

2019

Traditional methods for managing illness in newborns and infants in an Arab society

Diana H. Arabiat
Edith Cowan University

Lisa Whitehead
Edith Cowan University

Mohammad AL Jabery
Edith Cowan University

Amanda Towell-Barnard
Edith Cowan University

L. Shields

See next page for additional authors

Follow this and additional works at: <https://ro.ecu.edu.au/ecuworkspost2013>



Part of the [Nursing Commons](#)

[10.1111/inr.12505](https://doi.org/10.1111/inr.12505)

This is the peer reviewed version of the following article: Arabiat, D. H., Whitehead, L., AL Jabery, M., Towell-Barnard, A., Shields, L., & Abu Sabah, E. (2019). Traditional methods for managing illness in newborns and infants in an Arab society. *International Nursing Review*, 66(3), 329-337, which has been published in final form at <https://doi.org/10.1111/inr.12505>.

This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for Use of Self-Archived Versions.

This Journal Article is posted at Research Online.
<https://ro.ecu.edu.au/ecuworkspost2013/7256>

Authors

Diana H. Arabiat, Lisa Whitehead, Mohammad AL Jabery, Amanda Towell-Barnard, L. Shields, and E. Abu Sabah

Traditional Methods for Managing Illness in Newborns and Infants in an Arab Society

D.H. Arabiat¹, RN, PhD , L. Whitehead RN, PhD,
M. AL Jabery, PhD , A. Towell-Barnard, RN, PhD, L. Shields FACN,
MD (Research), PhD & E. Abu Sabah RN, PhD

Aim: This study explores self-management practices in relation to traditional methods for managing illness in newborns and infants and the implications of these practices on infant health.

Background: Self-medication with folk remedies are believed to have short and long-term impacts on wellbeing. Little is known about how mothers in Arab societies used their traditional beliefs and practices in self-managing their newborns and infants' health.

Methods: Data were collected from five focus groups using open-ended questions with 37 mothers. Participants were selected using snowball sampling and were recruited from four different cities in Jordan between June-2016 –August 2016.

Findings: Mothers were more willing to try herbal remedies, traditional massage and certain foods to self-manage their infants' health. Folk remedies were not restricted to traditions handed down through generations, but included a representation of newly emerged trends towards “safety” or “nature”.

Conclusions: While the use of folk-remedies have been handed down generations as customs, today, virtual support groups and social media provide modern resources for folk remedies' promotion in care and self-management.

Implications for nursing or health policy: Nursing and health policy makers can use our findings for planning and developing strategies and health policies that increase public awareness about adverse health effects associated with herbal remedies. Such strategies are likely to be facilitated through partnership between nursing and midwifery education institutions, antenatal clinics and social media in the region.

Keywords: traditional remedies, newborns, Arab, Jordan, self-management.

Introduction

As in most societies, cultural practices and beliefs related health and illness are important parts of life in most Arab societies. For Arab population, there are at least 22 Arab countries that form the Arab world (Cleveland et al. 2016, Authors, 2019). This community is related to shared culture and one language rather than sharing the same ethnicity. Women in those societies make up a variety of cultures that can influence the welfare of an infant and newborn (Authors, 2018). Nursing practices accommodating individuals and family's cultural needs can help promoting positive client-nurse relationship (Bawadi & AL-Hamdan, 2017). In a qualitative study investigating parent's views on family and healthcare system in Jordan, findings revealed that social support offered in traditional culture may not always be in the best interest of mother or child's wellbeing (Mrayan et al., 2016). Quite simply, culturally embedded attitudes and beliefs influences individual and family life style. The use of folk remedies within traditional societies can reflect various beliefs around health, religion, family values, and may be openly or secretly used depending on how the user perceives health practitioners 'acceptance of their use (Pardo-de-Santayana et al. 2015).

In traditional societies, different practices and values can be attributed to healing traditions within groups, and between individuals of the same culture. The use of certain remedies can overlap cultural groups but can vary between minority groups (Smitherman et al., 2005). In time of illness and uncertainty the use of folk remedies can provide comfort and familiarity (Amiri et al. 2014). Other reasons as to why folk remedies have been, and still are, relied upon can range from health beliefs to lack of modern or professional medical care, and/or economic factors (Hosseinzadeh et al. 2015).

For a developing country like Jordan, the system of care for mothers and newborns has been described as being of a high standard (Khader et al. 2018). At least 68% of the Jordanian population and 55% of the overall population are covered by various types of health insurance (Al Eman, 2016). Almost 94% of pregnant women in Jordan have at least four antenatal visits and 98% are attended by skilled attendants within a health institution (Amarin et al., 2010). However, significant variations remain in the quality of maternal and newborn care between governorates, as well as between health care sectors in the country. This includes shortages of skilled and competent birth attendants, lack of optimal thorough antenatal care and the lack of pivotal protocol, policies, and guidelines necessary for optimal mother and newborn care (Khader et al. 2018).

Jordan has adapted a policy of structured provision of health services based on Western medicine; nevertheless, folk medicines are used by a significant portion of the Jordanian population as an alternative practice and therapy (Wazaify, Alawwa, Yasein, Al-Saleh, & Afifi, 2013). In the United States, among African-American families, the use of folk-remedies has been described as a cultural and dynamic process, and they continue to be used even when access to mainstream health care systems are available (Bhattacharya 2012) . Irrespective of the education level of the caregiver and the age of the child, the use of at least one herbal or food product was common place during episodes of acute illness among African American communities (Smitherman et al. 2005). In Taiwan, as many as 60% of participants made use of folk remedies during their child’s hospitalisation, and the majority (72%) reported that they would not inform health care providers about their use of folk remedies for their children. (Chen et al. 2009). This illustrates the importance of health practitioners, including nurses to be aware of the use of folk remedies within the community in which they work, and enquiring about the use of folk remedies or traditional healing practices in a non-judgemental manner (Tull et al. 2017).

Overall, the type of folk remedy differs across countries and populations, but the high prevalence of use seems universal among most traditional societies. In Arab societies, Kattan et al. (2016) found that younger and less educated women in Saudi Arabia are more likely to follow folk remedies or cultural practices in burn management than their older and better-educated contemporaries. However, research evidence remains limited about the health practices and beliefs in the Arab region, or its impact on child welfare.

Aim

The aim of this paper is to examine self-management practices in relation to traditional methods for managing illness, in newborns and infants in Jordan, and the implications of these practices on health, and for nurses and midwives.

Methods

Design

This study is part of another, larger qualitative study about health beliefs and folk models of illness among Arab families. Part 1 reported on, analysed immediate and early post-par- 10 tum care practices among Arab societies, and is published elsewhere (Authors, 2018).The study was commenced in June 2016, following obtaining institutional review board approval

from the University of Jordan (ethics approval dated 26/5/2016). A retrospective cross-sectional descriptive design using focus groups was used to describe newborns and infants care and self-management practices of the participants. The use of focus group methodologies offers better ways for exploring social norms and opinions over other methodological approaches (Stage et al. 2015), and focus groups were chosen to understand if there was a consensus about the value of certain traditional practices.

Setting and sample

The sample consisted of self-identified mothers or grandmothers and from an Arab background. Inclusion criteria were restricted to females identified as mothers and/or grandmothers, from an Arab background, cognitive capacity and ability to converse in Arabic. Five focus groups were used in this study. Each focus group had seven to nine participants, total 37. Participants were recruited through one of the researcher's personal networks and all participants provided a written informed consent prior to participation.

To promote the group discussion and ensure all discussions were conducted in a sensitive manner, a female facilitator was used. Participants were selected to cover a range of backgrounds in terms of nationalities (Jordanian, Palestinians, and Syrians), socioeconomic status, age, and number of children). Two of the focus groups were conducted at a local university in Amman, while the rest were conducted at a local community setting).

Data collection

Initial recruitment for this study involved convenience sampling and snowball recruitment techniques. Two research assistants were recruited to facilitate the group discussion and to recruit participants through their social network and local advertisements at the community settings. All groups were audiotaped, and consent was obtained from all participants beforehand. They were informed that they could leave the group at any time. Open-ended questions were used to promote the participants' discussion around traditional methods used by participants for managing illnesses in their newborns and infants. Interview included questions as follows: 'are there certain traditional practices that you have followed for preventing and managing illness in your newborn or infant?' 'can you tell me more about this?' 'were these practices helpful?' 'if so, in what way?' 'how did you learn about it?'

Data analysis

A thematic analysis was done on the data in its original language – Arabic - and the themes and selected extracts of the analysis translated into English for reporting. The thematic analysis process followed a six-step approach (Braun & Clarke, 2006). First, three of us familiarised ourselves with the data through reading and re-reading the focus group transcripts, noting down initial ideas. Second, an initial list of interesting features was generated. Then, initial codes were collated into potential themes. A thematic ‘map’ of the analysis was generated by checking how the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2). Afterward, the themes were named and defined, and a list of selected extracts of the analysis was produced and reported to the research team.

Findings

Sample characteristics

In total, 37 mothers participated in the focus groups, most of which were mid-thirties or forties, and with secondary or university education (Table 1).

[TABLE1 ABOUT HERE]

Major themes

The two major themes were self-management of illness, and sources of support and intergenerational tension. Table 2 shows common traditional remedies used by participants in managing newborns’ and infant’s health concerns. Findings are presented with reference to the aforementioned themes of self-management of illness.

Theme 1: Self-management of illnesses

Fever and nightmares

The single most commonly described healing practice was lymphatic drainage massage “*Tamreej*” which often included the use of olive oil to massage the lymph nodes in the armpits and groin. The majority of participants believed that this technique relieved fever or irritability associated with bad dreams or ‘*envy*’ in newborns and infants.

“I don’t know if this is scientific or just oldwife tales, but I was taught that whenever my kid is afraid or terrified of something he may develop a fever. This fever is usually unresponsive to medicine; it only goes away by performing a massage to the groin area of the baby. It

should be done with olive oil and you can feel just a node in the groins and you have to massage it over and over”.

A small number described the use of “*a Brass Bowl*”, made of copper or silver, and carved with verses of the Quran. They believed that newborn/infants drinking from such a bowl could help treat and protect the babies from various ailments.

“The brass bowl I have is not mine. It was my granny’s. She used to let me drink from it whenever I have nightmares or feeling unwell. Every now and then I’ll keep water in night and drink in morning with a thinking that it is fruitful. I used for all my kids too”.

Constipation and colic

Herbal tea, olive oil massage and honey were described as an alternative therapy for various ailments by the majority. For example, a number of mothers used natural products such as date juice to treat constipation in their newborn. Others reported the use of homemade suppositories “made out of olive oil soap” to stimulate a bowel movement. One mother:

” ...my mother-in-law advised me to made a suppository made out of natural soap to treat my baby’s constipation. After telling me several times, I did that and I was terrified when my baby started screaming and crying. But thank God that he passed it out and had everything out with it later”.

Another participant added:

“Since my baby started to be constipated, I soaked dates with boiled water overnight and the next day I would use a sieve or strainer and give it to him. I did that every day since he was few weeks old”.

There was also much agreement in the reported use of herbal tea “*Zhorat*” and honey as an alternative therapy for various ailments. For example, the use of chamomile or anise for newborn colic:

“....no way to miss giving my baby a warm bottle of chamomile or anise every day. It works like magic for baby’s tummy. I’ve used it with all my children since they were few days old. Everyone I know used it”.

Jaundice

Some participants used sugared water to self-treat jaundice in their newborn. Another less common practice included the use of garlic.

“I’ve heard from friends that giving water with sugar, or “dextrose water “to my baby would help clearing her jaundice. My girl didn’t accept drinking it from the bottle, so I’ve used the spoon to feed it”.

Conjunctivitis or ear infection

A few mothers used expressed breast milk to treat eye infections, while some used olive oil drops for their infant’s ear infection.

“Mother’s milk works for eye infection and it does miracles. A couple of times there was this coloured secretions coming out of my baby eyes. My mother told me that they used to use the mother’s milk to clear this out. I did that and it works. Many years ago, my mother saw her granny used it to save my uncle’s eyes after accidentally been splashed with acids. She has managed to save her uncle’s eyes this way”.

“Olive oil drops in the affected baby’s ear is helpful too.... I used to gently warm the oil, and then dip a few drops into my baby’s ear. It soothes the pain and helpful with cleaning the ear wax”.

Common cold and cough

Another common practice includes the use of “Vicks VapoRub™” to their child’s back, feet, and chest to ease breathing.

“I remember using Vicks, this little bottle with the green axe over it. I’ll just rub my baby’s chest so he can breathe”.

In addition, mixture of lemon and honey, olive oil, and sesame oil were the most frequently mentioned ingested or topical remedies for treating asthma, and minor respiratory illnesses:

“My little baby girl used to have this noisy breathing and always chesty. I massaged her with olives oil, and I used honey to loosen phlegm but it didn’t work.... later some relatives advised me to use Sesame oil to her chest and to swaddle her to stay warm overnight. I used it over three consecutive nights and her coughing little improved, yet I had to take her to the clinic and started her on antibiotics”.

Muscle strains and hernia

Arab medicine was mentioned by some, including applying a mixture of egg yolk, olive oil soap fragments, an onion and flour wrapped around the baby's tummy.

“My girl wouldn't stop crying that day, she was few months and one lady saw her and she told me that she cries from her tummy for carrying her wrongly...she performed this mixture and strapped it and it worked like magic”.

And:

“I agree with her, it is well tried and it works every time, nothing comfort my daughter that day except applying this mixture like a dough around her tummy...she was vomiting and from her eyes you tell that it's her stomach”.

[TABLE 2 ABOUT HERE]

Theme 2: Sources of support and intergenerational tension

Most of the care practices to maintain health and protect the infant from harm described by mothers were handed down through their extended families. The majority were learned from an older female relative, mainly mother, mother-in-law, or grandmother. Although extended families were the primary source for learning, some participants used their social networks, or the Internet as a source for learning new traditional practices.

“It's not new as my mother used it since we were little kids, my friend post on her Facebook lots of interesting stuff too”.

“,,,,, sometimes I use the web search to get more information about things I am not sure about, I send things to other friends too. The same herbal tea we use is advised by professional people and doctors”.

Significantly, some mothers were able to cite these practices yet not necessarily believe in their significance or efficacy. Some mothers went through with practices either to “avoid conflict” with their husband's family, or “to reflect respect” for the elders' age and/or experience, and in other cases to ‘avoid responsibility or accountability’ if anything went wrong with the baby.

“It’s just rules and traditions that you marry to when you marry your husband. My husband’s family will think I am arrogant or not respectful if I say NO to them. My boy holds their name, so if they want to add salt to his bath or feed him anise let it be. Sometimes they will keep nagging me day and night till I use this or that with our little one”.

The majority of mothers stated they adhered to some of the traditional care practices because they were safe, relatively cheap, and relied on natural mixtures and herbs.

“It’s safe, it’s natural, and it was used for centuries in this country.... even Western societies went back to these natural remedies because it causes no harm and they started to release its benefits”.

“Recent medicine and ointments are all chemicals... if this cause no cure to the kids, it won’t hurt”.

In general, the use of herbal remedies including anise, chamomile, and fenugreek emerged as the most commonly described folk practice amongst mothers.

Discussion

This study examined self-management practices in relation to traditional methods for managing illness in newborns and infants and the implications of these practices on infant health. Worldwide, nurses and midwives involved in caring for patients from an Arab heritage may benefit from these findings and develop awareness about possible traditional practices in caring and self-management of newborns and infants’ health.

The first and most important theme revealed in this study is the use of herbal tea in managing a group of health conditions among infants. Our findings show that several types of plants were used for preventing or treating pain related to colic or constipation in the newborn, or soothing teething pain. This is congruent with previous literature where several studies have argued the beneficial value of using herbs in treating gastrointestinal and respiratory ailments in Hispanic (Mikhail 1994), African (Thairu et al. 2008; Kara et al. 2012; John et al. 2015), and Turkish societies (Ayaz et al. 2008). While acknowledging the importance of herbs in the treatment and management of health ailments (Farzaneh et al. 2015), concern remains regarding its potential to induce toxicity or adverse effects in adult and children (Teschke et al. 2015)._Therefore, an improvement in knowledge about adverse health effects of herbs, for instance, will have a positive impact on the provision of more professional or evidence-based care to children and society. It suggests also the need to

provide guidance when counselling families about the use of traditional/folk remedies or “self-medication through herbal remedies (Kronish et al. 2012; Tull et al. 2017).

In this study, some of the traditional practices reported in Jordan were similar to those used in other countries. For example, the use of mother’s milk to treat eye infections was reported among Hispanic (Mikhail 1994) and Turkish children (Ayaz et al. 2008). The use of water and sugar, or using a string of garlic around baby’s neck to reduce jaundice was also found in Iran, with the concerns that this may cause weight loss and delayed treatment leading to increased risk for complications and lifelong disability (Boskabadi et al. 2011). We argue that an understanding of mothers’ perceptions and use of folk remedies in self-managing newborns’ and infant’s health can facilitate discussion between mothers and the health care team about the risks and advantage of these practices, and this can lead to the initiation of health care awareness campaign in the community. In the absence of alternative mechanism by which parents can fulfil their informational needs, parents are often left with no option but to depend on traditional and unproven traditional practices for support (Mrayan et al., 2016). Nurses should be aware of the strong relationship between culture and health-seeking behaviours in traditional societies as Jordan, and therefor asking caregivers about the use of folk remedies should be an integral aspect of the assessment of all newborns and children in clinical as well as community settings.

Significantly, all of folk healing practices revealed in this study can be based on cultural norms (Arab folk customs) and not faith principles (Islamic customs). Failing to distinguish norms and faith may lead to confusing some traditional practices with those of faith (Arabiat 2013). For instance, 13 while Islam prohibits using amulets or objects for the protection against harm or ‘evil’ (Altiparmak et al. 2015), several 14 participants reported the use of an amulet or ‘a Brass Bowl’ for treating fever. This suggests that while belief in the ‘evil eye’ is embedded in the folklore of Arab societies, as well as some Islamic societies (Abu-Rabia 2005, Authors 2018), use of certain folk remedies is not always a reflection of faith.

Previous studies indicate that an amulet use is not limited to Arab culture as Turks (Kayabasi & Yanar 2013) and North Africa communities (Abu-Rabia 2005) use amulets for similar reasons. Another less practiced remedy noted in this study is performing armpits and groin massage while reciting certain verses of Quran ‘Tamreej’ for treating fever. The clinical value 15 of this cultural practice remains controversial until further research is conducted to identify the effects of using olive oil massage on a newborn’s lymphatic nodes, in particular,

to identify the impact of this practice on the newborn's thermoregulation and immunity system. This applies also to the use of egg yolk, scratched olive soap, onion and flour wrapped around the baby's abdomen to treat muscle spasm or strains.

A common theme that emerged from the study is that folk remedies are no longer restricted to traditions handed down through generations but represent newly emerging trends labelled "safety" or "nature". It is important to understand that mothers equate "herbs", for instance, with "natural and safe" and therefore, mothers were more willing to try folk remedies including herbs, olive oil and food to self-manage their infant's health. This is no different to any other country, where the local 'health food shop' and vitamin bars in pharmacies are well frequented by concerned parents. For some participants, decisions regarding use of traditional practices are usually made by an extended family member or through advice from virtual support groups and social media. Many participants were able to quote large number of folk practices, yet few relied totally upon them, probably reflecting the increased exposure and openness to Western health systems' influence during the last two decades.

A recent Jordanian study reported that a significant conflict between parents and their extended families could counterbalance the benefits of offering traditional support to new parents (Mryan et al., 2016). As such, some mothers in this study suggested that they were forced to adhere to traditional protocols of care to please their extended families. This suggested areas in which there might be conflicts between members of two generations involved in establishing and maintaining traditions in care. This is also congruent with a New Zealand study that reported that some mothers might adhere to traditional practices to avoid being blamed by their older relatives, and to avoid tensions (Abel et al. 2001). Mryan et al., (2016) reported that while parents in Jordan perceive their parent's support as "traditional" and often "wrong", they were left with no other option but to depend on their parent's guidance and traditional support. Therefore, we argue that the health practitioner should bear in mind that mothers employing traditional practices do not necessarily endorse them and there is a need for culturally safe, non-judgmental conversations with parents about the use of folk remedies and traditional practices. Nurses may have a role in bridging the gap between older and younger generations by inviting dialogue about the underlying conflict and approaching both generations candidly and respectfully.

Limitations

Focus groups were not stratified by ethnicity, education or age, and thus responses from cannot be differentiated by demographics. The absence of stratification may be a limitation and has been acknowledged. We have recommended that future studies are cognisant of the potential contribution of stratification in understanding the uptake of traditional medicine. This study was conducted with 36 participants in four cities in Jordan, and therefore may not be transferable to all populations in Jordan or the Arab region. Although our sample were representative in terms of geographic location, education and age, we cannot assume that all Arabs endorse the same traditional practices cited in this study.

While the use of focus group takes advantage of the strengths of qualitative designs by electing a variety of themes that cannot be obtained by a quantitative design, recall bias can limit our findings. Nevertheless, it is important to acknowledge that the study met three out of the four criteria used to achieve research rigour described by Given (2008). First, credibility was ensured through member checking with participants at the end of each focus group to ensure accuracy of data and peer debriefing. Second, dependability was ensured through external auditing by a research colleague to review research procedures and findings, and finally, confirmability was ensured through reflexivity and a clear audit trail.

Implications for Nursing & Health Policy

The growing trend of folk-remedies and herb use are a major challenge to health system, children and families. To ensure the quality and safety of nursing interventions to child and mothers in the Arab region, it is important to expand the current knowledge on beliefs, health practices and challenges or barriers to health care that mothers face in their daily living. The findings of this study can be used by nurses and midwives who have questions about what traditional remedies a mother of Arab heritage might be using. In addition, nurses need to be open to listening to patients and acknowledging their practice of traditional remedies while evaluating risks to create a culturally congruent plan that can be safely implemented with patients (Authors, 2018). We argue that nurses have a dual responsibility to acquire the cultural awareness and interpersonal skills needed to cope with the limited information regarding the clinical value of traditional practices. This calls for improved support to handle the conflicts that arise when the indigenous/folk knowledge and the Western medical system are at odds. Nurses need to bear in mind that not all forms of

traditional practices or social norms lead to better health outcomes. It calls also for designing further empirical and clinical approaches for exploring the effectiveness of various traditional remedies as the use of herbal tea ‘Zhorat’ in treating colic pain, or the use of honey as an alternative therapy for burns, cold or other ailments. Until this time, the impact of these practices will remain controversial.

In Jordan, nursing and health policy makers can use our findings for planning and developing strategies and health policies that increase public awareness about adverse health effects associated with herbal remedies. Such strategies are likely to be facilitated through partnership between nursing and midwifery education institutions, antenatal clinics and social media in the region. Social media collaboration can help nurses and midwives to be effective in raising awareness of short and long impacts of unproven remedies. Nurses and midwives, in collaboration with pharmacists, paediatricians and researchers could plan and implement clinical research to test the safety and efficacy of folk remedies.

CONCLUSION

Using a qualitative methodology of focus groups and thematic analysis, we have shown that participants perceived traditional remedies and folk practices to be useful in self-managing infant’s illnesses. Participants were supportive of folk remedies and perceived them as “natural and safe”. Therefore, midwives’ and nurses’ roles are vital in promoting safe practices and sharing knowledge regarding potential impacts of certain health care practices.

While the use of folk-remedies has been handed down generations as customs, today, virtual support groups and social media provide modern resources for folk remedies’ promotion in care and self-management. This study makes a unique contribution to understanding traditional practices used in caring or self-treating newborns and infants in Arab families and raises the need for further studies to understand the short and long impacts on health of certain cultural practices.

REFERENCES

- Arabiat, D., et al. (2018) Newborn Care Practices of Mothers in Arab Societies: Implication for Infant Welfare. *Journal of Transcultural Nursing*, 1-9. HYPERLINK <https://doi.org/10.1177%2F1043659618794256>.
- AL Jabery, M., & Arabiat, D. (2019) *Chronic Illnesses the Arab World*. In Laher, I (Editor), *Handbook of Healthcare in the Arab world*, Springer Nature Singapore Pte Ltd (Accepted)
- Arabiat, D. (2013) *Psychological Wellbeing of Children with Cancer in Jordan*. LAP LAMBERT, German Publishing.
- Al Emam, D. (2016, February 22). 55% of population, 68% of Jordanians covered by health insurance. *The Jordan Times*, Retrieved from <http://www.jordantimes.com/news/local/55-population-68-jordanians-covered-health-insurance%E2%80%99./>)accessed 21 January 2019).
- Altiparmak, I. B., & Aktas, G. (2015) How Superstitious Are Academicians?. *The Anthropologist*, 21, 548-557.\
- Amarin, Z., et al. (2010) National maternal mortality ratio for Jordan, 2007-2008. *International Journal of Gynaecology and Obstetrics*. 11, 2: 152-156.
- Abel, S., et al. (2001) Infant care practices in New Zealand: a cross-cultural qualitative study. *Social Science and Medicine*. 53: 1135-1148.
- Abu-Rabia, A. (2005) The evil eye and cultural beliefs among the Bedouin Tribes of the Negev, Middle East, *Folklore*. 116:3, 241-254, doi: 10.1080/00155870500282677.
- Ayaz, S., & Yaman Efe, S. (2008) Potentially harmful traditional practices during pregnancy and postpartum. *The European Journal of Contraception & Reproductive Health Care*. 13(3): 282-288.
- Amiri, M. S., Joharchi, M. R., & TaghavizadehYazdi, M. E. (2014) Ethno-medicinal plants used to cure jaundice by traditional healers of Mashhad, Iran. *Iranian journal of pharmaceutical research: IJPR*: 13(1), 157.

Bawadi, H. A., & Al-Hamdan, Z. (2017). The cultural beliefs of Jordanian women during childbearing: implications for nursing care. *International nursing review*, 64(2): 187-194.

Bhattacharya, G. (2012) Self-management of type 2 diabetes among African Americans in the Arkansas Delta: a strengths perspective in social-cultural context. *Journal of health care for the poor and underserved*, 23(1): 161-178.

Boskabadi H., Maamouri G., & Mafinejad S (2011) The effect of traditional remedies (camel's thorn, flixweed and sugar water) on idiopathic neonatal jaundice. *Iranian Journal of Pediatric*. 21, 3: 325-330

Braun, V., & Clarke, V. (2006) Using thematic analysis in psychology, *Qualitative Research in Psychology*. 3,2: 77-101. <http://dx.doi.org/10.1191/1478088706qp063oa>.

Cleveland, W.L., & Bunton M. (2016) *A history of the modern Middle East* (6th Edition). Westview Press. Philadelphia.

Chen, L., et al. (2009) Use of folk remedies among families of children hospitalised in Taiwan. *Journal of Clinical Nursing*, 18: 2162-2170.

Farzaneh, V., & Carvalho, I. S. (2015) A review of the health benefit potentials of herbal plant infusions and their mechanism of actions. *Industrial Crops and Products*, 65: 247-258.

Given, L. M. (2008) *The SAGE encyclopedia of qualitative research methods*. Thousand Oaks, CA: SAGE Publications Ltd. doi: 10.4135/9781412963909.

Hosseinzadeh, S., Jafarikukhdan, A., Hosseini, A., & Armand, R. (2015) The application of medicinal plants in traditional and modern medicine: a review of *Thymus vulgaris*. *International Journal of Clinical Medicine*, 6(09): 635-642.

John, M.E., et al. (2015) Indigenous child care beliefs and practices in the Niger Delta Region of Nigeria: Implications for Health Care. *International Journal of Health Sciences & Research*. 5, 11: 235-246. <http://www.scopemed.org/?mno=20719>. (accessed 08 February 2019)

Khader, Y. S., Alyahya, M. S., Al-Sheyab, N. A., Shattnawi, K. K., Saqer, H. R., & Batieha, A. (2018). Evaluation of maternal and newborn health services in Jordan. *Journal of Multidisciplinary Healthcare*, 11: 439-456.

Kattan, A. E., et al. (2016) Current knowledge of burn injury first aid practices and applied traditional remedies: A nationwide survey. *Burns & trauma*, 4,1: 37.

Kronish, I. M., Leventhal, H., & Horowitz, C. R. (2012) Understanding minority patients' beliefs about hypertension to reduce gaps in communication between patients and clinicians. *The Journal of Clinical Hypertension*, 14(1), 38-44.

Kara, D.J., et al. (2012) Home care practices for newborns in rural southern Nepal during the first 2 weeks of life. *Journal of Tropical Pediatrics*. 58 (3), 200- 207.

Kayabasi, N., & Yanar, A. (2013) Turkish handicraft motifs for evil eye and the beliefs in alevism about the evil eye. *Turk Kulturu Ve Haci Bektas Veli-Arastirma Dergisi*. 65, 169-184.

Mikhail, B.I. (1994) Hispanic mothers' beliefs and practices regarding selected children's health problems. *Western Journal of Nursing Research*. 16(6), 623-638.

Mrayan, L., Cornish, F., Dhungana, N., & Parfitt, B. (2016). Transition to parenthood during the transition to modernity in Jordan: New parents' views on family and healthcare support systems. *Applied Nursing Research*, 32: 139-143.

Pardo-de-Santayana, M., & Macía, M. J. (2015) Biodiversity: the benefits of traditional knowledge. *Nature*, 518(7540), 487.

Stage, F. K., & Manning, K. (Eds.). (2015) *Research in the college context: Approaches and methods*. Routledge, London

Smitherman, L., Janisse, J., & Mathur, A. (2005) The use of folk remedies among children in an urban black community: remedies for fever, colic, and teething. *Pediatrics*. 115(3), 297-304. doi: 10.1542/peds.2004-1443.

Thairu, L., & Pelto, G. (2008) Newborn care practices in Pemba Island (Tanzania) and their implications for newborn health and survival. *Maternal and Child Nutrition*. 4: 194-208.

Tull, R. Z., & Feldman, S. R. (2017). Cultural Considerations. In *Dermatoanthropology of Ethnic Skin and Hair*, Vashi, N., & Maibach, H (Editors), (pp. 467-477). Springer, Cham.

Teschke, R., et al. (2015) Herbal traditional Chinese medicine and its evidence base in gastrointestinal disorders. *World Journal of Gastroenterology: WJG*, 21, 15: 4466.

Wazaiify, M., Alawwa, I., Yasein, N., Al-Saleh, A., & Afifi, F. U. (2013). Complementary and alternative medicine (CAM) use among Jordanian patients with chronic diseases. *Complementary therapies in clinical practice*, 19, 3: 153-157. doi: 10.1016/j.ctcp.2013.03.001..

TABLES

Table 1. Socio-demographic characteristics of mothers participated (N = 37).

<i>Characteristics</i>	<i>Number (%)</i>	
Age (in years)		
19 - 35	10	27.0
36 - 45	21	56.8
≥ 45	6	16.2
Level of education		
Primary School	2	05.4
High School	11	29.7
University/Postgraduate	24	64.9
Parity		
1-2	10	27.0
3-5	20	54.1
6-7	5	13.5
≥ 8	2	05.4
Place of residence		
Amman Governorate	15	40.6
Al-Zarqa	8	21.6
As-Salt	7	18.9
Al-Karak	7	18.9
Country of Origin		
Jordanian	13	35.1
Palestinian (citizens)	19	51.4
Syrian (citizens)	5	13.5

Table 2 Common traditional remedies used for managing newborn and infant’s health concerns

<i>Health concern</i>	<i>Description of Remedy</i>
<i>Fever</i>	Using cold compresses of water and vinegar Applying yogurt and mints over the baby’s forehead Performing body massage using olive’s oil with special attention to the lymph-nodes located in the armpits and groin. Often performed while reciting certain verses of Quran.
<i>Delayed walking</i>	Massaging olive oil to the baby’s legs and exposing it to sun
<i>Constipation</i>	Soaking dates in boiled water and strain dates with a filter Herbal tea (Anise with water) Inserting thermometer to help baby Homemade suppositories “made out of olive’s oil soap”
<i>Ear problems</i>	Drops of olives oil into the ears
<i>Colic</i>	Herbs Rose water
<i>Jaundice</i>	Water and sugar Garlic on a string around baby’s neck Wearing yellow
<i>Diarrhoea</i>	Yogurt mixed with starch, tea and garlics Rice water or Mashed potato
<i>Conjunctivitis</i>	Mother’s milk Camomile Black tea
<i>Teething</i>	Rubbing baby’s gum with Mahleb powder
<i>Common Cold</i>	The use of “Vicks VapoRub” to their child’s back, feet, and chest to ease breathing. Ingestion of mixture of lemon and honey, Topical application of olives oils, and sesame oil
<i>Cough</i>	Soaking castrol or sesame oil on a paper and wrapping it around the baby’s chest after making few holes in it and leave it overnight.
<i>Muscle Strains</i>	Applying egg yolk, scratched olive’s soap, an onion and flour and wrapping it as a strap around the baby’s tummy.
<i>Hernia</i>	Coin over the stump