ABSTRACT

Introduction: Around the world women breastfeed without question, there is a natural assumption that the breast will be offered to the newborn infant and that breast milk will nourish the infant until weaning. However, cultural beliefs and traditions passed down by the family and friends influence the mothers’ breastfeeding experience. Previous research on breastfeeding in Saudi Arabia has mostly been using quantitative methods of research looking at rough numbers.

Study Objective: Explore and describe the breastfeeding live experience and Cultural Practices related to Exclusive breastfeeding of Saudi women who live in Al Ahsa city, Eastern Region, KSA.

Methods: Qualitative, in-depth interview utilized in the study. Data collected till reaching saturation from twenty mothers who were recruited from PHC Clinics during their baby’s immunization visit at six month.

Results: The findings highlighted that all mothers initiated breastfeeding, some were hesitant to feed the infant the colostrum. Unfortunately, all mothers started supplementation early in infant life because some cultural practices and social influences mandate giving the baby some foods that is believed to bless the baby. Husband was the most influential family member and getting pregnant again was a reason to stop breastfeeding.

Conclusion: The breastfeeding experience is not an isolated event but one that exists in a social context. Despite mothers initiate and admire the health benefits of breastfeeding, barriers to exclusive breastfeeding still remain. Bottle feeding became the norm with the societal modernization; women employment, and life styles, social support is not there, and non-spaced pregnancies. Understanding of the cultural practices related to can assist health professionals to provide culturally competent interventions.

Keywords
Breastfeeding, Cultural Practices, Saudi Arabia, Qualitative.

Introduction
Breastfeeding is the ideal and most natural way of nurturing infants. It is recognized as the optimal feeding method for all infants because of its proven health benefits to both infants and their mothers [1]. The World Health Organization (WHO), the American Academy of Pediatrics (AAP), the American College of Obstetrics and Gynecology (ACOG), and the United States Preventive Services Task Force all recommend exclusive breastfeeding for the first 6 months of life [2-4]. The latest WHO recommendation for mothers worldwide is to exclusively breastfeed for the child’s first 6 months to achieve optimal growth, development, and health. Thereafter, mothers should continue breastfeeding up to the age of 2 years or beyond [5].

Around the world, women breastfeed without question and there is a natural assumption that the breast will be offered to the newborn infant and that breast milk will nourish the infant until weaning.
However, culture (beliefs and traditions passed down by family and friends) influences the mothers’ breastfeeding experience. In Saudi Arabia, the Quran and the Hadiths (sayings of the Prophet Muhammad (PBUH) provide guidelines for Saudi laws. The Quran instructs its followers to breastfeed children for 2 complete years, saying, “The mothers shall give suck to their offspring for two whole years for him who desires to complete the term. But he shall bear the cost of their food and clothing on equitable terms” (2:233).

It has been reported in previous research that in Saudi Arabia, the largest Islamic country, breastfeeding rates are declining behind the recommended rate [1,6-10]. Most Saudi mothers initiated breastfeeding; however, only 50% continued to exclusively breastfeed at 1 month and 10% continued to exclusively breastfeed at 6 months [10]. Moreover, in Al Ahsa, these rates were even lower [8]. Partial breastfeeding was the trend for feeding in the first 6 months of life, which was accompanied by a rapid decline in lactation duration. Only 37% of mothers experienced exclusive breastfeeding in the first 6 months after birth, and 31.9% of mothers continued to breastfeed for 9–12, 12–18, and 18–24 months as the most frequent period longer than 6 months [11].

What had primarily been a breastfeeding culture in Saudi Arabia was disrupted with the great influx of oil wealth in the 1970s and 1980s the country witnessed massive advancements in socioeconomic status and became a target for the breastmilk substitutes industry. This coupled with other social and economic factors has caused a considerable change to the original pattern of breastfeeding over recent decades in the country [12]. Previous studies have shown that there are various reasons why Saudi mothers choose not to exclusively breastfeed. The most significant factor preventing long-term breastfeeding is mothers’ misconceptions regarding the adequacy of milk supply [13]. Other reasons also identified in the literature included mothers’ employment status and lifestyle [6]. On the other hand, factors that predicted a longer duration of exclusive breastfeeding were reported. Those factors included being a housewife mother, infant on-demand feeding, not providing pre-lacteal feeds, rural residence, timely breastfeeding initiation, average-weight infants, and spontaneous vaginal delivery [9]. Studies of feeding practices in different countries have shown a variety of beliefs and traditions related to breastfeeding [14-21]. While some of these beliefs and traditions can encourage breastfeeding, others may discourage it. A good understanding of local beliefs, customs, and traditions related to breastfeeding can help healthcare providers and breastfeeding advocates provide better support and more appropriate counseling to breastfeeding mothers.

Most of previous research about breastfeeding in Saudi Arabia has used quantitative methods by analyzing numbers; no previous in-depth qualitative studies aimed at understanding human beings’ experiences in a humanistic and interpretative way could be found. The significance of culture in understanding, describing, and explaining health-related behaviors of any phenomenon has been increasingly acknowledged [22]. Therefore, the purpose of the current qualitative study was to explore Saudi mothers’ cultural practices related to exclusive breastfeeding.

**Aim and Objectives**

The study aimed to understand Saudi mothers’ breastfeeding experiences and practices related to exclusive breastfeeding for their infants during the first 6 months of life by using a qualitative research method. The specific aims were to:

- Explore and describe the breastfeeding experience of Saudi women who live in Al Ahsa city, KSA, and have infants less than 6 months of age.
- Understand the cultural, value, belief, and experience determinants of initiation, continuation, and exclusivity of breastfeeding.

**Methods**

An exploratory qualitative design was implemented to obtain in-depth information about the mothers’ experiences with breastfeeding and to understand the cultural influences that impacted their decision to exclusively breastfeed their infants. An ethnographic approach suited the aim of the study, which included examining cultural practices, exploring meaning, and providing the descriptive data necessary to document the mothers’ breastfeeding experiences and to elicit information from the mothers in the context of their culture [23].

**Context of the research**

The study was conducted at primary healthcare (PHC) clinics in the Ministry of National Guard Health Affairs (MNGHA) in Al Ahsa over a period of 4 months. The PHC at NGHA provides high-quality primary health care services to National Guard personnel, their dependents, and also eligible patients who live in different rural areas in Al Ahsa. This made it possible to recruit diverse participants to represent the Al Ahsa district.

**Participants**

A purposive sample of mothers who had uncomplicated pregnancies with normal vaginal deliveries of viable, single, full-term newborn infants were recruited during the well-baby clinic visit for immunization during the first 6 months of infant life.

**Data Collection Procedures**

Interviews are advocated as a data collection method for exploratory research. Semi-structured interviews are the most recommended type of interviews for such a study as they provide the opportunity to “probe” for answers and let participants explain and build on their responses [24]. Mothers who agreed to participate were interviewed in private prepared rooms at the PHC clinics to ensure confidentiality. The infant could be with the mother during the interview and the interview was conducted in the Arabic language. The aim of the interview was clarified to the mothers, which was to understand the reasons related to the mothers’ decisions about initiation, duration, and exclusivity of breastfeeding practices.

An interview guide was used to direct data collection. The interview guide was developed after an extensive review of the literature. The guide included questions related to initiation, duration,
and exclusivity of breastfeeding as well as the introduction of complementary foods. Sociocultural influences and mothers’ personal experiences were also explored. The questions were in an open response format to allow for probing to clarify responses and not to preclude mothers’ from introducing other topics. Two researchers recorded the field notes and recorded the interview. All interviews were transcribed by the researcher, important statements were extracted, common themes were generated and organized, and a final detailed description of the themes was presented.

Data Analysis
Demographic information was summarized and tabulated using SPSS 20 [25] for descriptive statistics (frequencies, means, and standard deviations).

Qualitative data analysis
The qualitative data analysis commenced once all the data had been properly collected, transcribed, and verified for accuracy. The researchers analyzed the data manually by repeatedly immersing themselves in the data. The researchers organized the data into recurrent themes using comments and codes. The researchers then reexamined the themes that had emerged by arranging them into higher-order categories that provided an explanatory overview of the meanings, opinions, and attitudes that were embedded in the raw data. After the data was collected and coded, it was sent for verification to an independent coder who was a specialist in qualitative data analysis. The analysis was done by following Graneheim and Lundman's five steps [26]. Step 1 included familiarization and immersion; we obtained a preliminary understanding of the meaning of the data, then reviewed the field notes and interview transcripts once again and made notes and comments, drew diagrams, and brainstormed to ensure deep immersion. Step 2 involved inducing themes; the language used by the participants in the study was used to label the categories that had been identified. Under the categories, the researchers developed sub-themes for each heading. Step 3 was coding: breaking up the data into analytically relevant units. Different sections of data were identified utilizing the codes and were matched with one of the identified themes. All phrases, lines, sentences, and paragraphs were coded. Step 4 included elaboration and interpretation; themes were examined and explored more closely. Some of the themes were grouped together while some led to the emergence of new sub-themes for each heading. Step 5 involved checking; results were written by making use of the thematic categories that had been identified. All uncertainties and weaknesses were reexamined and interpreted. During this step, the researchers consulted with experts and peers as a way of checking the accuracy of the interpretations.

Ethical consideration
Ethical approval of the study was obtained from the setting IRB committee (approval number RE12/011). The ethical considerations as described by the Declaration of Helsinki and the Belmont Report [27] were followed. All participants received written and verbal information about the purpose of the study, their right to withdraw at any time, and the confidentiality of the information they provided to the researcher.

Findings and Discussion
Since this research was qualitative in nature, the findings and discussion have been combined to improve clarity and understanding. The mean age of the mothers was 30.9 ± 5.9 years. The majority of the mothers (90%) were housewives and lived with extended family (60%). Most of the mothers (90%) had breastfeeding experiences with their older children and reported breastfeeding durations from 2 to 18 months (7.4 ± 4.6 months). The majority had provided bottle feeding (90%) in the form of either formula (80%) or herbal drinks for colic (20%). During the data analysis process, the researchers identified the following themes:

Theme 1: How Do Mothers Feel about Breastfeeding?
Most of the subjects reported that breastfeeding was important, stating, “it is the norm,” “I love it,” “good, nutritious, easy, helpful,” “important but not enough to the baby,” and “I do not have enough milk for the baby to grow.” “it felt bad at the beginning but later I liked it” “it is not easy, it needs full time available for the baby” How mothers feel about breastfeeding is important as it determines the success of initiation and continuation of breastfeeding. A mother’s positive attitude plays an important role in the breastfeeding process [28]. A recent review [29] recommended that nurses and midwives provide antenatal and early postpartum education and periodical breastfeeding counseling to improve maternal attitudes and knowledge toward breastfeeding practices.

Theme 2: Practices Related to Early Initiation of Breastfeeding
Although early initiation of breastfeeding has been recommended for its many benefits for both mothers and their babies, global estimates are that less than half (42%) of all newborns are put to the breast within the first hour of birth [30]. Furthermore, Saudi Arabia was reported to have the lowest rate of early initiation of breastfeeding, with only 23% of mothers initiating breastfeeding within the first hour after delivery [31].

None of the participants had initiated breastfeeding within the first hour after delivery. The findings highlighted practices that caused delays in the initiation of breastfeeding within the first hour after delivery. Mothers provided the following opinions about the early initiation of breastfeeding: “No one gave the baby to me,” “I wanted to have the baby but I was so tired,” “I was afraid the baby cannot suck,” “I was feeling embarrassed, because doctors and nurses were around,” and “I wanted to have rest after delivery.”

All newborn infants to be breastfed within one hour of birth. Early initiation of breastfeeding improves child health outcomes and prevents morbidity and also can reduce deaths by 22% [34]. Few studies explored the experiences of women who decided not to initiate breastfeeding or the reasons for delayed initiation of breastfeeding.
Theme 3: Practices Related to Early Feeding and Feeding Colostrum

The findings highlighted that most mothers initiated breastfeeding and gave colostrum because it was important. However, because the colostrum was inadequate as evidenced by the baby crying and not being satisfied, the mothers gave supplementary feeds like sugary water and herbal drinks.

Perceived insufficient milk supply during the first day and beliefs regarding what the newborn ate were cited by the mothers: “I did not have milk yet during the first few days,” “we give sugar water,” “we give soft dates, this should be first thing for the baby to have,” “it bless the baby,” “it is Sunah to rub the baby’s palate with soft dates,” “herbal drink is needed to clean the baby gut,” and “Anise is good for the stomach and will help baby to sleep.”

Despite most of the mothers indicating that they were aware of the importance of early feeding of the colostrum, they indicated that it was inadequate: “colostrum is health for the baby but it is not enough,” and “I fed it to the baby, it was only few drops, and My mother in law gave the baby watery sugar.” Some mothers indicated the poor content of the colostrum and refused to feed it to the baby. They believed it was not nutritious and should have been discarded: “I think it is bad,” “it is not milk,” “it is bad secretions,” “it is not nutritive,” “I think if I gave the baby it will get sick,” “My body is not clean at this time, so any secretion will not be clean,” “it contains secretions, as it is yellow,” and “It is like watery and bloody discharge.”

Similarly, Wanjohi and associates indicated that mothers described colostrum as dirty due to its color and consistency and that it was different than milk [35]. The nutrient and antibody-rich colostrum was discarded and newborns were fed honey, sugar water, or infant formulas instead.

Theme 4: Exclusive Breastfeeding and Discontinuation of Breastfeeding

All mothers initiated breastfeeding because it was important and they felt it was the norm in their culture. Because they believed feeding breastmilk alone was inadequate as evidenced by the baby crying and not being satisfied, they gave supplementary feeds like sugary water and herbal drinks. A large-scale survey of Saudi mothers reported that only about 37% of study subjects exclusively breastfed their infants [10].

Mothers stopped breastfeeding early because of many reasons. Mothers reported that they wanted to breastfeed but they were afraid of weight gain, breast and body sag, “that make others comments on my body shape,” “my breast will fall down,” “I am afraid not to be pregnant,” “my husband wants more children,” “the baby will not grow well with breast milk alone,” “they stop it early before teething,” and “the baby will bite me.” Overall, breastfeeding was seen as a limitation to their everyday activities: “I have no time because of the housework and busy with other kids,” “It is tiring, and especially at night,” and “If I breastfeed I have to wake up at night.”

Despite all mothers admiring the health benefits of breastfeeding, their attitudes against breastfeeding remained. Bottle feeding became the normal method of infant feeding with the societal modernizations that have influenced women’s willingness to breastfeed. Most of the mothers reported that formula feeding was easier: “all women give bottle feeding,” “bottle feeding is a must,” and “by 40 days after delivery, there will be less milk, we will have to start formula.” Feeding formula allowed for more freedom as the mothers could control their time and it was less likely to restrict them at home. Formula makes the child satisfied, especially at night. “the baby sleep

Mothers indicated that they had to eat more to increase their milk supply. Most mothers agreed that the foods that increased milk supply would also increase their weight. Because weight and body shape were a concern for most of the mothers, they reported lower milk supplies because they avoided eating certain kinds of foods. This included Halawa, Murah, dates, fenugreek (Helba) seeds, and Rashad (cresson) seeds.

Theme 5: Social Influences and Breastfeeding Support

The breastfeeding experience is not an isolated event but one that exists in a social context. Social influences by social networks (exclusive, including close relatives, or expansive, including peers and friends) can affect maternal decisions to initiate and to continue breastfeeding; opinions of the father and significant others also influence the mother’s breastfeeding experience [36,37]. In the current study, the most influential person was the husband. Some mothers indicated that husbands did not directly affect their decision to breastfeed or not to breastfeed: “my husband does not care,” “he wants to enjoy me at any time and this can affect being available for the baby,” “he wants me to get pregnant again,” “I want him to be involved and helping the baby so I started bottle feeding,” and “My husband encourage me to breastfeed, but he wants me in shape, and get pregnant soon.” A lack of social support, as well as influences from peers, family members, and husbands, can all lead to unsuccessful breastfeeding experiences [38].

Most of the mothers perceived that they would need support if they were going to breastfeed. The foremost source of support was the health care providers and healthcare practices. Some mothers indicated that after delivery when they were not able to breastfeed, the nurses and physicians suggested they give formula to the baby: “baby keep crying and I was tired the nurse said doctor prescribed formula,” “no one teach me how to feed,” “during my prenatal visits no one discussed breastfeeding,” and “I was given pamphlets of importance of breastfeeding.” Supportive interventions need to be implemented in healthcare settings to improve breastfeeding outcomes. A recent systematic review and meta-analysis indicated that both face-to-face teaching and telephone follow-ups across the antenatal and postnatal periods can be effective at enhancing exclusive breastfeeding beyond 6 months [39,40]. Hospital practices and health care providers play an important role in encouraging mothers for early initiation of breastfeeding and, consequently, successful continuation of breastfeeding.
Conclusion
The breastfeeding experience is not an isolated event but one that exists in a social context. Despite mothers initiate and admire the health benefits of breastfeeding, barriers to exclusive breastfeeding still remain. Bottle feeding became the norm with the societal modernization and life styles, non-spaced pregnancies and influence of the husband. Expecting mothers need to learn both how to breastfeed and about the importance of early initiation of breastfeeding.

Recommendations
Study findings can guide the development or modification of culturally grounded interventions to improve breastfeeding rates in the country. Identifying the modifiable, unhealthy practices and unrecognized strengths could be promoted in culturally competent interventions. The primary healthcare center’s role has to be activated for providing culturally sensitive interventions to promote the initiation and exclusivity of breastfeeding as well as the continuation of breastfeeding to the age recommended by many health care organizations and scientific societies. Finally, further in-depth qualitative studies are needed to explore culture influences in different regions of Saudi Arabia on breastfeeding practices.

References
1. Ahmed AE, Salih OA. Determinants of the early initiation of breastfeeding in the Kingdom of Saudi Arabia. Int Breastfeed J. 2019; 14: 13.
2. www.who.int/nutrition/publications/infantfeeding/en/index.html
3. Committee on Health Care for Underserved Women, American College of Obstetricians and Gynecologists. ACOG Committee Opinion No. 361 Breastfeeding maternal and infant aspects. Obstet Gynecol. 2007; 109: 479.
4. United Nations Children’s Fund UNICEF. World Health Organization. Capture the moment, early initiation of breastfeeding The best start for every newborn. New York UNICEF. 2018.
5. www.who.int/entity/mediacentre/news/statements/2011/breastfeeding
6. Al-Hreashy FA, Tamim HM, Al-Baz N, et al. Patterns of breastfeeding practice during the first 6 months of life in Saudi Arabia. Saudi Med J. 2008; 29: 427-431.
7. Fida NM, Al-Aama JY. Pattern of infant feeding at a University Hospital in Western Saudi Arabia. Saudi Med J. 2003; 24: 725-729.
8. Amin T, Hablas H, Al Qader AA. Determinants of initiation and exclusivity of breastfeeding in Al Hassa Saudi Arabia. Breastfeed Med. 2011; 6: 59-68.
9. El-Gilany AH, Shady E, Helal R. Exclusive breastfeeding in Al-Hassa Saudi Arabia. Breastfeed Med. 2011; 6: 209-213.
10. Alshebly M, Sobaib B. Attitudes of Saudi mothers towards breastfeeding. Sudan J Paediatr. 2016; 16: 31-36.
11. El Mouzan MI, Al Omar AA, Al Salloum AA, et al. Trends in infant nutrition in Saudi Arabia compliance with WHO recommendations. Ann Saudi Med. 2009; 29: 20-23.
12. https://www.worldbreastfeedingtrends.org/wbti-country-ranking.php
13. Alyousefi NA. Determinants of Successful Exclusive Breastfeeding for Saudi Mothers Social Acceptance Is a Unique Predictor. Int J Environ Res Public Health. 2021; 18: 5172.
14. Buyukgebiz B, Cevik N, Oran O. Factors related to the duration of breastfeeding in Ankara with special reference to sociocultural aspects. Food and Nutrition Bulletin. 1992; 4: 289-293.
15. Harrison GG, Zaghoul SS, Galal OM, et al. Breastfeeding and weaning in a poor urban neighborhood in Cairo Egypt maternal beliefs and perceptions. Soc Sci Med. 1993; 36: 1063-1069.
16. Marandi A, Afzali HM, Hosaini AF. The reasons for early weaning among mothers in Teheran. Bull World Health Organ. 1993; 71: 561-569.
17. Giovannini M, Banderali G, Agostoni C, et al. Epidemiology of breastfeeding in Italy. Acta Paediatr Suppl. 1999; 88: 19-22.
18. Ergenekon-Ozelci P, Elmaci N, Ertem M, et al. Breastfeeding beliefs and practices among migrant mothers in slums of Diyarbakir Turkey 2001. Eur J Public Health. 2006; 16: 143-148.
19. Yaman H, Akçam M. Breastfeeding practices of health professionals and care workers in Turkey. Coll Antropol. 2004; 28: 877-884.
20. Hizel S, Ceyhun G, Tanzer F, et al. Traditional beliefs as forgotten influencing factors on breast-feeding performance in Turkey. Saudi Med J. 2006; 27: 511-518.
21. Geçkil E, Sahin T, Ege E. Traditional postpartum practices of women and infants and the factors influencing such practices in South Eastern Turkey. Midwifery. 2009; 25: 62-71.
22. Al-Bannay H, Jarus T, Jongbloed L, et al. Culture as a variable in health research perspectives and caveats. Health Promot Int. 2014; 29: 549-557.
23. Morgan-Trimmer S, Wood F. Ethnographic methods for process evaluations of complex health behaviour interventions. Trials. 2016; 17: 232.
24. LoBinodo-Wood G, Haber J. Nursing research Methods and clinical appraisal for evidence-based practice. Mosby New York. 2010.
25. IBM SPSS. Statistics for Windows Version 27.0. Armonk NY: IBM Corp. 2020.
26. Graneheim UH, Lundman B. Qualitative content analysis in nursing research concepts procedures and measures to achieve trustworthiness. Nurse Educ Today. 2004; 24: 105-112.
27. Premberg A, Hellström AL, Berg M. Experiences of the first year as father. Scand J Caring Sci. 2008; 22: 56-63.
28. Hamze L, Mao J, Reifsnider E. Knowledge and attitudes towards breastfeeding practices: A cross-sectional survey of postnatal mothers in China. Midwifery. 2019; 74: 68-75.

29. Dukuzumuremyi JPC, Acheampong K, Abesig J, et al. Knowledge attitude and practice of exclusive breastfeeding among mothers in East Africa: a systematic review. Int Breastfeed J. 2020; 15: 70.

30. https://www.who.int/gho/publications/mdgs-sdgs/en/

31. Victora CG, Bahl R, Barros AJ, et al. Breastfeeding in the 21st century: epidemiology, mechanisms and lifelong effects. Lancet. 2016; 387: 475-490.

32. http://www.who.int/elena/titles/early_breastfeeding/en/

33. http://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding

34. Mullany LC, Katz J, Li YM, et al. Breast-feeding patterns and the time to initiation and mortality risk among newborns in southern Nepal. J Nutr. 2008; 138: 599-603.

35. Wanjohi M, Griffiths P, Wekesah F, et al. Sociocultural factors influencing breastfeeding practices in two slums in Nairobi, Kenya. Int Breastfeed J. 2017; 12: 5.

36. Rebecca F Carlin, Anita Mathews, Rosalind Oden, et al. The influence of social networks and norms on breastfeeding in African American and Caucasian mothers: A qualitative study. Breastfeeding Medicine. 2019; 14: 640-647.

37. Moon RY, Carlin RF, Cornwell B, et al. Implications of Mothers’ Social Networks for Risky Infant Sleep Practices. J Pediatr. 2019; 212: 151-158.

38. Shortt E, McGorrian C, Kelleher C. A qualitative study of infant feeding decisions among low-income women in the Republic of Ireland. Midwifery. 2013; 29: 453-460.

39. Wong MS, Mou H, Chien WT. Effectiveness of educational and supportive intervention for primiparous women on breastfeeding related outcomes and breastfeeding self-efficacy: A systematic review and meta-analysis. Int J Nurs Stud. 2021; 117: 103874.

40. Kim SK, Park S, Oh J, et al. Interventions promoting exclusive breastfeeding up to six months after birth: A systematic review and meta-analysis of randomized controlled trials published correction appears in Int J Nurs Stud. 2019; 89: 132-137.