AVICENNA
A Qatar Foundation Academic Journal

OPEN ACCESS

Research article

Health beliefs and practices of Qatari women: A qualitative study

Suha Al-Oballi Kridli[1,*], Olufunke M Ilori[2], Jessica Goeth[1]

[1]Oakland University, Rochester, Michigan, USA
[2]Sidra Medical and Research Center, Doha, Qatar
[*]Email: kridli@oakland.edu

ABSTRACT

The purpose of this study was to understand health beliefs and practices of Qatari women by exploring puberty and sexual relations. 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 collected data. Participants reported that Qatari women lacked information about puberty and did not feel prepared for their first menstrual period (menarche). Participants also reported a lack of information about sexual relations due to their mothers' and schools' discomfort with the topic. Recommendations related to the investigated areas were elicited from the participants. There is a urgent need to conduct educational programs in Qatar.

Keywords: Beliefs, Practices, Puberty, Sex

http://dx.doi.org/10.5339/avi.2012.1

Published: 27 June 2012

QSCIENCE.com
Member of Qatar Foundation

Cite this article as: Kridli SAK, Ilori OM, Goeth J. Health beliefs and practices of Qatari women: A qualitative study, *Avicenna* 2012:1 http://dx.doi.org/10.5339/avi.2012.1

INTRODUCTION

Qatar, pronounced "KA-tar," is an Arab country in the Middle East. Arabic is the main language in Qatar, although English is widely used as a second language. Islam is the predominant religion. Qatar is a peninsula, bordered by the Persian Gulf and Saudi Arabia to the south. It is a country rich in oil and natural gas and as a result, according to the International Monetary Fund, Qatar has attained the second highest per-capita income in the world [1].

In 2010, the Qatar Statistics Authority reported that the Qatari population was estimated to be 1,647,092 persons [2]. The majority of the residents in Qatar are expatriates from South Asia and non oil-rich Arab countries. According to the Central Intelligence Agency (CIA) World Factbook, the expatriate community consists of 40% Arab, 18% Indian, 18% Pakistani, 10% Iranian, and 14% other [3].

Despite the fact that the overall population of Qatar, both nationals and expats, is less than two million people, the population is very diverse in terms of ethnic backgrounds. Additionally, the healthcare providers themselves are of ethnic backgrounds that mirror the diversity of this population. These different groups hold different health beliefs and practices, which is a challenge for the current health systems in Qatar. Accordingly, there is a need to understand the health beliefs and practices held by the different groups living in Qatar, in particular the Qatari nationals, in order to provide them with culturally sensitive care.

There is a consensus among healthcare professionals regarding the paucity of literature on cultural practices and religious beliefs that influence health care behaviors of Qataris in general, and Qatari women in particular. The experience of menarche (first menstrual period), for young women, is a significant life event accompanied by emotional, physical, and social changes. Qataris believe a preteen girl has reached puberty when she has experienced her menarche. Lack of knowledge about menarche can cause undue stress, anxiety, and fear [4,5]. Young women need to understand the changes that accompany menarche to better understand the biology of their bodies and the connection of menarche to sexual relations. With a fundamental appreciation for their bodies' functional processes, young women can better prepare for and understand sexual relations. The sparse literature in this area reports that there is a general reluctance to acknowledge sexual relations among young Arab women, as evidenced by unmet needs and lack of educational programs [6].

Education is an important aspect of providing health care. Understanding health beliefs and practices is urgently needed when planning health care services, especially heath education programs, for this population. It is vitally important that these health education programs are culturally competent to prepare young women for puberty and inform them about sexual relations. 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 the health beliefs and practices of Qatari women in the areas of puberty and sexual relations. Recommendations regarding each area were elicited from the participants.

METHODS

Design

A qualitative descriptive research design, using focus groups, was used in this study. The intent was to have the participants help identify beliefs and practices held by Qatari women regarding puberty and sexual relations. These women were asked to reflect upon their personal experiences in these areas to help develop and plan health education services. Focus groups are characterized by explicit use of group interaction to develop a new understanding and to explain previously unstudied phenomena [7–9]. Compared to other qualitative methods, a strength of focus group research is the concentrated focus that produces concentrated data [10]. The environment of a focus group is non-threatening and is created to enhance the ability of participants to speak freely and build on each other's ideas [11]. The dynamics of the focus group help allow the participants to express their views in ways that are less likely to occur than in the one-to-one interview setting [11]. Focus groups were used in this study to discover cross-cultural information that can guide the content and structure of clinical practice.

Sample

To be included in the study, participants had to be females, of Qatari nationality, currently enrolled in college in Qatar, and willing to sign a consent form. Purposive sampling was used to recruit college age Qatari women. Purposive sampling is "the process of deliberately selecting a heterogeneous sample and observing commonalties in their experiences" [12]. Six colleges were contacted to recruit participants. An email invitation was sent by each college administration to a selected group of Qatari female students who can provide in-depth information needed for this study. Approximately 80% of the participants were 18–25 years of age with the remaining participants 28–36 years of age. Utilizing six college campuses provided an accessible environment that allowed the participants to volunteer their time and experiences for this study [13]. Female Qatari students willing to participate in the study were provided with consent forms providing explanation and detailed information about the study prior to data collection. Participants were asked to reflect upon their experiences reaching puberty and preparedness for sexual relations.

Data collection and management

The principal investigator (S.K.) obtained informed consent, as approved by the Institutional Review Board from Oakland University. An in-country ethical approval was obtained through developing an ad hoc committee consisting of experts in the field due to the fact that Sidra Medical and Research Center is still a project under development. To protect the identity of the participants, descriptors for the participants' responses were not used.

The principal investigator conducted six focus groups. Each focus group consisted of 5–10 participants and lasted up to ninety minutes. The moderator of each focus group (S.K.) was a female of Middle Eastern descent who speaks fluent Arabic. Basic demographic information was collected from all participants using a short survey. A semi-structured interview guide was used to direct the discussion of the focus group. Focus groups were conducted at the college where the students were enrolled. The location of the focus groups was chosen to minimize disruptions so that the participants felt comfortable, relaxed, and were able to open up to participate in the group discussion [14]. Data collection continued until saturation was reached [11].

A focus group guide developed by Kruger and Casey was used for conducting the focus groups [15]. Each focus group was conducted in the native language (Arabic), audio taped, translated to English, and then transcribed for analysis. Finally, transcripts were downloaded, coded, and analyzed for emergent themes using NVivo 8 qualitative analysis software. The P.I. listened to the audio tapes while reading the translated transcriptions to check for accuracy.

Data was analyzed using a grounded theory approach. Grounded theory is a methodology that can be used while in the field to obtain data to create theoretical constructs to help explain the social action under research [16]. This methodology is very helpful when no previous information has been identified. This approach allows for the focused perspective, "…particularly since it focuses attention upon the social processes and interactions taking place in the situation rather than upon the static characteristics that might categorize the social situation" [16]. This allows freedom from previous misconceptions and lets the researchers observe and inquire to help define best nursing practice in a culturally competent framework.

The process of data analysis included specific steps. These steps were performed by the principal investigator (PI) and co-PI.

Step 1: As data was obtained, it was translated and then transcribed as soon as possible. To ensure accuracy, the transcripts were rechecked against audio tapes, 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 was a statement about a set of complex, interrelated concepts and themes. This process of data analysis, which is flexible and evolving, consisted of a 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.

FINDINGS

Sample findings

Participants were distributed by age, college, and marital status and displayed in Figs. 1–3.

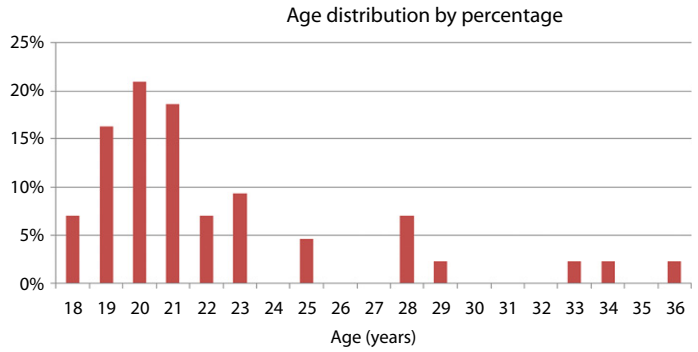

Figure 1. Age distribution of participants.

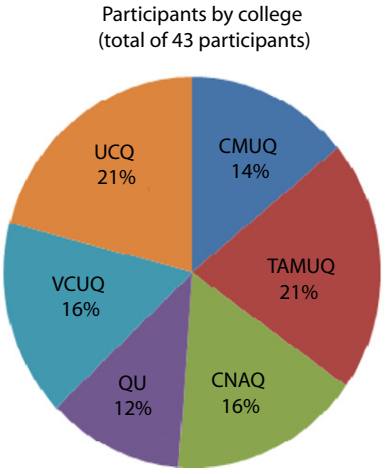

Figure 2. Colleges attended by participants.
CNAQ = University of Northatalantic-Qatar, CMUQ = Carngie Mellon University-Qatar, QU = Qatar University, TAMUQ = Texas A &M-Qatar, UCQ = University of Callgary-Qatar, VCUQ = virginia Commonwealth University-Qatar.

Beliefs and practices related to puberty

Social changes related to puberty

The majority of the participants felt that their social expectations changed after they experienced their first menstrual cycle. Some viewed it positively, while others viewed it negatively. Those who viewed it positively felt their opinion was being heard and they received more privacy. On the other hand, those who viewed it negatively felt that reaching puberty ended their childhood too early at a time when they were not ready for that change.

Examples of social changes were no longer playing with boys and heavier emphasis on religious duties. Playing with boys became inappropriate and had to stop. This was viewed negatively because it meant the end of childhood. Positive changes were sharing a room with a brother ended and this meant more privacy. Also a heavier emphasis was placed on religious duties such as prayer, fasting, and wearing the hijab (head cover) and abaya (robe-like dress). This was viewed positively, although some girls were not ready to wear the hijab and abaya.

One participant *stated, "I used to love playing outside but I felt that after I hit puberty I was restricted from that."*

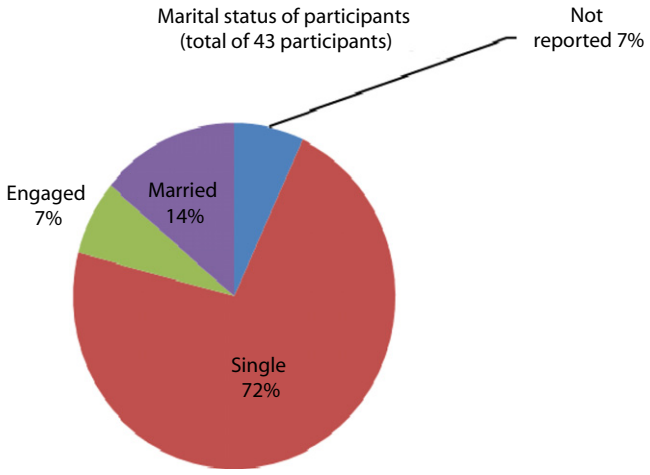

Figure 3. Marital status of participants.

Another participant stated, *"The best thing happened to me was that I got a separate room. We had empty rooms in the house so I got one."*

One more participant stated, *"After I hit puberty, I think that there became more emphasis on wearing the hijab and on religious responsibilities."*

Role of family in preparing for puberty

Family, especially mothers, played a role in educating their daughters about puberty. However, their teaching was mostly limited to hygiene and the menstrual cycle. The majority of the participants were dissatisfied with the role their mothers played in preparing them for this very sensitive phase of their lives. They stated that their mothers did not inform them about changes that occur during puberty, which led to feelings of fear and embarrassment. They believed that their mothers did not feel comfortable discussing this topic with them.

One participant stated, *"I feel that my mother was shy so she did not talk to me about it (puberty)."*

Another participant stated, *"She (my mother) used to say that I should not be physical or shower on the first day of the menstrual period but we know that it is wrong because exercising reduces the menstrual cramps and shower is good."*

Older sisters and female cousins also played a role in educating the younger girls about this phase by using their own experiences. The older sister role mostly started after the younger sister has experienced her first menstrual period. Some participants stated that they felt more comfortable discussing the topic with their sisters than their mothers. The role of the female cousins was evident but not as strong as that of the older sisters.

One participant stated, *"My younger sister came to me and discussed this subject so now thank God she knows more than I did when I was in fifth grade."*

Another participant stated, *"I mostly learned (about puberty) from my mother and sister."*

Role of school in preparing for puberty

In addition to family, school played a role in educating young girls about puberty. Education about puberty varied from school to school in the type of information and grade level. Most participants received some form of education during sixth, seventh, or eighth grade. For some participants, they reported that this education came too late as they had already experienced their first menstrual cycle in fifth or sixth grade. Most schools taught the topic of puberty as part of science, biology, or Islamic studies. Participants reported that the information taught lacked the needed depth regarding emotional and physiological changes. When the topic was taught in Islamic studies, it focused mostly on hygiene and cleansing. Other schools omitted the reproductive system and puberty content from the science and biology curriculum. Some participants believed that this occurred due to the fact that the teachers were uncomfortable teaching the topic. Others believed that the teachers omitted the content because they felt that it was socially unacceptable.

One participant stated, *"I learned about menstrual period after I got my period, what was the point?"*

Another participant stated, *"It was too late. I mean I already knew everything three years before the school provided me with the information."*

Some schools brought a health professional, such as a nurse, to the school to educate students about this area. Some participants felt that the teacher would have been a better choice of educator as she had an established rapport with the students, while others trusted the nurse's level of knowledge. Finally, some young women with experience were able to teach their peers about areas related to the menstrual cycle.

Teaching methods, for schools that provided education related to puberty, varied from one school to another. For example, most schools used lecture-based curriculum and it covered mostly physical or "scientific" changes. The lectures were provided by teachers or nurses while some schools provided their students with booklets to take home and read on their own. Several participants referred to the "I Grew Up" program, sponsored by Always Company, as a teaching method used at their school. The program involved a video, booklets, and sanitary pad samples.

One participant stated, "*The explanation (the school provided) lacked information about physical changes."*

Another participant stated, *"They (schools) did not explain what kind of changes would happen to the body. For example, the breast would grow bigger and things like that were not mentioned."*

Participants were unsatisfied with the educational role the school played in preparing them for this phase. In addition to the fact that it was provided late, it did not address all aspects of this experience, and as a result, the girls did not feel that the school prepared them properly.

Lack of information about puberty

The majority of the participants did not feel that they were well prepared for puberty. They felt that they lacked information about physical and emotional changes that was needed to help them prepare and cope with this very critical phase of their lives.

One participant stated, *"We did not know about the physiological change that will happen to our bodies. We knew that one day this (puberty) will happen to us and there was something called period. We knew about it in general terms but not in detail."*

The majority of the participants believed that the mother should be the main source of information for the preteen girls, followed by the teacher, and finally by a nurse. They stated that such information is best delivered by a person who is close to them, whom they knew and trusted.

One participant stated, "*I think that the mother is the best way (to educate her daughter)."*

Another participant stated, *"I believe that we should educate the mother…so she understands the emotional state of her daughter before initiating such a sensitive topic."*

One more participant stated, *"The mother should be the main source. We should bring awareness to the mother first then the girl who is hitting puberty and growing up."*

Beliefs and practices related to sexual relations

Source of sexual knowledge

The majority of the participants reported the internet as their main source of information about sexual relations. However, they feared that some of this information was not reliable, or socially or religiously unacceptable. They reported books as the second source of information that was used, mainly without parents' knowledge.

One participant stated, "*… Not everything that is available online is consistent with religion, there are some things that are halal (religiously allowed) and others that are haram (religiously not allowed)."*

Another participant stated, *"Okay, the internet gives you the basic important stuff that you need, but you need a reliable and experienced source about the topic like a doctor or a specialist."*

One more participant stated, *"Some girls are shy to go to their mothers because their relationship is not strong so she can search the internet and read."*

One last participant stated, *"Girls in sixth grade used to buy books without their parents' permission."*

Role of female relatives in preparing for sexual relations

The majority of the participants believed that the mother is the most trusted source of information in this area. They also strongly believed that it is the mother's role is to initiate such discussions as daughters tend to be too shy to ask. Finally, they believed that such a discussion should only take place after the daughter becomes engaged.

One participant stated, *"The mother has an essential part in such a matter and should not be forgotten."*

Another participant stated, "*The mother should initiate the discussion so the daughter will feel comfortable talking to her mother."*

One more participant stated, "...I asked my mother once and she replied, 'When you find a groom I will tell you'... Then I went to a Qatar Bride website."

In addition to the mother, older sisters, female cousins, aunts, and girlfriends were reported as a source of information about sexual relations. Such information is usually discussed in female gatherings, which occur quite often in this culture.

One participant stated, *"If one of the girls gets engaged, she becomes too shy to discuss the topic with her mother so the mother along with the aunts come and start the discussion with her."*

Role of school in preparing for sexual relations

The majority of the participants were dissatisfied with the role the school played in educating them about this area. The majority stated that they did not receive any sexual education and a few stated that they received some education when studying the reproductive system. They stated that the teachers were uncomfortable teaching this topic. They also stated that the reproductive system topic was part of the biology curriculum in their high school. However, not all students study biology due to academic track choices in high school.

One participant stated, *"It was very scientific. For example, how the sperm meets the egg."*

Another participant stated, *"...In junior high the teacher was very shy to talk about such stuff. She did not tell us everything."*

One more participant stated, *"When I was in high school, I majored in engineering and my friends majored in medicine. They studied everything about it. They even studied childbirth and contraception."*

DISCUSSION

Puberty is a critical phase in a young woman's life. It is significant because of physical, emotional, and cognitive changes that occur during this phase. Puberty also involves social changes to a young woman's life in Qatar. This study revealed that young Qatari women lacked information regarding this important phase of their lives. This occurred due to the fact their families, especially mothers, and schools did not prepare them for this phase in general, nor for their first menstrual period. This is consistent with findings by previous researchers as they found that adolescent girls in Bangladesh were not adequately prepared for puberty, which caused them to reach menarche in fear [17]. In another study by Ali and Rizvi, almost 60% of urban Pakistani girls reported fear and worry with their first menstruation and only 47.8% had any knowledge prior to menarche [18]. In Egypt, only 5% of girls reported receiving information from school to prepare them from puberty and 25% of them received unsatisfactory information from their friends [19]. Furthermore, Abioye-Kuteyi found that Nigerian girls who knew about menses still had incomplete knowledge about the physical changes and menstrual hygiene [20]. In Arab families, menarche is only discussed with women and never in the presence of men [21]. Orringer and Gahagan conducted a study of multiethnic American females and found that some female family members, especially mothers, are not comfortable discussing menarche and often times do not realize their daughter's body is maturing [22]. In the Pan Arab Project for Family Health survey conducted in Lebanon, 70% of young females who reached puberty reported it was normal. For an additional 28% who reached puberty, they reported that it was not easy. Through the help of this survey, Lebanon has recognized the need to augment education for females [23]. Previous research conducted in this region showed that young people's knowledge about their body's physiology is very limited. There is a general lack of willingness from the government and schools to address education issues for this group of young people. Teachers reported feeling embarrassed teaching this topic to their students [19]. Educating preteen girls at an

early age about expected developmental changes is necessary, as it can reduce their fear and anxiety associated with this vital period of their life.

In some cultures, the topic of menarche is often seen as taboo, but the importance of preparing young women is paramount. Young women need to be prepared for all of the changes they will experience, from the social changes and religious expectations to knowing who to turn to for reliable information within the family and at school. A research study in Egypt revealed that girls felt they should not speak about sensitive issues of puberty or sexual relations. The participants in this study also reported the desire to learn from their mothers but were too shy or realized their mothers did not have enough knowledge. They often reported turning to their friends or media but not feeling confident in the trustworthiness of the information [19]. Studies specifically relating to health beliefs and practices of menarche in Middle Eastern countries are sparse. However, research investigating this area was identified in other countries. In one study, Taiwanese girls who were provided with education about menarche, most often by their teachers, responded in a more positive manner than the girls without this education, who had a more difficult time adjusting—although both groups of girls experienced some embarrassment [24]. In Mexico, girls are educated about menarche by teachers starting in fifth grade, however it only addressed the physical aspect, not the emotional or cognitive changes [25]. Information provided to the mothers, preteen girls, and teachers should adhere to cultural expectations driven by ongoing research.

Participants reported both positive and negative social aspects with reaching puberty. The positive aspect was getting more privacy at home, getting their own room if shared with a brother, and more religious duties. The negative aspect involved restricted social interactions, no playing with boys, making them feel they are forced to grow up too quickly. Social changes associated with puberty, among Arab women, were confirmed by Kridli as she reported that Arab girls become mature women with puberty and are to cease socializing with boys and adhere to stricter rules for when to leave the house and with whom. Furthermore, she stated that for Muslim girls, it may mean she is expected to start wearing the hijab [21].

Participants reported that limited education regarding menarche was provided too late, as they had already experienced menarche. The education provided did not include information about how to cope with or what physical or emotional changes they would experience. Similarly, in Pakistan, if the school provided education for menarche, it only focused on hygiene, social, and religious expectations [18]. Lacking this crucial information for preparedness, places these young women at a disadvantage as they are fearful and taken by surprise when they reach puberty. This is confirmed in a study by Orringer and Gahagan, that young girls are able to have a positive reaction to menarche if they are prepared for it and reassured that this is a normal part of being female [22]. Participants of this study reported the importance of a familiar person to provide this education, first the mother, then teacher, and finally a nurse. However participants did not feel their mothers were comfortable discussing menarche and sexual relations with them. This is consistent with findings of another study where Pakistani mothers reported being often uncomfortable discussing menarche with their daughters [5]. These results demonstrate the importance of providing education to mothers and adolescent girls about changes to be expected with puberty and provide them with reliable sources.

Participants used multiple sources to gain information about sex. Despite the fact that the internet was the most frequently mentioned source, participants feared source reliability, social and religious acceptability of such a source. Young Pakistani women also reported using the media, movies, magazines, and newspapers for information on sexual relations. Most of their education was provided in a vague manner from married friends or what they observed through movies; retrospectively, they did not feel prepared for sexual relations [5]. A study from the Middle East and North Africa acknowledged a lack of access to information and services leading to a dangerous gap in health care that leaves young women unprepared [26]. This is also confirmed by study conducted in the Arab countries and Iran that young people reported scarce access to health information from parents, teachers, or health services. In this study, young people reported being afraid to use the internet as a source of information because of state surveillance [27]. Participants trusted their mothers as a source of information in this area, but the mothers waited until their daughters got engaged to discuss sex and sexuality with their daughters. This could be due to the fact that the Qatari mothers feared that their daughters may become sexually active if they were taught too early. Young people from other Arab countries and Iran also reported their parents as their preferred resource. However, the parents did not often feel well equipped to discuss this with them [27]. Our

finding is consistent with previous research where Thai and Taiwanese mothers did not discuss sexual issues with their daughters because they feared that gaining sexual knowledge may encourage them to engage in sexual activities [24,28]. Once daughters were engaged, they were informed of their duties and responsibilities in being a wife, a mother, and a daughter-in-law, but not about sexual relations [5]. In another study, Swedish adolescents stated that they needed to discuss and learn more about sex, but the adults around them disagreed with them because the parents felt that the adolescents were too young for such information [29].

Participants were dissatisfied with the role their schools played in educating them about sex. They stated that their teachers' discomfort level with this topic contributed to their lack of knowledge about sex and sexual relations. This finding is consistent with a previous study where Iranian teachers did not teach topics related to sexual and reproductive health even when they existed in the curriculum [6]. This is also found in other Arab countries where if the curriculum existed, the teachers often skipped over important lessons because they felt unprepared or embarrassed [27]. In Pakistan, science classes at the high school level discussed only animal biology not human development or sexual relations, leaving the students uninformed [5]. The family and school discomfort with this topic led to a lack of knowledge about sexual relations among Qatari girls. Sexual education is a highly needed area in this society and should be targeted through parents, schools, and other official sources in Qatar. These findings articulate the need for increased education across the span of menarche to sexual relations to minimize fear and anxiety as girls grow older. Teachers and mothers struggle to educate girls about menarche and all of the changes it encompasses [22]. Information can be derived and modified from existing cultures to help explain and educate the maturing girl for the expectations of her body and her culture that will take place. This information can be used to educate mothers and teachers and also develop school curricula to provide education about menarche and sexual relations. It is important for young girls to be able to learn about personal and sexual development through reliable sources and have opportunities to ask questions in a safe environment. This education can be presented within a socio-cultural context and regulated and delivered within the context of Islamic teaching.

RECOMMENDATIONS

Recommendations in this study were elicited from the participants. During the focus groups, participants were asked to make recommendations for improvements in this particular area. As evidenced below, participants emphasized the importance of being culturally sensitivity in their recommendations.

Recommendations related to puberty

Recommendations made by the participants to improve this area were:

1. Conduct several educational sessions at school, by teachers, as they are closer to the students than the nurse or other health care providers.
2. Educate preteen girls about handling their first menstrual period.
3. Educate preteen girls about physical and emotional changes related to puberty early and before experiencing their first menstrual period in school. Fourth grade was identified as the best time to conduct such education.
4. Educate mothers about the emotional and physiological changes that occur during puberty through conducting educational meetings and group discussions in the community.
5. Advertise information for the mothers about the educational meetings in a culturally sensitive way. Schools were identified as the best location for conducting educational sessions for the mothers.
6. Educate the mothers about puberty before, and separate from, their preteen daughters. This will allow the daughter to ask questions freely and help avoid any mother–daughter generational conflict.
7. Send the mothers text messages to inform and remind them about attending the educational sessions.
8. Educate the mothers and fathers by using the media such as television (especially morning shows), radio, internet, and newspapers.
9. Conduct educational campaigns, targeting the whole country, while involving health care providers, teachers, and mothers.

Recommendations related to sex education

Recommendations made by the participants to improve this area were:

1. Conduct private workshops to educate Qatari women about sexual relations. Participants stated that it should be private because it will not be culturally acceptable.
2. Recruit Qatari women who attend premarital medical counseling through emailing or sending them a text massage. Premarital medical counseling is a service that allows couples to receive effective premarital medical counseling and appropriate advice; diagnosis of previously undetected medical, communicable, and/or hereditary conditions [30].
3. Conduct workshops for Qatari men separate from women. This will allow each gender to ask questions freely.
4. Include sexual education in high school curriculum regardless of academic track choices. High school was considered the best time by most participants, due to the fact that many young Qatari women get married after high school. A few participants believed that such education should occur in middle school.
5. Conduct educational sessions at the different universities in the country.

CONCLUSION

This is the first known qualitative study 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 puberty and sexual relations. It was evident that Qatari women lacked the information about puberty and did not feel prepared for their first menstrual period (menarche). Qatari women also lacked information about sexual relations due to the mothers' and schools' discomfort with the topic. There is a high need to conduct educational programs in these investigated areas in Qatar as evidenced by participants' recommendations. There is also a high need to conduct quantitative research to investigate specific areas related to these findings such as school based intervention programs for puberty and sexual education in Qatar. The effect of educating mothers about puberty and sexual relations on their daughters' knowledge and behavior can also be investigated. The results from this study are driving future research to explore health beliefs and practices from the perspective of Qatari adolescent females.

References

[1] International Monetary Fund: Qatar and the IMF. http://www.imf.org/external/country/index.htm.
[2] Statistics authority: Population in Qatar. http://www.qsa.gov.qa/Eng/populationcensus/2009/populationcensus_March.htm.
[3] The World Factbook: Middle East: Qatar. https://www.cia.gov/library/publications/the-world-factbook/geos/qa.html.
[4] Chang YT, Hayter M and Wu SC A systematic review and meta-ethnography of the qualitative literature experiences of menarche. Journal of Clinical Nursing. 2010;19:3, 447–460.
[5] Hennink M, Rana I and Iqbal R Knowledge and personal and sexual development amongst young people in Pakistan. Culture, Health & Sexuality. 2005;7:4, 319–332.
[6] DeJong J, Jawad R, Mortagy I and Shepard B The sexual and reproductive health of young people in the Arab Countries and Iran. Reproductive Health Matters. 2005;13:25, 49–59.
[7] Stewart DW and Shemdasani PN Focus Groups: Theory and Practice. Sage, Newbury Park, CA. 1990.
[8] Kreuger RA Focus groups: A Practical Guide to Applied Research. 2nd ed, Sage, Thousand Islands, CA. 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.
[10] Morgan DL Focus Groups as Qualitative Research. Sage. Morgan, Thousand Islands, CA. 1997.
[11] Burns N and Grove SK The Practice of Nursing Research: Appraisal, Synthesis, and Generation of Evidence. 6th ed, Saunders, St. Louis, MO. 2009.
[12] Morse JM Designing funded qualitative research. In Denzin NK, Lincoln YS. Handbook of Qualitative Research. 1994;Sage, Thousand Oaks, CA. 220–235.
[13] Polit DF and Becks CT Nursing Research: Generating and Assessing Evidence for Nursing Practice. 8th ed, Lippincott Williams & Wlikins, Philadelphia, PA. 2008.
[14] Focus Group Instructional Guidelines from an IRB Perspective. www.hsc.unt.edu.
[15] Kruger RA and Casey MA Focus Groups: A Practical Guide for Applied Research. 3rd ed, Sage, Thousand Oaks, CA. 2000.
[16] Cressler DL and Tomlinson PS Nursing research and the discipline of ethological science. Western Journal of Nursing Research. 10:6, 743–756.
[17] Bosch AM, Hutter I and Van Ginneken JK Perceptions of adolescents and their mothers on reproductive and sexual development in Matlab, Bangladesh. International Journal of Adolescent Medicine & Health. 2008;20:3, 329–342.

[18] Ali TS and Rizvi SN Menstrual knowledge and practices of female adolescents in urban Karachi, Pakistan. Journal of Adolescence. 2010;33:4, 531–541.
[19] Hanafy SA, El Sharkawy OG, Abdelbaqy MA, Tewfik MM, Kharboush I, Malek A and Ismail HM Minding the gap in Alexandria: Talking to girls in schools about reproductive health. Population Reference Bureau February. 2012; 1–3.
[20] Abioye-Kuteyi EA Menstrual knowledge and practices amongst secondary school girls in Ile, Ife, Nigeria. The Journal of The Royal Society for the Promotion of Health. 2000;120:1, 23–26.
[21] Kridli S Health beliefs and practices among Arab women. The American Journal of Maternal/Child Nursing. 27:3, 178–182.
[22] Orringer K and Gahagan S Adolescent girls define menstruation: A multiethnic exploratory study. Health Care for Women International. 31:9, 831–847.
[23] The Pan Arab Project for Family Health, Principle Report. (2004). *Lebanon Family Health Survey.* Retrieved from: http://www.pdslebanon.org/UserFiles/File/Lebanon%20Report%20English%281%29.pdf.
[24] Chang YT, Chen YC, Hayter M and Lin ML Menstrual and menarche experience among pubescent female students in Taiwan: Implications for health education and promotion practice. Journal of Clinical Nursing. 2009;18:14, 2040–2048.
[25] Marvan ML and Bejarano J Premenarcheal Mexican girls' and their teachers' perceptions of preparation students receive about menstruation at school. Journal of School Health. 2005;75:3, 86–89.
[26] World Health Organization, Report on an Inter Country Workshop with Partners. (2002). *Promoting Adolescent Health and Development Using Information, Education and Communication.* Retrieved from: www.emro.who.int/rhrn/pdf/JordanREPORT.pdf.
[27] DeJong J, Jawad R, Mortagy I and Shepard B The sexual and reproductive health of young people in the Arab countries and Iran. Reproductive Health Matters. 2005;13:25, 19–59.
[28] Thongpat S. Thai mothers and their adolescent daughters' communication about sexuality. Unpublished doctoral dissertation 2006. University of Illinois at Chicago, Chicago.
[29] Rembeck GI and Hermansson E Transition to puberty as experienced by 12-year-old Swedish girls. Journal of School Nursing. 2008;24:5, 326–334.
[30] Fathzadeh M, Bigi MAB, Bazrgar M, Yavarian M, Tabatabaee HR and Akrami SM Genetic counseling in southern Iran: Consanguinity and reason for referral. Journal of Genetic Counseling. 2008;17:5, 472–479.