. It's always been there
		since day one, that I needed
		to figure out the best thing
		for my baby. Like the best
		routine, and when I could
		not, I felt like I failed."
		[Focus group 2;
		Arabexpatriate-]
		"If you breastfeed, someone
		is going to have an opinion
		and also if you don't
		breastfeed. You can never
		win with people. And if you
		don't meet their
		expectations you feel like a
		failure." [Focus group 2,
		Arab; Emirati] "I was completely ready for
		the normal delivery. And I
		read a lot about it. So that
		was a surprise for me. I was
		not expecting that [] I was
		not expecting that [] I was not ready for this feeling or
		this experience." [Focus
		group 3; Arab expatriate]
	Absence of support	"For me, just to have time
	system for expatriate	for me to find myself, that
	women	was the real struggle, you
		know, like, where do I fit in
		-
		all of this? I just wanted 15

Tabla	2	(continued)	
radie.	21	(continued)	

able. 2 (continued)		
Theme	Sub-theme(s)	Verbatim quotes
	External life circumstances	worry." [Focus group 2; Arab expatriate] "No friends, I feel excluded, no one is really bothering to see if am in for an outing or gathering, people assume that I am busy. I feel like I am cut off society, I felt I am in my own bubble, a lot of isolation." [Focus group 4; Arabexpatriate] "My mother was going through a crisis and she was not able to be present. And I think that's something that triggered my anxiety and I needed her so badly but she was not able to be there but it is something I can't blame
	Work-life balance	her for." [Focus group 4; Arab, non-Emirati] "[] Work kind of supported my mental health. Because in the weekend
		there are too many things that I have to do, like preparing or putting a plan for my work or doing house chores like cleaning and cooking or even doing some social activities, plus taking care of my babyIt will be very, very challenging because I'm all the time with my baby." [Focus group 3; Arab expatriate]
Postpartum scial support resources and providers	Instrumental support from family and nanny	"It's part of our culture, the first 40 days after you give birth, you go back to your mom's house. So when after I gave birth, I was at my mom's for 40 days. I had a lot of help from my mom and my sisters. They would cook the food []" [Focus group 2; Arab, Emirati] "My mom came for a month and a bit after I delivered to help me and that's the help that I felt I needed, which is to someone to caok for me, someone to take care of me. The baby was fine. But I needed to be taken care of. And my mom was that for me as well." [Focus group 2; Westerner]
	Emotional support from husbands	"My husband helped me the most, he saw my anxiety and he realized that I am not doing well. His-role was super important, he really stepped in and he was the only person to tell that I wasn't normal and he'd encourage me to go and seek therapy." [Focus group 4; Arab, non-Emirati]
The need for formal and informal resources	Specialized sychotherapy	"Tve just restarted personal therapy, but it's not coming from a maternal postpartum kind of point of view because she is not like specialized in postpartum mental health." [Focus group 1; Westerner] (continued on next page)

#### Table. 2 (continued)

eme	Sub-theme(s)	Verbatim quotes
		"So many times, I was like,
		wait, let me just go to a
		therapist or something.
		Because I mean, I felt like I
		needed that support
		psychologically, I wanted
		some support, like
		professional support. And every time I bring it up at
		first there was this reaction.
		Whether from my spouse, or
		my family. It was like, no,
		what are you talking about?
		Don't ever speak about this
		again." [Focus group 3;
		South Asian]
	Mental health guidance	"You go to your six-week
	from healthcare	appointment and they check
	professionals	your C-section, the stitches,
		and then they will tell you
		okay, do you want to go on birth control?. And then
		you're done, you never see
		them again until you're
		pregnant again They don't
		talk about mental health or
		ask if you want to see
		someone or how are you
		feeling?" [Focus group 2;
		Arab, Emirati]
	Peer support and	"One thing that I felt like I
	community networks	needed and I didn't have
		was a network of other moms. I am in a country
		where I am an expat and I
		work from home. I haven't
		been here for very long. I
		don't have any friends here,
		really. So I don't have a
		network of other moms that
		I speak to or can
		troubleshoot or can be like a
		listening point." [Focus
		group 1; Westerner]
		"[] just like now, this
		group discussion, we are all strangers but it feels very
		therapeutic." [Focus group
		4; Arab expatriate]
		"There's something about
		people that you're not
		extremely familiar with kind
		of like sitting with a
		therapistthat makes the
		venting a bit better, I don't
		know why." [Focus group
		2; Westerner]
	Solitude to cope with self-	"[] whenever I have the
	identity crisis	time to just sit alone, enjoy a
		cup of coffee. And so it's usually comes me down and
		can recharge me again. Or
		even driving around in the
		car alone" [Focus group 4;
		Arab expatriate]
		" I go to the gym. I made it
		like a routine when my older
		kid is at the nursery and my
		newborn is taking a nap.
		This has improved a lot my
		<i>mental health</i> " [Focus group 2; Arab expatriate]

understand their own emotional state. This lack of emotional responsiveness was also associated with feelings of isolation, neglect, and loneliness especially among expatriates mothers.

#### Multifaceted challenges in breastfeeding

As mothers described their emotional experiences, they unveiled a multitude of unforeseen challenges confronted during the postpartum period, often centered around their experience with breastfeeding.

#### Breastfeeding difficulties

Throughout the four focus group discussions, the participants consistently identified breastfeeding as a substantial challenge during the postpartum period. The majority expressed that breastfeeding was not as intuitive as initially anticipated. They described their concerns about their infants' inability to breastfeed effectively and the common worry surrounding their insufficient milk supply. Some mothers reported that breastfeeding difficulties were attributed to experiencing mastitis, pain and discomfort at the cesarean section site incision, and infant tongue-tie issues. Yet, as mothers recovered and received appropriate treatment, these difficulties resolved.

#### Emotional aspect of breastfeeding

Mothers frequently shed light on the impact of breastfeeding on their emotional states. Several mothers reported being concerned about their infants' inability to breastfeed effectively and worried about having an insufficient milk supply. They also described both breastfeeding and pumping as physically and emotionally exhausting, especially when having to take care of their other children. As for those who encountered difficulties and had to deviate from their initial plan of exclusively breastfeeding, the introduction of formula triggered anxiety and intensified feelings of pressure for not meeting societal and personal expectations, further exacerbating the challenges faced during this period.

#### Limited access to lactation guidance in the UAE

Most mothers also emphasized the limited availability of accessible and affordable lactation support and consultation services in the UAE which have been significant barriers to achieving successful possible experiences. For instance, some of the mothers who were exclusively pumping and had to return to work reported that they stopped pumping due to an unsupportive work environment. Moreover, some mothers attributed the reasons for breastfeeding cessation to insufficient preastfeeding education before hospital discharge and the inability to ocate and or afford lactation consultations as they are not covered by heir insurance. On the other hand, of the six mothers who were exclusively breastfeeding at the time of the discussions (at 2, 3, 10, and 1 months postpartum), four reported positive breastfeeding experiences as they were able to proactively seek support, through paid services such as attending antenatal breastfeeding educational sessions, consulting with a lactation consultant, and receiving midwives home visits in the first month postpartum. All these resources were deemed to be highly beneficial as they have positively influenced the mothers' preastfeeding journey.

## Multifactorial influences on postpartum mental health

Another prominent theme that developed from the mothers' discussions, was the various factors that exerted significant influence on their mental health during the postpartum period.

## Lack of mental health support from family and healthcare providers

Many mothers noted that there is a predominant focus on physical recovery after childbirth, whether from healthcare providers or family members, rather than emotional and mental wellbeing. This has negatively impacted their mental health during the postpartum period.

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Additionally, they underscored that while they highly valued the support they received in managing household chores and childcare their need for mental health support as they perceived themselves capable of handling the "temporary" childcare challenges.

#### Personal and societal expectations

Mothers reported that their own expectations, as well as those imposed by others like family members and friends, greatly shaped their mental health during the postpartum period. They elaborated that these expectations comprised various aspects including the constant pursuit of an idealized image of motherhood, the challenges related to breastfeeding expectations and parenting goals, and the disappointment stemming from unmet childbirth experience expectations such as cesarean section instead of vaginal childbirth.

## Absence of support system for expatriate mothers

Certain mothers, especially expatriates, who did not have a sufficient support system experienced feelings of isolation, loneliness, and neglect during the postpartum period. They voiced that having no family and friend as troubleshooters or listening points adversely affected their mental health.

#### External life circumstances

External factors, including family events and family member illness, had a significant impact on some mothers' mental health, restricting their access to informal support and causing mental health challenges beyond the postpartum period.

#### Work-life balance

Mothers returning to work two months after childbirth reported anxiety and guilt over the separation from their babies and the balance between work and childcare. Conversely, some found that resuming work after a few weeks provided a break from the intensity of motherhood demands, offering structure and routine that positively impacted their mental health. Notably, for some, weekends became more stressful due to full-day childcare responsibilities.

## Postpartum social support resources and providers

After learning about the mothers' mental health influencing factors, we discussed the mothers' social support resources and providers which they particularly valued during the postpartum period.

### Instrumental support from family and nanny

Mothers across all focus groups consistently identified nannies and immediate family members including the husband and own mothers as primary sources of childcare support during the postpartum period. Nonetheless, some Arab mothers expressed their appreciation for the invaluable instrumental support they received from their own mothers, particularly in the first three months postpartum period. They emphasized that their mothers' assistance with household chores, such as cooking and cleaning, played a pivotal role in allowing them to effectively manage and cope with the demands of the postpartum phase. An Emirati mother revealed that she spent the first two months after childbirth at her mother's house to receive dedicated postpartum support, aligning with her family's cultural practices and tranditions. Other extended family members such as sisters and in-laws were noted as additional sources of support.

## Emotional support from husbands

In all group discussions, mothers consistently highlighted that their husbands' support was inevitable, particularly among expatriate mothers without nearby family members. They heavily relied on their husbands for various forms of support, including both practical and emotional assistance. While a few mothers mentioned a lack of emotional support from their husbands, who seemed to be more inclined towards practical and hands-on assistance, the majority reported receiving emotional and affirmation support from their partners, which they perceived as an utmost necessity. They explained that their husbands were attentive listeners who recognized their emotional state and provided the necessary emotional support. Futhermore, two mothers mentioned that the emotional validation they received from their husbands played a significant role in their decision to continue breastfeeding.

#### The need for formal and informal resources

Throughout the discussions, mothers highlighted various mental health needs and in turn, they identified a range of potential formal and informal resources that could improve their postpartum mental wellbeing.

#### Specialized psychotherapy

Across the four focus group discussions, mothers conveyed their desire to seek professional support from a specialized therapist as they were uncertain about whether they were experiencing baby blues or depressive symptoms, often assuming it was a challenging phase that would naturally resolve with time. Only one mother reported ongoing psychotherapy after childbirth, however, she found it insufficient because the therapist lacked specialization in maternal mental health, and she could not locate a perinatal therapist in the UAE tailored to her specific needs. Nevertheless, some mothers of Arab or South Asian nationalities expressed their need for therapy during the postpartum period but refrained from seeking it due to various barriers. They revealed collective family judgments against therapy, either due to cultural non-acceptance or concerns about the absence of religious faith when considering therapy.

#### Mental health guidance from healthcare professionals

Mothers recognized the significant healthcare professional support they received during pregnancy but expressed dissatisfaction and disappointment after childbirth. Many felt that healthcare professionals primarily focused on physical aspects, neglecting their mental health needs. However, some mothers had positive experiences with specific healthcare providers like physiotherapists and pediatricians, who were empathetic and attentive to their mental wellbeing, allocating time for mental health checks and offering affirmational support. Nonetheless, none of the mothers reported receiving standardized assessments for postpartum mental health, and most expressed a desire for enhanced mental health guidance and support during the postpartum period.

#### Peer support and community networks

The importance of peer support and having a network of mothers to address mental health concerns was a recurring theme in all the focus group discussions, particularly among expatriate mothers. Mothers further highlighted that the presence of a supportive community comprising mothers with the same cultural background and infant age can be profoundly beneficial. They found great value in connecting with other mothers, who shared similar experiences and offered support. Specific Facebook groups such as Australian mothers with twins and British moms in the UAE were considered as valuable resources in providing expatriate mothers with a platform to interact, share knowledge, and seek guidance. Moreover, one mother shared her experience of attending a group support session every four weeks after childbirth with the group members changing each time. She described the sessions as unexpectedly therapeutic, particularly because she did not know the other mothers. She also appreciated the ability to bring her son to these sessions, which enhanced her overall experience. In contrast, a mother who participated in a virtual network of mothers through WhatsApp conveyed that conversations often evolved into a competitive atmosphere and became inundated with unsolicited advice. She emphasized the unhelpful nature of the group, which comprised over 200 mothers.

## Solitude to cope with self-identity crisis

Many mothers reported that as the focus was centered on their babies, they sought self-recognition and needed time to rediscover their own identities. However, to do so, they emphasized the importance of having solitary time to implement coping strategies like resting, savouring a cup of coffee, or engaging in personal activities such as going to the gym. They further elaborated that this self-reliance would enable them to overcome difficult situations and improve their mental health.

#### Discussion

This study aimed to explore the experiences and perceptions of mothers in the UAE regarding their mental health needs and available resources during the postpartum period. The anlysis revealed that distressing emotions are prevailing in the initial postpartum stage. Mothers encountered multifaceted challenges in breastfeeding related to the practical and emotional aspects. The lack of mental health support from family and healthcare providers in addition to the societal and personal expectations, absence of support system for expatriates mothers, and external life circumstances have adversely impacted the mothers' mental health after childbirth. In respect to work-life balance, while initially it affected the working mothers' mental health, as they gradually settled into their new roles and responsibilities, work was perceived as favorable for their mental health. Mothers further valued the receipt of instrumental support from immediate family members and nannies coupled with emotional support from their husbands. They also identified the need for formal (specialized psychotherapy and mental health guidance from healthcare providers) and informal (peer support and community networks and solitude to cope with self-identity crisis) resources to improve their postpartum mental health.

In the present study, parity was found to potentially influence mothers' perception of the postpartum period, but not necessarily their emotional experiences, as the majority of the mothers expressed a comparable range of emotions after childbirth. Some studies have indicated that primiparous mothers may experience higher levels of emotional distress after childbirth, including symptoms of anxiety and depression (Martínez-Galiano et al., 2019; Motegie et al., 2020). Other studies have found similar results among multiparous mothers (Figueiredo and Conde, 2011; Salonen et al., 2014). On the other hand, when experiences of mothers with emotional difficulties were examined in a qualitative research setting (Coates et al., 2014), findings revealed that multiparous and primiparous mothers comparably endorsed themes such as feelings of "inexperience" and "unknown in healthcare system", even when primiparous mothers were expected to endorse those themes more. Consequently, authors suggested a lack of clear differences between multiparous and primiparous women in terms of postnatal emotional experiences and underlined the inconclusive relationship between parity and maternal distress (Coates et al., 2014). This implies the importance of addressing postpartum emotional wellbeing, irrespective of the mother's parity.

Breastfeeding was perceived as a significant challenge for mothers in the postpartum period. The majority reported that the limited availability of accessible and affordable lactation support and consultation services, hindered their ability to achieve a successful breastfeeding experience. This aligns with previous UAE and international research, which identified that the lack of a supportive environment, lack of timely professional guidance, inadequate breastfeeding knowledge and skills preparations, and mothers' low breastfeeding self-efficacy affect their ability to breastfeed successfully (Rollins et al., 2016; Zhang et al., 2018; Hadia et al., 2018). On the other hand, some mothers highlighted the positive impact of husband support on their breastfeeding journey, a factor not consistently confirmed in previous UAE research where reliance on informational and instrumental support from female networks was more prominent (Radwan et al., 2021). However, systematic evidence suggests that emotional and appraisal support from husbands significantly influences breastfeeding practices and duration (Ogbo et al., 2020). In our study, mothers stressed the vital role of husbands after childbirth, emphasizing the importance of emotional support for their overall wellbeing. Notably, various studies established that a husband's support is a predictor of anxiety and depression in women during the postpartum period (Antoniou et al., 2022). This can be attributed to the husband being regarded as the most important person in helping the mother navigate the challenges and emotional fluctuations typical of the postpartum period (Hannon et al., 2022).

In this study, over half of the participating mothers experienced severe depressive symptoms (EPDS  $\geq$ 13), and only 6 out of 27 mothers exclusively breastfed. While probable contributing factors were not specifically assessed, a synthesis of qualitative studies exploring breastfeeding experiences among mothers with postpartum depression suggested that feelings of guilt and inadequacy regarding breastfeeding difficulties and early cessation may contribute to the onset of postpartum depression (Da Silva Tanganhito et al., 2020). Furthermore, the stress and anxiety experienced by mothers with breastfeeding difficulties can be exacerbated by social pressure and personal expectations can (Chaput et al., 2016). Studies have shown that women with negative breastfeeding experiences are more likely to have higher EPDS scores  $(\geq 13)$ . Conversely, given the existing evidence on the bidirectional relationship between maternal mental health and breastfeeding, postpartum depression is consistently linked to breastfeeding cessation (Tucker et al., 2022). Therefore, this suggests the need for comprehensive interventions addressing both the practical and emotional aspects of breastfeeding challenges. Pezlev et al. (2022) proposed breastfeeding-focused interventions that span the perinatal period and provide individualized support from professionals and peers across continuum settings to effectively improve both maternal mental health and breastfeeding outcomes. Additionally, Abbaspoor et al. (2023) suggested the implementation of postpartum supportive education program aimed at enhancing husbands' understanding of maternal characteristics and postpartum issues to foster husbands' social support and maternal self-efficacy, while simultaneously alleviating maternal stress during the postpartum period.

The questionnaire results indicated that the majority of mothers obtained the greatest assistance from their nannies. However, in line with prior qualitative research (Negron et al., 2013), when mothers were probed about the principal sources of social support they received, they emphasized their immediate family members as important sources of instrumental support. This intriguing discrepancy suggests that, although nannies fulfill a crucial role in providing childcare assistance, their support is perhaps expected as part of their professional duties and thus, mothers perceive close relatives as the key support pillars in their lives. Moreover, our analysis revealed that cultural norms may play a role in shaping the patterns and mobilization of support after childbirth. Most Arab postpartum women expressed expectations and reliance on instrumental support from their own mothers. This fits with evolutionary theories that emphasize the importance of the maternal grandmother for reproductive success and suggest that own mother constitute a protective factor for the development of maternal postpartum mental health problems (Reim et al., 2023). It also reinforces the collectivistic nature of Arab societies, where family values are strongly emphasized, including mutual assistance and shared responsibility (Abou Salih et al., 2023). Conversely, while Arab mothers in our study valued support from their own mothers, it has been argued that the "overly of family support" in Arab cultures could increase the mother's vulnerability to mental health challenges (Qutteina et al., 2018). Therefore, it is crucial to explore the underlying dynamics that may lead to this paradox to ensure a balance between preserving cultural practices and meeting mothers' postpartum needs.

Throughout the focus group discussions, participating mothers frequently voiced an interest in psychotherapy, however, only one reported to have sought formal support. Some Arab and South Asian mothers identified cultural stigma as a barrier to seeking professional support, causing demeaning attitudes towards mental health. A plausible explanation could be the perception of mental health issues in these communities as a threat to the family integrity and reputation (Andrade et al., 2022). Moreover, the lack of knowledge about postpartum mental health issues among mothers impacted their help-seeking behaviors. Studies have shown that when symptoms of postpartum depression arise, most women are unable to recognize the problem because they are unfamiliar with its signs and symptoms which make them reluctant to seek professional support (Grissette et al., 2018). Despite ongoing efforts to improve mental health services, the availability and accessibility of postpartum mental health care in the UAE remains a substantial challenge. This could be attributable to the shortage of mental health providers in the UAE, especially Arabic-speaking professionals, coupled with limited mental health legislation and policies in the country (MOHAP, 2023) as well as the remarkably high cost of mental health care in the country - 201% higher than the global average, as reported by the Kenkou Index (Wegaya, 2022).

Consistent with previous studies (Calisster et al., 2011; Nan et al., 2022), mothers reported significant disappointment and dissatisfaction with healthcare professionals during postpartum follow-up concerning their mental health and emotional needs. The disparity between the level of attentive care provided to women during pregnancy and childbirth, compared to the more infant-centered postpartum care, was significant, leading to a sense of inadequate support among many women (Hannon et al., 2022). However, a qualitative study conducted in Brazil (Santos Junior et al., 2013), investigating the experiences of healthcare providers in delivering services to mothers with postpartum depression, revealed that healthcare providers face constraints in terms of time availability and limited access to the necessary diagnostic tools for identifying women at risk of developing postpartum depression. Therefore, prioritizing mental health education and professional training on postpartum mental health problems for both mothers and healthcare professionals is essential to ensure the provision of adequate support and facilitates access to appropriate care. Further research is needed to evaluate the cultural adaptation of formal treatments in contexts where mental health issues are highly stigmatized and to address the barriers faced by mothers in accessing mental health services.

In this study, mothers, particularly expatriates, emphasized the value of peer support and community networks for addressing their mental health needs. They highlighted that having a network of other mothers with similar experiences and backgrounds could be profoundly beneficial for offering emotional support and validation. McKleish and Redshaw (2017) affirmed that the supportive atmosphere of peer support, characterized by active and non-judgmental listening, creates a secure environment in which mothers' concerns are normalized and their parenting self-efficacy and self-esteem are enhanced. This suggests an empowerment-oriented approach for addressing mothers' mental health needs, distinct from medical models to engage mothers in existing services (Raymond et al., 2014). Recent systematic reviews and meta-analyses showed that technology-based peer-support interventions effectively reduce the risk of postpartum depression and improve anxiety outcomes among new mothers (Hanach et al., 2019; Yamashita et al., 2022; Stentzel et al., 2023). The latter could be a promising approach for overcoming barriers related to limited resources such as limited social networks, insufficient support, and time constraints. In the UAE context, further research and initiatives are necessary to investigate the effectiveness and implementation of evidence-based, culturally responsive peer support programs tailored to meet the needs of mothers.

The aforementioned mental health needs Involving formal and Informal resources echo recent findings that highlight the perceived lack of emotional, instrumental, and informational support, which is associated with an increased risk of postpartum depression among expatriate mothers (Banbury et al., 2023). This observation could potentially explain the severe depressive symptoms in our study, given that the majority of our participating mothers were also expatriates. In the context of the UAE, the heterogeneous nature of the population implies variations in the needs and experiences of mothers in postpartum care as well as differences in the levels of acculturation. Acculturative stress has been shown to impact expatriate mothers' ability to perceive sufficient social support, familiarize themselves with local resources, and engage in help-seeking behavior, which, in turn, can have a pronounced effect on their postpartum mental health (Alhasanat-Khalil et al., 2019).

## Strengths and limitations

To the best of our knowledge, this is the first focus group study conducted in the UAE to delve into the experiences and perceptions of mothers regarding their mental health needs and the resources available during the postpartum period. The utilization of synchronous online focus group discussions via video conferencing facilitated geographic accessibility (Rivaz et al., 2019) and involved participants from different Emirates such as Sharjah, Dubai, and Abu Dhabi. This inclusiveness allows for a comprehensive understanding of diverse experiences, considering variations in healthcare systems across these regions. The online format also provided convenience and flexibility for the participating mothers and accommodated their unique needs by empowering them to actively engage from their preferred locations and even the ability to breastfeed their infants during discussions. This attention to prioritizing participant comfort and uninterrupted participation adds to the trustworthiness and reliability of the study's findings. Nevertheless, it is imperative to address the limitations of this study when interpreting the analysis findings. First, the probable presence of self-selection bias, as some mothers may have chosen to participate based on their specific interests and experiences with postpartum mental health. Second, it is important to note the underrepresentation of the South Asian ethnicity in this study. Of the 27 participants, only four mothers were identified as South Asian, despite South Asians comprising 59.4% of the UAE population (Central Intelligence Agency, 2023). Another limitation which limits the generalizability of the findings and overall representativeness of the sample, is that the majority of the mothers were well-educated, married, and had a high family income. It is important to explore the distinct perceptions of the postpartum period and mental health needs of mothers from lower socioeconomic backgrounds and or who are single. Furthermore, we have not stratified groups of mothers with comparable EPDS scores and different postpartum stages., which may have influenced the extent and intensity of shared experiences within the focus groups. However, while it could have brought more insights into the mental health problem, the scope of this study was broader and served as an overview of the multifaceted nature of the mothers' postpartum experiences. This mixed groups also ensured a representation of divers perspectives and contributed to nuanced understanding of maternal mental health needs.

#### **Conclusions and implications**

This focus group study represents an important step toward understanding the postpartum experiences and mental health needs of women in the UAE. These findings have several implications for healthcare professionals, policymakers, and researchers. Healthcare professionals should receive training on postpartum mental health problems and strategies should be developed to improve the continuity of care from pregnancy to the postpartum period, ensuring that the mother's mental health needs receive equal attention and support. Exploring and implementing an evidence-based standardized structured screening protocol is essential for early detection and optimized postpartum care in the UAE. Policymakers should prioritize mental health education and support programs specifically tailored for mothers, addressing cultural stigma associated and promoting the self-help-seeking skills and knowledge beyond traditional healthcare settings. The involvement of family members in mental health education may also foster a sustainable system of care. Furthermore, the UAE is known for its rapid techonological advancements. For instance, the National Programme for Happiness and Wellbeing (Government of the UAE, 2023) launches various campaigns comprising virtual sessions and hotline numbers to support residents' wellbeing. Therefore, building upon previous successes, the expansion of telehealth services to reach out new mothers could be a viable option in enhancing their access to mental health support during the postpartum period. Establishing organized support networks, both in-person and online, can provide safe spaces for sharing experiences and offering mental health support especially for expatriate mothers lacking the presence of friends and family in the UAE. Future research should stratify participants by depression risk levels and postpartum timing to examine potential variations in postpartum perceptions and mental health needs.Exploring healthcare providers's perpectives would offer inights into available support and resources for postpartum mental health in the UAE. Ultimately, a collaborative multidisciplinary approach should be adopted to address the mental health needs of mothers during the postpartum period.

#### CRediT authorship contribution statement

Nivine Hanach: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. Hadia Radwan: Methodology, Project administration, Supervision. Wegdan Bani Issa: Methodology, Validation, Writing – review & editing. Roba Saqan: Data curation, Formal analysis, Investigation, Methodology, Resources, Software. Nanne de Vries: Conceptualization, Methodology, Supervision, Validation, Writing – original draft, Writing – review & editing.

#### Declaration of competing interest

None declared.

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#### Supplementary materials

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#### References

Abbaspoor, Z., Sharifipour, F., Javadnoori, M., Moghadam, Z.B., Cheraghian, B., Najafian, M., 2023. Evaluation of the effectiveness of a postnatal support education program for husbands in promotion of their primiparous wives' perceived social support: a randomized controlled trial. BMC Women's Health 23 (1), 139. https:// doi.org/10.1186/s12905-023-02270-x. Page.

Abou-Saleh, M.T., Ghubash, R., 1997. The prevalence of early postpartum psychiatric morbidity in Dubai: a transcultural perspective. Acta Psychiatr. Scand. 95, 428–432.

- Alhammadi, S.M., Hashem, L.A., Abusbeih, Z.R., Alzaabi, F.S., Alnuaimi, S.N., Jalabi, A. F., Abdulrahman, M., 2017. Predictors of postpartum depression in Dubai, a rapidly growing multicultural society in the United Arab Emirates. Psychiatria Danubina 29 (Supplement 3), 313–322.
- Alhasanat-Khalil, D., Giurgescu, C., Benkert, R., Fry-McComish, J., Misra, D.P., Yarandi, H., 2019. Acculturation and postpartum depression among immigrant women of Arabic Descent. J. Immigrant Minority Health 21 (6), 1208–1216. https:// doi.org/10.1007/s10903-018-0837-z.
- American Psychological Association. 2022. Postpartum depression: causes, symptoms, risk factors, and treatment options. Retrieved from: https://www.apa.org/topics/wo men-girls/postpartum-depression [Last accessed: May 9, 2023].
- Antoniou, E., Tzanoulinou, M.D., Stamoulou, P., Orovou, E., 2022. The important role of partner support in women's mental disorders during the perinatal period. a literature review. Maedica 17 (1), 194–200. https://doi.org/10.26574/ maedica.2022.17.1.194.
- Asadi, M., Noroozi, M., Alavi, M., 2022. Identifying women's needs to adjust to postpartum changes: a qualitative study in Iran. BMC Pregnancy Childbirth 22, 115. https://doi.org/10.1186/s12884-022-04459-8. Page.

- Banbury, S., Lusher, J., Henton, I., 2023. The relationship between postpartum depression and postpartum support: expatriate and non-expatriate comparisons. Int. J. Sci. Res. Sci. Technol. 10 (1), 326–332 pages.
- Boyatzis, R.E., 1998. Transforming Qualitative information: Thematic analysis and Code Development. Sage.
- Braun, V., Clarke, V., 2022. Conceptual and design thinking for thematic analysis. Qual. Psychol. 9 (1), 3 page.
- Centers for Disease Control and Prevention, 2022. Identifying Maternal depression. Division of Reproductive Health. National Center for Chronic Disease Prevention and Health Promotion. Retrieved from: https://www.cdc.gov/reproductivehealth/vital -signs/identifying-maternal-depression/index.html [Last accessed: May 8, 2023].
- Central Intelligence Agency. 2023. United Arab Emirates Country Summary. Retrieved from: https://www.cia.gov/the-world-factbook/countries/united-arab-emirates/su mmaries [Last accessed: June 19, 2023].
- Chaput, K.H., Nettel-Aguirre, A., Musto, R., Adair, C.E., Tough, S.C., 2016. Breastfeeding difficulties and supports and risk of postpartum depression in a cohort of women who have given birth in Calgary: a prospective cohort study. CMAJ Open 4 (1), E103–E109. https://doi.org/10.9778/cmajo.20150009.
- Cox, J.L., Holden, J.M., Sagovsky, R., 1987. Detection of postnatal depression: development of the 10-item Edinburgh postnatal depression scale. Br. J. Psychiatry 150 (6), 782–786. https://doi.org/10.1192/bjp.150.6.782.
- Da Silva Tanganhito, D., Bick, D., Chang, Y.S, 2020. Breastfeeding experiences and perspectives among women with postnatal depression: a qualitative evidence synthesis. Women Birth 33 (3), 231–239. https://doi.org/10.1016/j. wombi.2019.05.012.
- Dodgson, J.E., 2019. Reflexivity in qualitative research. J. Hum. Lact. 35 (2), 220–222. https://doi.org/10.1177/0890334419830990.
- Epperson, C.N., Huang, M.Y., Cook, K., Gupta, D., Chawla, A., Greenberg, P.E., Eldar-Lissai, A., 2020. Healthcare resource utilization and costs associated with postpartum depression among commercially insured households. Curr. Med. Res. Opin. 36 (10), 1707–1716. https://doi.org/10.1080/03007995.2020.1799772.
- Figueiredo, B., Conde, A., 2011. Anxiety and depression symptoms in women and men from early pregnancy to 3-months postpartum: parity differences and effects. J. Affect. Disord. 132 (1–2), 146–157. https://doi.org/10.1016/j.jad.2011.02.007. Issues.
- Gedzyk-Nieman, S.A., 2021. Postpartum and paternal postnatal depression: identification, risks, and resources. Nurs. Clin. North Am. 56 (3), 325–343. https:// doi.org/10.1016/j.cnur.2021.04.001.
- Glaser, B.G., Strauss, A.L, 1967. The Discovery of Grounded Theory: Strategies for Qualitative Research. Aldine, Chicago.
- Government of the United Arab Emirates, 2023. National Programme for Happiness and Wellbeing. Retrieved from. https://u.ae/en/about-the-uae/the-uae-government/ government-of-future/happiness/national-programme-for-happiness-and-wellbeing.
- Green, K., Broome, H., Mirabella, J., 2006. Postnatal depression among mothers in the United Arab Emirates: socio-cultural and physical factors. Psychology, Health Medicine 4 (11), 425–431. https://doi.org/10.1080/13548500600678164.
- Grissette, B.G., Spratling, R., Aycock, D.M., 2018. Barriers to help-seeking behavior among women with postpartum depression. J. Obstetric, Gynecologic Neonatal Nurs. 47 (6), 812–819.
- Hamdan, A., Tamim, H., 2011. Psychosocial risk and protective factors for postpartum depression in the United Arab Emirates. Arch. Women's Mental Health 14 (2), 125–133. https://doi.org/10.1007/s00737-010-0189-8.
- Hanach, N., Radwan, H., Fakhry, R., Dennis, C.L., Issa, W.B., Faris, M.E., De Vries, N., 2023. Prevalence and risk factors of postpartum depression among women living in the United Arab Emirates. Soc. Psychiatry Psychiatric Epidemiol. 58 (3), 395–407.
- Hannon, S., Newnham, E., Hannon, K., Wuytack, F., Johnson, L., McEvoy, E., Daly, D., 2022. Positive postpartum well-being: what works for women. Health Expectations 25 (6), 2971–2981.
- Haque, A., 2020. Mental health laws and reflections on culture: the case of United Arab Emirates. J. Muslim Mental Health 14 (1). https://doi.org/10.3998/ immh.10381607.0014.103. Doi:
- Karout, N., Abdelaziz, S.H., Goda, M., Al Tuwaijri, S., Almostafa, N., Ashour, R., Alradi, H., 2013. Cultural diversity: a qualitative study on Saudi Arabian women's experience and perception of maternal health services. J. Nurs. Educ. Practice 3 (11), 172–182.

Krueger, R.A., & Casey, M.A. 2002. Designing and conducting focus group interviews 18. Luca, Dara Lee, Margiotta, Caroline, Staatz, Colleen, Garlow, Eleanor, Christensen, Anna, Zivin, Kara, 2020. Financial toll of untreated perinatal mood and anxiety disorders: among 2017 births in the United States. Am. J. Public Health 110, 888–896. https:// doi.org/10.2105/AJPH.2020.305619.

- Martínez-Galiano, J.M., Hernández-Martínez, A., Rodríguez-Almagro, J., et al., 2019. Relationship between parity and the problems that appear in the postpartum period. Sci. Rep. (9), 11763. https://doi.org/10.1038/s41598-019-47881-3.
- Mohamad Ibrahim, O.H., Ibrahim, R.M., Al-Tameemi, N.K., Riley, K., 2020. Challenges associated with mental health management: barriers and consequences. Saudi Pharmac. J. 28 (8), 971–976.
- MOHAP, 2023. The National Policy For the Promotion of Mental Health in the UAE. Ministry of Health and Prevention. https://mohap.gov.ae/app \_content/legislations/php-law-en-68/mobile/index.html#p=1.
- Motegi, T., Watanabe, Y., Fukui, N., Ogawa, M., Hashijiri, K., Tsuboya, R., Sugai, T., Egawa, J., Araki, R., Haino, K., Yamaguchi, M., Nishijima, K., Enomoto, T., Someya, T., 2020. Depression, anxiety and primiparity are negatively associated with mother-infant bonding in Japanese mothers. Neuropsychiatric Dis. Treatment 16, 3117–3122. https://doi.org/10.2147/NDT.S287036.
- Murray, L., Carothers, A.D., 1990. The validation of the Edinburgh Post-natal Depression Scale on a community sample. Br. J. Psychiatry 157, 288–290.

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- Negron, R., Martin, A., Almog, M., Balbierz, A., Howell, E.A., 2013. Social support during the postpartum period: mothers' views on needs, expectations, and mobilization of support. Matern. Child Health J. 17 (4), 616–623. https://doi.org/10.1007/s10995-012-1037-4.
- Nicole, L., Duffett-Leger, L., Stewart, M., Hegadoren, K., Dennis, C.L., Rinaldi, C.M., Stoppard, J., 2007. Canadian mothers' perceived support needs during postpartum depression. J. Obstetric Gynecologic Neonatal Nurs. 36 (5), 441–449.
- Ogbo, F.A., Akombi, B.J., Ahmed, K.Y., Rwabilimbo, A.G., Ogbo, A.O., Uwaibi, N.E., Ezeh, O.K., Agho, K.E., 2020. Breastfeeding in the community-how can partners/ fathers help? A systematic review. Int. J. Environ. Res. Public Health 17 (2), 413. https://doi.org/10.3390/ijerph17020413.
- Qutteina, Y., Nasrallah, C., James-Hawkins, L., Nur, A.A., Yount, K.M., Hennink, M., Rahim, H.F.A., 2018. Social resources and Arab women's perinatal mental health: a systematic review. Women Birth 31 (5), 386–397.
- Radwan, H., Fakhry, R., Metheny, N., Baniissa, W., Faris, M.A.I.E., Obaid, R.S., Al Marzooqi, S., Al Ghazal, H., ElHalik, M., Dennis, C.L, 2021. Prevalence and multivariable predictors of breastfeeding outcomes in the United Arab Emirates: a prospective cohort study. Int. Breastfeeding J. 16 (1), 79. https://doi.org/10.1186/ s13006-021-00428-7.
- Raymond, N.C., Pratt, R.J., Godecker, A., Harrison, P.A., Kim, H., Kuendig, J., O'Brien, J. M, 2014. Addressing perinatal depression in a group of underserved urban women: a focus group study. BMC Pregnancy Childbirth 14 (336). https://doi.org/10.1186/ 1471-2393-14-336.
- Riem, M.M., Bakermans-Kranenburg, M.J., Cima, M., van IJzendoorn, M.H., 2023. Grandparental support and maternal postpartum mental health: a review and metaanalysis. Human Nature 34 (1), 25–45.
- Rivaz, M., Shokrollahi, P., Ebadi, A., 2019. Online focus group discussions: an attractive approach to data collection for qualitative health research. Nurs. Practice Today 6 (1), 1–3. https://doi.org/10.18502/npt.v6i1.386.
- Rollins, N.C., Bhandari, N., Hajeebhoy, N., Horton, S., Lutter, C.K., Martines, J.C., Piwoz, E.G., Richter, L.M., Victora, C.G., Lancet Breastfeeding Series Group, 2016. Why invest, and what it will take to improve breastfeeding practices? Lancet 387 (10017), 491–504. 10.1016/S0140-6736(15)01044-2.
- Sacks, E., Finlayson, K., Brizuela, V., Crossland, N., Ziegler, D., Sauvé, C., Langlois, É.V., Javadi, D., Downe, S., Bonet, M., 2022. Factors that influence uptake of routine

postnatal care: findings on women's perspectives from a qualitative evidence synthesis. PLoS One 17 (8). https://doi.org/10.1371/journal.pone.0270264. Article e0270264.

- Salonen, A.H., Oommen, H., Kaunonen, M., 2014. Primiparous and multiparous mothers' perceptions of social support from nursing professionals in postnatal wards. Midwifery 30 (4), 476–485. https://doi.org/10.1016/j.midw.2013.05.010.
- Sandelowski, M., 2010. What's in a name? Qualitative description revisited. Res. Nurs. Health (1), 77–84, 33m.
- Santos Junior, H.P., Rosa Gualda, D.M., de Fátima Araújo Silveira, M., Hall, W.A, 2013. Postpartum depression: the (in) experience of Brazilian primary healthcare professionals. J. Adv. Nurs. 69 (6), 1248–1258. https://doi.org/10.1111/j.1365-2648.2012.06112.x.

Skelton, K., Evans, R., LaChenaye, J., Amsbary, J., Wingate, M., Talbott, L., 2018. Utilization of online focus groups to include mothers: a use-case design, reflection, and recommendations. Digital Health 4, 2055207618777675.

- Stebbins, R.A., 2001. Exploratory Research in the Social Sciences, 48. Sage.
  Stentzel, U., Grabe, H.J., Schmidt, S., et al., 2023. Mental health-related telemedicine interventions for pregnant women and new mothers: a systematic literature review. BMC Psychiatry (23), 292. https://doi.org/10.1186/s12888-023-04790-0.
- Sulaiman, S.O., Bhugra, D., de Silva, P., 2001. Perceptions of depression in a community sample in Dubai. Transcult. Psychiatry 38 (2), 201–218.
- Thomas, J., Mutawa, M., Furber, S.W., Grey, I., 2016. Religiosity: reducing depressive symptoms amongst Muslim females in the United Arab Emirates. Middle East J. Positive Psychol. (2), 9–21.
- Tong, A., Sainsbury, P., Craig, J., 2007. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. Int. J. Qual. Health Care 19, 349–357.
- The United Arab Emirates Government Portal, 2023. Fact Sheet. Retrieved from: htt ps://u.ae/en/about-the-uae/fact-sheet.
- Weqaya. 2022. UAE: high costs, limited resources prove barriers to mental health support. Retrieved from: https://www.weqaya.ae/en/posts/uae-high-costs-limite d-resources-prove-barriers-to-mental-health-support [Last accessed: July 18, 2023].
- Yamashita, A., Isumi, A., Fujiwara, T., 2022. Online peer support and well-being of mothers and children: systematic scoping review. J. Epidemiol. 32 (2), 61–68. https://doi.org/10.2188/jea.JE20200079.