

## ORIGINAL RESEARCH

# Health beliefs and practices related to pregnancy and childcare in Qatar: A qualitative study

Suha Al-Oballi Kridli<sup>1</sup>, Olufunke M. Ilori<sup>2</sup>, Heather L. Verriest<sup>1</sup>

1. School of Nursing, Oakland University, Rochester, Michigan, USA. 2. Sidra Medical and Research Center, Qatar Foundation, Doha, Qatar.

**Correspondence:** Suha Al-Oballi Kridli. Address: School of Nursing, Oakland University 48309, Rochester-Michigan, USA. Telephone: 248-364-8773. Email: kridli@oakland.edu.

**Received:** July 1, 2012

**Accepted:** July 16, 2012

**Published:** February 1, 2013

**DOI:** 10.5430/jnep.v3n2p1

**URL:** <http://dx.doi.org/10.5430/jnep.v3n2p1>

## Abstract

**Purpose:** The purpose of this study was to understand health beliefs and practices of Qatari women in the areas of pregnancy and childcare.

**Methods:** A qualitative descriptive research design, using focus groups, was used in this study. Purposive sampling was used to recruit college age Qatari women from six universities in Qatar. A total of 43 Qatari women participated in this study. NVivo 8 qualitative analysis software was used to analyze the collected data.

**Results:** A lack of knowledge about pregnancy and childcare was found. Family, especially mothers, provided education and support to mothers during pregnancy and after childbirth, especially during the 40-day period after childbirth. A strong preference for having a large family and having sons to carry the family name was found. Although the Qatari society is changing, the husband and husband's family play a role in determining the number of children.

**Conclusion:** Childbirth and childcare educational sessions are highly needed, in Qatar, but need to be provided in a culturally sensitive manner. Recommendations were elicited from the participants.

## Key words

Beliefs, Pregnancy, Childbirth, Arab, Muslim, Islam

## 1 Introduction

Qatar, pronounced "KA-tar", is an Arab country in the Middle East. Arabic is the main language and Islam is the predominant religion. In 2010, the statistics authority reported that the Qatari population was estimated to be 1,647,092 persons with the majority of the residents being expatriates from South Asia and non-oil rich Arab countries. Qatar is an oil and natural gas rich country<sup>[1]</sup>. As a result, according to the International Monetary Fund, Qatar has attained the second highest per capita income in the world<sup>[2]</sup>.

According to literature, Qatari hospitals conducted 14,714 deliveries in the year 2008<sup>[3]</sup>. Of the total live births 8.5% were low birth weight and 8.9% were preterm<sup>[3]</sup>. Hamad Medical Corporation, one of the biggest health care systems in Qatar, stated that the rate of low birth weight had not changed since 1990 (8.3 to 9.5%)<sup>[3]</sup>. The perinatal and neonatal mortality rate, on the other hand, decreased from 24.7 in the year 1977 to 10.3 in the year 2007<sup>[4]</sup>. According to UNICEF and World

Health Organization (WHO), the perinatal rate in Qatar is slightly higher than in the United States (7/1000), Japan (7/1000), and the United Kingdom (8/1000) <sup>[5,6]</sup>. The literature stated that this is due to the fact that Qatar has a higher still birth rate (8/1000) than these countries. The high rate of stillbirth in Qatar could be due to congenital anomalies that may be related to consanguineous marriages and the low rate of medical terminations of pregnancy <sup>[4]</sup>.

Over the last decade, the two leading causes of neonatal deaths in Qatar, based on global health estimates by WHO, are prematurity (42.6%) and congenital anomalies (28%). Sepsis (19.1%) was reported to be the third leading cause of neonatal deaths in Qatar <sup>[6]</sup>. Neonatal tetanus and neonatal diarrhea did not contribute to neonatal death in Qatar, which is similar to developed countries <sup>[4]</sup>.

Despite Qatar's fast economic growth and health improvement, the rate of underweight live birth in Qatar remains constant, which requires further investigation. The literature stated that the leading causes of neonatal death in Qatar, prematurity and congenital anomalies, can be reduced through conducting health education programs and providing better antenatal care <sup>[4]</sup>. There is a consensus among healthcare professionals regarding the paucity of literature on cultural and religious beliefs and practices that influence health care behaviors of Qataris in general, and Qatari women, in particular. Understanding beliefs and practices is urgently needed when planning health care services, especially health education programs, to this population.

Pregnancy and childbirth are significant life events that require good understanding of body changes and required care. Lack of knowledge about taking care of self and newborn baby can cause fear, stress and anxiety to the new mother. Conducting health programs that are culturally competent to prepare women for pregnancy, childbirth and childcare are urgently needed when planning health care services in Qatar. This study was primarily conducted in an effort to assist Sidra Medical and Research Center, an academic health center currently under development in Qatar, understand health beliefs and practices of Qatari women. The purpose of this study was to understand health beliefs and practices of Qatari women in the areas of pregnancy and childcare. Recommendations regarding each area were elicited from participants.

## 2 Methods

### 2.1 Design

A qualitative descriptive research design, using focus groups, was used in this study. The intent was to identify beliefs and practices held by Qatari women regarding pregnancy and childcare by having them reflect on past experiences to better understand areas of need in the Middle East and help guide future research needed to improve health services such as education. Focus groups are characterized by explicit use of group interaction to develop new understanding and to explain previously unstudied phenomena <sup>[7,9]</sup>. Compared to other qualitative methods, a strength of focus group research is the concentrated focus that produces concentrated data <sup>[10]</sup>, and a non threatening environment that is created to enhance the ability of participants to speak freely and build on each other's ideas <sup>[11]</sup>. The dynamic of the focus group helps participants express their views in ways that are less likely to occur in a one-to-one interview <sup>[11]</sup>. The reason for using focus groups, in this study, was to discover cross-cultural information that can guide the content and structure of clinical practice.

### 2.2 Sample

Purposive sampling was used to recruit college age Qatari women. Purposive sampling is "the process of deliberately selecting a heterogeneous sample and observing commonalities in their experiences" <sup>[12]</sup>. To be included in the study, female students had to be of Qatari nationality, currently enrolled in college in Qatar, and willing to sign a consent form. The participants were specifically recruited from six different colleges in Qatar because of their educational experience and age, being of childbearing years. Participants' ages ranged from 18-36 years with the majority (56%) ranging from 19-21 years old. Out of all of the participants 72% were single, 14% were married, and 7% were engaged (see Figures 1, 2

& 3). Not all of the participants had experienced childbearing personally; those who had not were able to participate in the focus group by sharing experiences of their close family members, such as sisters or mothers.

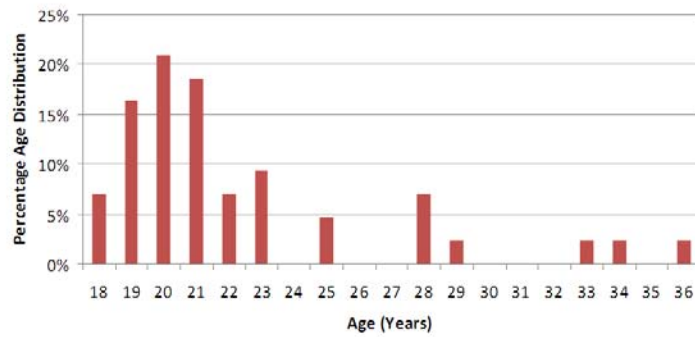


Figure 1. Age distribution of participants

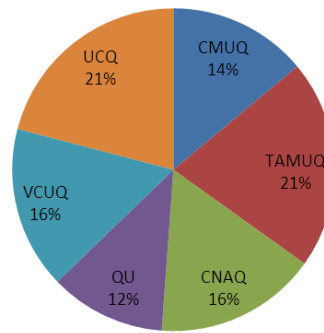


Figure 2. Distribution of participants by college

CMUQ: Carnegie Mellon University- Qatar, CNAQ: College of the North Atlantic-Qatar, QU: Qatar University, TAMUQ: Texas A & M University-Qatar, UCQ: University of Calgary-Qatar, VCUQ: Viginia Commonwealth University-Qatar

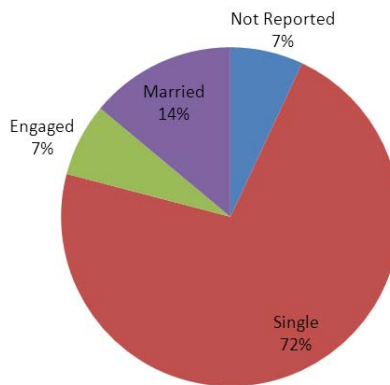


Figure 3. Marital status of participants

### 2.3 Data collection and management

Approval for this study was obtained from the Oakland University Institutional Review Board. A total of six focus groups of Qatari college age women were conducted. Each focus group consisted of 5-10 participants and lasted up to one and a half hours. The moderator (S.K.), a female of Middle Eastern descent who speaks the Arabic language fluently, explained the purpose and topics for the session before it started. Basic demographic information was collected from all participants

using a short survey. A semi-structured interview guide was used to direct the focus group discussions. Focus groups were conducted at the college where the students were enrolled, a comfortable and relaxed setting for them. The moderator encouraged the participants to take part in the group discussion amongst themselves rather than a discussion with the moderator. Data collection continued until the point of saturation was reached<sup>[11]</sup>.

A focus group guide, based on Kruger and Casey's guidelines, was used in conducting the focus groups<sup>[13]</sup>. Focus groups were conducted in the native language (Arabic), audio taped, then translated to English and transcribed, in English, for analysis. Finally, the transcripts were downloaded, coded, and analyzed for emergent themes using NVivo 8 qualitative analysis software.

The process of data analysis included specific steps, which were performed by 2 analysts, who were the principal investigators. Step 1: As the data was obtained it was translated and then transcribed as soon as possible. To ensure accuracy, the transcripts were rechecked against audiotapes, corrected, and then a hard copy was obtained for preliminary data analysis. Step 2: In the early stages of analysis, transcripts were coded to identify preliminary themes and a list of code categories was formulated to organize subsequent data. These code categories were refined as subsequent data was gathered. Step 3: Data coded in one category was examined for its relevance to other categories. The final outcome of this analysis is a statement about a set of complicated interrelated concepts and themes. This process of data analysis, which is flexible and evolving, consisted of systematic and rigorous development of code categories and subcategories. Step 4: Emerging or identified themes and concepts were used to compare within and across data set transcripts and across research subjects. This generated a higher level of data conceptualization and broader theoretical formulations.

## 3 Findings

### 3.1 Beliefs and practices related to pregnancy

#### Source of information about pregnancy

Some participants referred to family, especially mothers, as a source of information to pregnant mothers during pregnancy, followed by their sisters and sisters in law who had experienced pregnancy. Other participants supported the idea of getting information related to pregnancy through using books, media, and the Internet instead of using the mother as their main source of information. They believed that their own experiences might be different from their mother's experiences.

One Participant stated, "My friends who got pregnant got their advice from their mothers or sisters".

Another participant stated, "*At the end I am different from my mother. Whatever worked for her may not work for you. Your body is different from your mother's*".

One more participant stated, "*I'm not pregnant now but when I plan to get married in the future; I won't use my mother's advice only...I will read books*".

One more participant stated, "*I am different from my mother in so many ways; although she has many experiences...but you still need professional help*".

#### Preparing for pregnancy

Participants did not support the idea of seeking health advice or information prior to getting pregnant especially if the woman was not married. They stated that it is socially unacceptable for unmarried women to seek information or medical advice related to pregnancy prior to getting married.

One Participant stated, *“Of course when she gets married she has more freedom so she can sit with her mother and talk to her about this (pregnancy)”*.

Despite the fact that a newly married woman is expected to get pregnant shortly after marriage, a newly married woman would not seek medical advice until she gets pregnant. Participants reported that a newly married woman might be shy or embarrassed to seek advice this early.

One Participant stated, *“Yes. They will go (to seek medical advice) after they get pregnant not before”*.

Pregnancy is never announced shortly after a woman gets pregnant. Participants stated that announcing pregnancy this early might evoke the evil eye and cause harm to the new mother and her unborn baby. As a result, they may wait until the end of the first trimester to announce the pregnancy, especially if it's the mother's first pregnancy.

One Participant stated, *“My family does not announce anything if someone gets pregnant. It is kept a secret...they fear the evil eye but when her pregnancy shows, they say she has been pregnant for a couple of months”*.

### **Number and gender of children**

Participants confirmed that Qatari men have a strong preference for having a large family. They also confirmed that, although the society is changing, mostly the husband and sometimes the husband's family decide the number of children.

One participant stated, *“Husbands love having more children”*.

Another participant stated, *“Right after their first child, they (the husband's family) say the boy needs a sibling”*.

Another participant stated, *“Husbands think that if they have more children (7 or 8), then at least 3 of them will turn out good enough to help him out”*.

One more stated, *“A man likes to have children and takes pride in his wife raising a large number of kids”*.

A relationship between the financial status of the husband and the number of children was identified. Participants reported that men with a higher financial status tend to have more children.

One participant stated, *“If the husband's income supports ten children”*.

A preference for a son is changing, but it still exists in Qatari society. Participants reported that a man wants to have a son or sons to carry the family name and support him. As a result, there is pressure from the family to have the first and sometimes second son. The family pressure comes mainly from the husband's family, especially if the married couple lives with them.

One participant stated, *“It is not like in the past. If a woman has only girls...her husband needs to marry another woman to have boys”*.

A strong preference for getting pregnant shortly after marriage was also identified. Contraception is more accepted after having the first child, mostly for spacing purposes. Participants stated that these beliefs are slowly changing due to fact that Qatari women are becoming more educated.

One participant stated, *“If you get married, you get pregnant during the first year of marriage. After that you can stop if you want but you have to have the first baby”*.

Another participant stated, about postponing the first pregnancy, *“family starts questioning why you still did not get pregnant and wonder if there is something wrong with you...people just get involved”*.

### **Pregnancy support educational programs**

Participants emphasized the high need for childbirth classes as they lack knowledge about this pregnancy and childbirth. They believed that Qatari women would accept childbirth and Lamaze classes, especially if they were conducted at a convenient place and time.

Participants confirmed that a husband should not be expected to attend such classes, as it is totally unacceptable for a Qatari man to see another man with his wife. As a result, a pregnant woman may be accompanied by a female relative, such as her mother or sister. Based on this, conducting group sessions, involving both genders, should be avoided. Husbands may attend with their wives only if it was a “one-on-one” session in a health institution such as a clinic or hospital, according to participants.

One Participant stated, *“Our society does not accept gatherings in couples”*.

Another participant stated, *“Some men will not accept that their wives talk in front of other men”*.

One more participant stated, *“I actually don’t think that men will allow their women to lie down in front of other men”*.

## **3.2 Beliefs and practices related to childcare**

### **Source of information about childcare**

Participants referred to hospitals and health centers as their main source of information regarding taking care of a newborn, especially in areas related to feeding and vaccination.

One Participant stated, *“Health centers provide information about breastfeeding”*.

Another participant stated, *“Hospitals are doing well educating the mothers. When they give birth; they give them baby cards with all the needed dates (for vaccinations)”*.

One more participant stated, *“Private hospitals follow the growth curve and pediatricians give advice”*.

According to participants, the family, mothers, mothers in law, and sometimes, female relatives, play a primary role in supporting the mother in taking care of herself and her newborn after birth. They also stated that first time mothers tend to get more support because they lack experience. Mothers educate their daughters about newborn care activities such as bathing, feedings, clothing, etc. Mothers also educate their daughters about traditional medicine practices. The mother’s role, in helping her daughter, tends to last for about 40 days after childbirth.

One participant stated, *“...and my mother was with my two sisters in law when they had their children from the beginning until the end. She taught them everything and how to breastfeed. She helped them even if one of them was tired”*.

Another participant stated, *“My mother even taught them (brother and wife) about traditional medicines and food preparations”*.

On more participant stated, *“My mother teaches my brother’s wife anything she does not know. Of course the child is hers too”*.

### Childcare educational support groups

According to our participants, childcare educational support groups to help new parents take care of their newborn will only attract those who lack family support and maybe those who are more educated. They believed that this idea would not attract those who believe that their mothers are a sufficient source of information to them in this area.

One Participant stated, *“This could be useful in cases where the new couple have no one to ask or refer to”*.

Another participant stated, *“I think that our generation is more acceptant of new information and attending seminars”*.

One more participant stated, *“She (the mother) may feel that it is enough with her mother being there. Also if her mother discourages her; she won’t go”*.

Another participant stated, *“People may not engage in such support groups as they feel that they do not need it, for they can ask their family members who know (about childcare)”*.

Participants stated that parents might be resistant to going to educational sessions as they are used to seeking medical help when they have a health related problem only. As a result, vaccination appointments would be an ideal time to educate them. The best locations to educate the new parents about childcare are hospital waiting rooms, health centers, and clinics, according to participants.

One Participant stated, *“If you tell a parent that you should visit the doctor to get general information about your baby, they won’t find it necessary and won’t bother to go. But they will go for their vaccination appointment so you can provide them with the information there”*.

Another participant stated, *“She (the mother) would sit in the waiting room for 2, 3, or even 4 hours sometimes. So during this time, she could benefit from the information”*.

## 4 Discussion

Seeking medical advice while preparing for pregnancy is not a common concept in the Middle East<sup>[14]</sup>. Qatari women obtain information from different sources, such as books, media, and family, to prepare for pregnancy. According to this study’s participants, Qatari women seek medical attention only after the pregnancy occurs. This could be related to the fact that Arab Muslim women view pregnancy as a natural process, so seeking medical advice before pregnancy is perceived as unnecessary<sup>[14]</sup>. During pregnancy, participants reported that Qatari women would accept childbirth and Lamaze classes if they were conducted in a culturally sensitive manner where husbands do not accompany their pregnant wives. Conducting childbirth and Lamaze classes is another highly needed area in Qatar. A research study conducted in Jordan that looked at the childbirth experiences of mother’s reported that most participants were unhappy with their childbirth experience and felt that they did not have any control over the experience<sup>[21]</sup>. It was reported that majority of the mothers thought childbirth was more painful than what they had anticipated, they didn’t understand many of the different procedures being done, and they were scared, and again lacked control. These findings demonstrate a strong need for medical education and Lamaze classes in the Middle East so that women can be well informed about the procedures during childbirth and what they can expect so that the experience of childbirth can be improved for women in the Middle East<sup>[21]</sup>.

Although Qatari society is rapidly changing, it was reported that the number of children was to be decided mostly by the husband, and sometimes the husband’s family. Hamadeh, Al-Roomi, and Musuadi confirmed that the husband determines the size of the family in the Gulf Arab countries. They stated that in families where the husband was the decision maker on the number of children, they had significantly more children than in families where the couple participated together in the decision<sup>[15]</sup>. Preference for sons was also found in this study. This finding is consistent with findings by Kridli and Libbus where young couples, in Jordan, were found to have family pressure to have children immediately after marriage, *Published by Sciedu Press*

especially boys, to preserve the family name <sup>[16]</sup>. The preference of sons is quite common in Arab Muslim societies. Farsoun, Khoury and Underwood identified three cultural reasons for the importance of having sons in Arab Muslim societies: to carry the family name, to assist the family economically, and to provide parents with security in old age <sup>[17]</sup>.

Hospitals and health care centers were identified as a source for obtaining information regarding childcare by Qatari parents. However, it was limited to feeding and vaccinations. Mothers and other female relatives were found to play a primary role in educating and supporting the young mother in providing care to her newborn especially during the first 40 days after childbirth. The 40-day period of support after childbirth is a practice commonly found in the Middle East <sup>[18]</sup>. This is because the new mother and infant are viewed as being vulnerable to illness and at a greater risk death during this period <sup>[18]</sup>. Missal found that Gulf Arab women felt supported and respected by their family during the 40 days after childbirth. They stated that the family centered care they received helped reduce their fear and anxiety and helped them transition into motherhood with self- confidence <sup>[19]</sup>. Because of this, participants believed that a childcare educational support group may only be accepted by mothers who lack such support. Findings from this research study are similar to a previous research study that looked at changes and continuity in childbirth and parenting practices across three generations of women in the United Arab Emirates. It was reported that a factor that was continuous across all three generations, daughters, mothers, and grandmothers, was that most women identified their mothers as the most significant source of information for direction and education after giving birth <sup>[20]</sup>. It was also reported, however, that some trends were changing across the generations including fewer adolescent births and decreasing birth rates in the younger generation, more daughters giving birth in a hospital setting with a doctor present than their mothers or grandmothers, and significantly fewer daughters were reported to breastfeed than the older generations <sup>[20]</sup>. These findings show that birth practices are changing in the Middle East, most likely due to women becoming more educated, that they are becoming more willing to seek medical help and education as evidenced by the growing trend of delivering with a doctor in a hospital setting, but that more educational programs need to be put in place to teach younger women about beneficial health practices in caring for infants, such as breastfeeding <sup>[20]</sup>.

## 5 Recommendations

Recommendations in this study were elicited from the participants. During the conduction of the focus groups, and at the end of each topic area, participants were asked to make recommendations for improvements in that particular area. As evident below, participants emphasized the importance of being culturally sensitive in their recommendations. A childbirth and parenting education initiative, that is evidence based and culturally sensitive, should be initiated for Arab women in the Middle East, and if it is in congruence with religious practices and beliefs of the society it should be well accepted. An education program is a safe and effective way to improve perinatal and neonatal mortality.

### 5.1 Recommendations related to pregnancy

Recommendations made by the participants to improve this area were:

- 1) Conduct childbirth classes at different times (am and pm) to accommodate working mothers.
- 2) Advertise through media and send text messages to the mothers as a reminder to attend.
- 3) Conduct classes at different locations such as gyms, ladies sports clubs, universities, and health centers.

### 5.2 Recommendations related to childcare

Recommendations made by the participants to improve this area were:

- 1) Conduct childcare educational support group sessions for the new mothers, as the idea of conducting support groups for new parents, as a couple, is totally unacceptable.



- 2) Conduct educational sessions for the fathers that focus on parenting instead of the fathers' role in direct physical care of the newborn, such as feeding and bathing, to make it more attractive to them.
- 3) Conduct educational sessions in public locations such waiting rooms in hospitals and clinics, gyms, family counseling centers, and universities.
- 4) Provide childcare to participants attending with their older children.
- 5) Conduct educational sessions at different times of the day (am and pm) to accommodate working mothers.
- 6) Use the media, especially TV, to educate parents.
- 7) Orient the mothers of the new parents about the importance of attending educational sessions.

## 6 Conclusion

This qualitative study is the first known to investigate health beliefs and practices of Qatari women. It provided a good basic cultural understanding of the health beliefs and practices of college age Qatari women in the areas of pregnancy and childcare. It was evident that family played an important role in providing education and support to the mothers during pregnancy and after childbirth, especially during the 40-day period after childbirth. Family is also a source of information about pregnancy and childcare. The findings of this research study are useful because they can help develop a culturally appropriate child bearing educational program for women in the Middle East and guide future research to evaluate the effectiveness of the programs set forward. New programs will be able to be developed based on the findings by incorporating some historic ways of preparing for pregnancy and childbirth along with the addition of new research based education strategies. New educational programs may help to improve perinatal and neonatal mortality rates in the Middle East. Educational programs are highly needed but again, need to be provided in a culturally sensitive manner.

## References

- [1] Population in Qatar [Internet]. Statistics authority. Available from: [http://www.qsa.gov.qa/Eng/populationcensus/2009/population\\_census\\_March.htm](http://www.qsa.gov.qa/Eng/populationcensus/2009/population_census_March.htm). Accessed November 22, 2010.
- [2] Qatar and the IMF [Internet]. International Monetary Fund. Available from: <http://www.imf.org/external/country/index.htm>. Accessed November 22, 2010.
- [3] Hamad Medical Corporation. Annual Health Report. 2008: 21-27. PMID:18457209
- [4] Salameh, K., Rahman, S., AL-Rifai, H. et al. Academic Journal An analytic study of the trends in perinatal and neonatal mortality rates in the State of Qatar over a 30-year period (1977 to 2007): a comparative study with regional and developed countries. *Journal of Perinatology*. 2009; 29(11): 765-770. PMID:19641511. <http://dx.doi.org/10.1038/jp.2009.89>
- [5] UNICEF. State of the World's Children. 2007: 102-105.
- [6] World Health Organization. The World health report. 2005: 1-243.
- [7] Stewart, D.W., Shemdasani, P.N. Focus groups: Theory and practice. Newbury Park, CA: Sage; 1990.
- [8] Kreuger, R.A. Focus groups: A practical guide to applied research. 2nd ed. Thousand Islands, CA: Sage; 1994.
- [9] Wilkinson, S. Focus groups in health research: Exploring the meanings of health and illness. *Journal of Health and Psychology*. 1998; 3(3): 329-348. PMID:22021395 <http://dx.doi.org/10.1177/135910539800300304>
- [10] Morgan, D. L. Focus groups as qualitative research. Thousand Islands, CA: Sage; 1997.
- [11] Burns, N., Grove, S, K. The Practice of Nursing Research: Appraisal, Synthesis, and Generation of Evidence. 6th ed. St. Louis, MO: Saunders; 2009.
- [12] Morse, J. M. Designing funded qualitative research. In N.K. Denzin & Y.S. Lincoln, Handbook of qualitative research. Thousand Oaks, CA: Sage; 1994: 220-235.
- [13] Kruger, R.A. & Casey, M.A. Focus groups: A practical guide for applied research. 3rd ed. Thousand Oaks, CA: Sage; 2000.
- [14] Kridli, S. Women's Health Care Beliefs and Practices of Arab Americans. *MCN The American Journal of Maternal Child Nursing*. 2002; 27(3): 17-182. <http://dx.doi.org/10.1097/00005721-200205000-00010>

- [15] Hammadeh, R.R., Al-Roomi, K., & Masuadi, E. Determinants of family size in the Gulf Arab state: a comparison between two areas. *Journal of Royal Society for Promotion of Health*. 2008; 128(50): 226-232. PMID:18814403  
<http://dx.doi.org/10.1177/1466424008092795>
- [16] Kridli, S., & Libbus, K. Contraception in Jordan: a cultural and religious perspective. *International Nursing Review*. 2001; 48 (3): 144-151. PMID:11558689 <http://dx.doi.org/10.1046/j.1466-7657.2001.00071.x>
- [17] Farsoun, M., Khoury, N., & Underwood, C.. *In Their Own Words: A Qualitative Study of Family Planning in Jordan*. Baltimore: Johns Hopkins for Communication Programs; 1996.
- [18] Hundt, G.L., Beckerleg, S., Kassem, F., Abu Jafar, A.M., Belmaker, I, Abu Saad, K., et al. Women's health custom made: building on the 40 days postpartum for Arab women. *Health care for Women International*. 2000; 21: 529-542. PMID:11235284  
<http://dx.doi.org/10.1080/07399330050130313>
- [19] Missal, B.E. *The Gulf Arab woman's transition to motherhood*. Unpublished doctoral dissertation. University of Minnesota. Minnesota; 2003
- [20] Green, K. E., Smith, D.E. Change and continuity: childbirth and parenting across three generations of women in the United Arab Emirates. *Child: care, health, and development*. 2006; 33 (3): 266-274. PMID:17439440  
<http://dx.doi.org/10.1111/j.1365-2214.2006.00667.x>
- [21] Oweis, A. Jordanian mother's report of their childbirth experience: findings from a questionnaire survey. *International Journal of Nursing Practice*. 2009; 15: 525-533. PMID:19958407 <http://dx.doi.org/10.1111/j.1440-172X.2009.01774.x>