

**The effectiveness of educational program about
sexuality education and child sexual abuse on knowledge,
attitude and behaviors of mothers with 4 -6 year-old child**

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Abstract

The goal of this study is to examine the effectiveness of educational programs about child sexuality education and child sexual abuse (CSA) on knowledge, attitude and behaviors of mothers who had preschool children. There were 57 mothers in this study. They were divided into two case and comparison groups. Each group had 27 members. Both case and comparison groups were given two questionnaires on *parental knowledge about children's sexuality* and *parental attitude in the case of child's sexuality education*. There were five educational sessions on sexuality education and CSA prevention for case group, but comparison group had no training. After the sessions both groups responded to the same questionnaire to examine if there were any changes in mothers' answers. The results of SPSS showed that the educational program has had positive effect on mothers' attitude, knowledge and behavior towards sexuality education and child sexual abuse.

Introduction

Based on studies, children's experience in early (birth to year 8) and middle childhood (6 to year 12) is the milestone of child's healthy development and learning in lifelong (Halfon, 2009; Shonkoff, 2009; Liew, 2012). Early childhood is the period in which the developmental milestones are reached. These milestones include emotional regulation and attachment, language development, cognitive development and motor skills. However all of these milestones can be delayed when children experience incompetent caregiving, environmental stress, and other risk factors. These problems and risk factors can impact a child's brain and jeopardize physical, social-emotional, cognitive and development (Duncan, 2010; Luby , Belden & Botteron , 2013).

Even though early and middle childhood are the periods when most of the children are healthy, during this time children are at risk of special situations. Although these conditions are not lethal, they are able to impact on children well-being, their education, their relationships with other people and the health of adults that they will become in future. These conditions include:

- Developmental and behavioral disorders
- Child maltreatment
- Asthma and other chronic conditions
- Obesity
- Dental caries
- Unintentional injuries (<https://www.healthypeople.gov/2020/topics-objectives/topic/early-and-middle-childhood>)

Child sexual abuse (CSA) is a significant public health crisis. CSA is defined as "sexual contact between a child (under the age of 18) with a person who is at least 5 years older" (Kenny & Wurtele, 2008). Based on the American Psychological Association (2001), the main feature of CSA is an adult authority figure who can force a child into sexual contact. CSA includes a range of behaviors including touching child's genitals to oral, genital, anal contact and to vaginal, oral and anal intercourse. In addition, CSA does not just include physical contact, but it also comprises of non-contact abuses for instance voyeurism and child pornography. In fact CSA is a heinous form of victimization that impacts both boys and girls regardless of their age, socioeconomic status, religion or geographic place (Kennym & Wurtele, 2012).

Hesami in the introduction of Wasserman' book has mentioned that based on a report presented by World Health Organization (WHO) in 2002, 150 million girls and 73 million boys under the age of 18 were sexually abused (Wasserman, 2009). In 2007, The National Centre on Child Abuse and Neglect (NCCAN) reported about 600,000 victims. Meanwhile, sexual violence against children is not reported and follow up is lacking because of the cultural taboo of many countries (Kenny, 2010). A meta-analysis by Pereda and his colleagues (2009) that conducted in 65 countries showed that 1 in 5 women and 1 in 12 men had been sexually abused before the age of 18 (Pereda, Guilera, Forns & Gomez-Benio, 2009).

Based on WHO reports, although data quality of CSA prevalence varied significantly between countries, controlling for these differences between studies, in females, the prevalence of non-contact, contact and intercourse types of CSA was about 6%, 11% and 4%, respectively. For all kinds of CSA this numbers were estimated 2% for males. As a result over 800 million people around the world may have experienced CSA (WHO, 2002)

CSA is part of the child maltreatment and can have significant life-long consequences. There are several national surveys in low- and middle income countries to estimate the scope of this problem, but data from many of these countries, including Iran, is lacking. Actually, there are no data available on this topic in Iran and many other Middle Eastern countries since this issue is taboo and seen as a sin. As a result, it is challenging to gather data about this topic. Based on WHO report, international studies have shown that a quarter of all adults had been physically abused in childhood. In addition, 1 in 5 women and 1 in 13 men reported they had been sexually abused as a child (WHO, 2016; Polonko, Adam, Naeem, & Adinolfi, 2016).

According to studies, being sexually abused in childhood can put the child at risk of several disorders, including medical, psychological, behavioral and sexual. Depression, anxiety, low self-confidence, eating disorders, victimization, interpersonal difficulties and sexually transmitted infections are some of common consequences of CSA. These difficulties can last until adulthood and affect mental and physical health of person (Maniglio, 2009). Kendall-Tackett (2012), has found in his study that adults who had been sexually victimized as a child, had higher health care utilization than people who were not sexually abused in childhood. Although it is very hard to estimate the cost of CSA to society, Minnesota Department of Health (2007) announced that the cost for each sexual abuse victim aged 0-17 was \$184,000. This includes "mental and medical health care, lost work, property damage, suffering and lost quality of life, criminal justice and several other costs"(Kenny & Wurtele, 2012). However, they estimated that these cost was just part of what is spent, because the other cost, such as intense fear and mistrust in community are hard to determine(Kendall-Tackett, 2012; Kenny & Wurtele, 2012).

Based on research that was conducted in economically industrialized countries, CSA can increase the risk of mental disorders later in life. It is certain that CSA causes a considerable burden of disease, including depression, panic disorder, alcohol and drug abuse, post-traumatic stress disorder and suicide. For example, it has been estimated that about 33% of post-traumatic stress disorder in females and 21% in males is attributable to CSA. About 11% of panic disorders are also attributable to CSA globally. In addition, it has been estimated that CSA can cause about 5-8% of self-inflicted injuries, and alcohol and drug use. Generally, CSA is the cause of 0.1% of deaths worldwide (79 000). The disabling burden of CSA is more than its fatality; CSA causes 8.2 million DALYS (0.6%); 0.4% in males and 0.8% in females (WHO, 2002)

Literature Review

Elliot and colleagues (1995), in their studies, have revealed that teaching accurate body parts' name, including genitals to children and sexual knowledge of them not only could help children to have a healthy body image, but they might be less vulnerable to sexual abuse. Their studies showed that sexual abusers avoided children who knew proper names of the genitals because they seemed to be educated about sexuality and body safety (Elliott, Browne, & Kiloyne, 1995). In addition, children with knowledge of proper terminology are more able to report the abuse and more likely to be understood and receive needed attention (Kenny, Capri, Ryan, Thakkar-Kolar, Ryan & Rumyon, 2008). Despite these findings, Kenny and Wurtele (2008) reported that only 10 % of children knew the correct terminology for penis, breasts and vagina, about 25 % knew the proper term for buttocks. Meanwhile, the majority of children (89%) knew the correct terms for non-genital part of the body.

Kenny and Wurtele (2012), have mentioned that most of the previous intervention for prevention of CSA had focused on educating children and there were less efforts on educating parents and even much less focused on modifying environment in which CSA takes place. Although child-focused CSA prevention programs teach many children about personal safety and skills, research has shown that CSA prevention programs that focused on parents could have different benefits. As parents are more aware and knowledgeable about child sexuality education and CSA, they are more likely to provide safer environment for children and prevent CSA (Kenny & Wurtele, 2010; Kenny & Wurtele 2012).

Sexual education has been the subject of political debate, with opinions differing between cultures since the 1960s. Despite these differences, the value of sexual education has been largely accepted. (Andrade, Mello, Sousa, Makuch, Bertoni, & Faundes, 2009; Asekun-Olarinmoye, Dairo, Abodurin, & Asekun-Olarinmoye, 2011; Merghati-Khoei & Abolghasemin, 2014). In addition, research has shown that sexuality is an important element

for healthy development of young people. WHO also emphasizes on the importance of healthy sexual development for general mental and physical well-being (Shtarkshall, Santelli, & Hirsch, 2007). However sexuality education have remained controversial in some counties, including Iran, and in spite of many developments in this filed around the world, old perspectives about children sexuality education in Iran and many societies causes ignorance and lack of knowledge about it. There are two reasons for this issue. The first one is that children are perceived as sexually innocent and the other reason is that lots of people are worried that with sexuality education, children will become sexually active. However research from public health, sexology and pediatric fields have showed that knowledge of children about sexuality issues did not lead to improper behavior, but lack of knowledge and ignorance did (Andrade, Mello, Sousa, Makuch, Bertoni, & Faundes, 2009; Asekun-Olarinmoye, Dairo, Abodurin & Asekun-Olarinmoye, 2011; Merghati-Khoei & Abolghasemin, 2014). In addition, Taris (2005), showed in his research that children who talked with their parents about sexuality are less likely to have early sexual activity and are more responsible in their approach for sexual activity than children who did not have these conversations.

As mentioned earlier, in Iran the silence culture is the dominant viewpoint regarding sexuality education of children and parental lack of knowledge and misinformation are evident. To promote a healthy interaction among parents and children, parents must be informed and gain skills that empower them with the knowledge, attitude and skills by educating them about child sexuality education (Merghati-khoei & Abolghasemin, 2014).

From the perspective of psychology studies, for a three or four year olds child there is no difference between nose, hand and genitalia. He or she has no wrong or right understanding of his/her body organs and as he/she wants to know about eye, ear and nose, he

or she is curious about his or her genitalia or that of the opposite sex. As a result, it can be said with certainty that a 3-year-old child not only did not do something bad, but he reached a stage of growth in seeking to understand these matters. In other words, if a child does not ask any questions about these subjects until the age of six, there will be surprise and even concern. By the age of four and five when the child recognizes his/her gender, try to ensure his or her recognition. He or she wants to know what differences and similarities he or she has with his/her father, mother and siblings. The results of the studies have shown that for 4-year-old children understanding the sexual issues is transient. If parents have a good attitude and knowledge, children will pass this period successfully, and in terms of sexual growth in adulthood, they will be normal and healthy persons. Otherwise, this provides sexual dysfunction for their children. High irritability, impotence and dozens of sexual problems in adulthood are the consequences of wrong and uninformed attitude of parents and other caregivers (Berk, 2008; Schultz, 2009).

The awareness and roles of parent about child sexuality education

Finan, in 1997, mentioned that parents are the main source of teaching about healthy sexuality to children. Their knowledge, attitude and behaviors can shape child's feeling about gender identity (Finan, 1997). Studies have shown that children whose questions were answered appropriately and had enough information according to their age, started sexual activity later in life (Andrade, Mello, Sousa, Makuch, Bertoni, & Faundes, 2009; Asekun-Olarinmoye, Dairo, Abodurin & Asekun-Olarinmoye, 2011; Wakley, 2011). Wakley (2011), also mentioned that child sexuality educations must start as soon as possible; three years of old and even younger. This education has to be very natural; talking about private parts should be as natural as explaining about what the nose is.

Walker, in 2001 in Leeds area, did a qualitative research to explore three important issues: how parents talked to their children about sex, key factors affected on parents talking to their children about sex and ways that helped parents for sexuality education. The findings showed that mothers were the main educators, but both mothers and fathers had felt embarrassment and shamed for sexuality education especially for sons. Several parents in Walker's study had used several approaches to avoid sexuality education in home. On the other hand, in spite of difficulties, many parents had been eager to provide sexuality education for their children and used different strategies to educate this issue to their child. Some parents had provided gradual sexuality education rather than major sex talk. Fathers expressed that the fear of losing face in front of children had been one the most important factors that had been as a barrier for providing sexual education. Mothers, on the other hand, mentioned, "Lack of knowledge" had been the main difficulty for sex educating their sons. The results of this study also revealed that the parents' experiences about receiving sexuality education from their own parents had significant effects on their approaches for sex educating their children. Parents were role model for health education and if there was avoidance or escape from sexuality education in one generation, there would be poor sexuality education in the next generation and so on. Walker mentioned that health education programs needed to be provided for parents to empower them about interpersonal skills to help them overcome their fears and embarrassments and improve their knowledge and awareness about children sexuality education. He also pointed that cultural, ethical and religious aspects also needed to be considered and health education programs had to be in the context of every population, since in many populations sexuality education was taboo. In this study, parents expressed their need for resources and education by professionals. The results of this study recommended that providing sexuality education by professionals and recourses (e.g., books

and literatures) for parents, could improve their quality, knowledge and confidence for their children's sexuality education (Walker, 2001).

The other study belongs to Merghatikhoie and her colleagues in 2013, in Tehran. They conducted a qualitative study with community-based approach. The goal of this study was to describe family perspective regarding the concept of children's sexual health, values, normal child sexuality education and sexuality education priorities. The results were divided in three main areas: 1) family management, 2) the role of school, 3) tradition framework. Most of the participants in description of children's sexual health, did not count sexual behaviors as health indicator and some them just believed in sexual instinct. In the management of their children's sexual behavior, the majority of parents implemented their own family policy. Because of the conflict between child' sexual behavior and traditional family values, in most of the families, tolerance and silence in management of children's behavior became normal. The other results expressed that family relationships had an impact on child sexuality education. This study suggested that education in families could be a motivation factor for educational programs at school. Some barriers were recognized in management of children's sexual behaviors. The most important ones were parents' attitude towards child sexuality education and unwillingness of them to address sexual issues. Overall, the need for educating parents to give them a comprehensive view and influence on their perception and awareness about child sexuality education was completely obvious. Actually, preparing parents for necessary actions in their children sexuality education was the first parents' priority in this study (Merghati-Khoei, Abolghasemi & Taghdisi, 2013).

Merghati-khoei and Abolghasemin in 2014 conducted a qualitative research study in Tehran, Iran to explore how Iranina parents percived about their children's sexuality. The results of their study showed that parents had misinformation about children's sexuality and they had accumulated myths and ignorance regarding childrens's sexual development. In addition, both inflexible family rules and

firm policy and instructions for sexual education were evident. Parents also said that they did not have enough information and skills to educate their children about sexuality. Actually, the majority of mothers answered "incompetence" as a criteria in their parent-child interactions. At the end, the findings suggested that the community needed sexuality education that is culturally sensitive for parental use (Merghati-khoei & Abolghasemin, 2014).

Martin and Torres, in 2014, conducted a study to explore what children learn from their parents by audio recording of the conversation of 49 parents (45 mothers and 4 fathers) with three to five year olds children. The goal of the study was to discover the role of children in their sexual socialization. The findings showed that parents were not the only regulator of those conversations. Children were also determining the amount and type of the information in conversations. Actually, they actively engaged in what they were learning about sexuality. What they learnt at the end of the study was not only a product of what their parents decided to tell them, but also their misinformation, confusions and questions were deeply determining them to get more information from parents (Martin & Torres, 2014).

In 2015, Lukolo and van Dyk performed a situational analysis in Namibia to explore how parents provide sexuality education for their children. Although parental participation in sexuality education of children is crucial, since they are the main socializing agents of children, the results showed that lots of parents did not provide sufficient sexuality education for their children. This was because they did not have enough knowledge and information about sexuality, they did not know how to explain what they knew and they felt embarrassed. In addition, the results found that culture could develop insufficient parental participation in children's sexuality education, since parents' faith in culture had effect on their behavior about sexuality related issues. At the end, the findings revealed that almost all the participants needed education and training regarding sexuality-related issues for their children (Lukolo & Dyk, 2015).

Izugbara conducted a qualitative study in 2008, trying to explore how and why parents in rural Nigeria talked with their children about sexual subjects. The main goals of this study were to explore participants' descriptions on sexual issues they discussed with their own children, who started the discussions and why and when these discussions had been started. Other topics were also included in these interviews including how parents felt when they talked about sexual issues and the gender of children with whom they normally talked about sexual matters. Even though, the results of these interviews might not be the representative of the larger population of Nigerian parents, it highlighted important issues. The findings expressed that few number of rural parents talked with their children about sexual issues. Only 39% of 187 parents admitted that they had discussed with their child about sexuality. Actually, the attitude of Nigerian society towards children sexuality education might be the reason of this few number. Talking about sexual subjects was taboo in their culture. Even parents, who had talked with their children, could not provide appropriate information and answer well enough. They just frightened their children. The results showed that the majority of parents believed that young people would be safe if they knew nothing about sexuality. Consequently, in almost all of discussion, parents pointed to sexual topics as "dangerous" and stigmatized sex and sexual information. Parents also reported that their children and themselves felt uncomfortable and shy in these discussions. These feelings hindered their children to ask questions during discussion. At the end, the researcher concluded that there was a critical need for special interventions like educational programs to promote the ability and skills of parents in sexuality education of their children, since parents play a major role in healthy socialization of their children (Izugbara, 2008).

Children sexuality education programs:

Wight and Fullerton in 2013 performed a systematic review to appraise the effectiveness of involving parents to improve their children's sexual health. The studies were experimental, quasi-experimental and pre and post type. They searched databases from 1990 to 2009 and identified 44 programs. The data analyses showed a broad range of programs that involved parents or improvement their children's sexual health. Of these programs, one third was school based and one third was community based (the other one third, was not mentioned in the article). All the programs included one-to-one support, workshops, assignments at home, video, media messages and written materials. Almost all the programs focused on parent-child communication about sexual issues. Just seven of these programs addressed the controlling of children's behavior and two of them worked on parental modeling of appropriate behavior. The results of these programs showed that most of programs had a causal pathway as shown below:

Intervention with parents → change parent-child interaction → change adolescent's knowledge/ attitude/skills → change adolescent's sexual behavior

As it is shown here, the results showed that these programs improved parent – child communication, the knowledge of adolescents and children's attitude towards sexual issues. All the findings expressed that educating parents about their adolescents' sexuality education, played a key role to promote and modify adolescents' sexual behaviors (Wight & Fullerton, 2013).

The other study belongs to Kenny and Wurtele in 2008. The goal of their research was to examine the knowledge of preschool children about their genital and non-genital body parts. According to the result, only 10 % of children knew the correct terminology for penis, vagina and breasts and 25% knew the correct name for buttocks. On the other hand, much

more children knew the correct terms of non-genital body parts. The findings also revealed that parents were teaching their children about the correct names of non-genital body parts very effectively, but they were not teaching anything about correct terms for genital parts and put this responsibility on body education lessons. At the end, it was recommended that parents needed to make their children aware of the importance of teaching the correct terms of genital body part to their children (Kenny & Wurtele 2008).

Eser and Celikoz performed a research in 2009 in Turkey about the impact of parents' attitude towards the sexual identity development in pre-school children. This study was done on 4 – 6 year- old kindergarten children and it was based on General Scanning Model. The results based on teachers' observations showed that the development of sexual identity of pre-school children was normal and children expressed appropriate behavior according to their sexual identity. The other finding was about parents' attitude about sexual identity development of their children. The attitude of mothers and fathers were separately evaluated and it showed that both groups had positive attitudes. The important issue is that parents should behave according to the behavior models they expect from their own child. Based on comparison of previous studies that was done by Eser and Celikoz, it became appear that family structure was changing in Turkey and parents talked about sexual development much more than before. The last but not the least result was that parents' attitude about sexual identity development had direct positive relation with children's sexual identity development. However, there are other factors that may affect on child's sexual identity development including: other family members, environment, friends and media, but still the role of parents is much larger wide than any of other factors (Eser & Celikoz, 2009).

Kurtuncu and colleagues, in 2015, performed a descriptive study in Turkey "...to determine the knowledge, attitude and opinions of doctors and nurses working in health care

who are in a position to reach parents regarding the sexual development and sexuality education of their children...(Kurtuncu, Akhan, Tanir, & Yildiz, 2015)". Based on the results of this study, the number of correct answers of respondents differed deeply based on age group, the status of having children and marriage, educational status and occupational position. Actually single respondents had less correct answers than married ones. Number of correct answers in age group of 31 and above is more than 25 and less. In addition, university graduated participants had many more correct answers than non-graduates. Overall, 93.1% stated that sexuality education for children is necessary. 54.7% thought sexuality education should start 7-12 years old and about 31% said parents must provide it. Among all the topics talked with children "bodily difference between genders" was the most common one and least common topic was "masturbation". 96.2 % of participants mentioned children between 5 and 6 years old touched their mothers' or other women's breasts. 71.1% of participants believed that the statement of "Sexuality and sexuality education starts during adolescence" was the most wrong answer. At the end of this study, it was found that culture, shyness and anxiety are important factors that have impact on approaches about children sexuality education (Kurtuncu, Akhan, Tanir, & Yildiz, 2015).

In 2015, Jaberzadeh conducted a pre – post - semi-experimental study with control group in Isfahan. The main goal of this study was to evaluate the effectiveness of educational sessions on sexuality education for mothers and their children of the first grade. The results of this study showed that educational sessions were effective in increasing the knowledge of mothers about children's sexuality in a control group. The educational sessions had also positive effect on mothers' attitude towards their children's sexuality education. Both of these effects were equal to 66%. The findings also reported that children's knowledge about sexual abuse in case group increased and this effect was equal to 70% (Jaberzadeh, 2015).

Child sexual abuse prevention programs:

Kenny and colleagues in 2008 performed a review of some sexual abuse education and body safety programs. The findings revealed that children as young as three years of age could be impressively taught about self-protection skills. In addition, parental involvement in these trainings is very important. The components of those programs that were successful included teaching children to recognize and resist inappropriate touching, assuring them that it was not their fault if they were abused and teaching children the correct names of their genitals. It was shown that to achieve a result with high efficiency, parents needed to be engaged in sexual education and self-protection programs. Based on the results, self-protection skills and proper names of genitalia needed to be taught to children as early as age of three (Kenny & Wurtele, 2008).

The other study in 2013 belongs to Zhang and colleagues in Beijing, China. They wanted to study the level of CSA prevention knowledge of preschool children and the relationship between children's CSA knowledge with their parents' CSA knowledge and the communication of parents and child with each other regarding CSA. The results showed that the knowledge and skills of Chinese preschool children was poor regarding sexual abuse and it was consistent with other studies in a western context. About 40 % of children could not recognize inappropriate touching. Only 16 % of children knew that they should report the bad touch. Less than 30 % of children were aware of verbally refusing bad touching and less than 20 % were aware of removing themselves from sexual abusive situations. The results also showed that the communication of parents with children regarding CSA and the level of parental knowledge about CSA had the great role in children self-protection skills (Zhang, Chen, Feng, Li, Zhao & Luo, 2013).

In 2010, Kenny conducted a preliminary study to analysis the effectiveness of a parent-child program, Kids Learning about Safety (KLAS). KLAS is a child-focused CSA prevention program that takes 16 hours. It educates preschools and their parents regarding personal and general safety related to CSA. Based on the results, after educational sessions, the knowledge of preschool children about general safety and personal safety increased a lot. There were also no side effect or increase in sexualized behavior in children after all the sessions. Parents' feedback was positive. They reported that they were satisfied with the program and were more capable than before to enlighten their children and communicated with them about CSA. Overall, the results showed the success of KLAS strategy as a method to increase general and personal safety knowledge for preschool children and to improve parent – child communication (Kenny, 2010).

Mathoma and his colleagues in 2006 in Botswana and Swaziland performed an exploratory qualitative study to investigate the knowledge and perception of parents about CSA. Based on the data analysis, respondents had appropriate knowledge about CSA prevalence, its predisposing factors and its effects. In addition, all the respondents agreed that CSA exists in their countries and it happened a lot. The other important question was the definition of CSA. It is obvious that to understand well about CSA problem, at first there needs to be a complete definition. The results showed that all the respondents defined CSA as sexual intercourse with or without agreement. Although in many cases this definition is true, but there are other non-penetrative types of CSA that none of the respondents mentioned them. This might be because of the properties of African culture that other form of CSA as pornography was still strange and alien so, they did not mentioned them. The answer to predisposing factor for CSA, had different answers. Most of respondents mentioned that as talking about sexuality is taboo in African culture, most of the respondents related CSA with parents ignorance and failure in educating and talking to their children about sexuality. Some

of respondents believed that Western culture affected their children. They counted some factors that put children in the danger of sexually abuse, including the type of Western dressing especially for girls, television program on sex, the desire for material possessions such as fancy cars and money. The other important predisposing factor for CSA mentioned by respondents, was poverty that placed young girls in particularly vulnerable circumstances. The respondents answered the last question about CSA effects on children in term of physical (e.g., HIV/AIDA, unwanted pregnancy and Sexual Transmitted Disease (STDs), psychological (e.g., depression, anxiety and poor performance in school) and social (e.g., growing up as an abuser, rejection by family and stigmatization) difficulties (Mathoma, Maripe-Perea, Khumalo, Mbayi & Seloilwe, 2006).

The last study belongs to Kenny and Wurtele in 2012, that conducted a review on CSA prevention programs based on ecological approach. They mentioned that for eradication or reduction of child sexual abuse, the prevention programs) needed to be applied at different levels of the society. It means that CSA prevention programs needed to be performed by educating children, youth, their parents, professionals and general public. In addition, laws and policies had to be modified towards CSA prevention. At the end, the writers also mentioned that although there has been advancements in research approaches on this topic, more empirical researches are needed to promote and evaluate prevention programs for children, youth, parents, professional and public (Kenny and Wurtele, 2012).

Research question

Will four educational sessions for mothers of 4- 6 year-old children about children sexuality education and child sexual abuse, affect the knowledge and attitude of mothers towards their own children sexuality education?

Research Hypothesis

- 1) Five educational sessions for mothers of 3-6 year-old children about children sexuality education and child sexual abuse, will have positive effect on the knowledge of mothers about children sexuality education.
- 2) Five educational sessions for mothers of 4-6 year-old children about children sexuality education and child sexual abuse, will have positive effect on the attitude of mothers towards their children sexuality education
- 3) Mothers' behavior? They more likely to behave differently and talk to their children after the 5 sessions.

Objectives:

- 1) Assessing the effectiveness of educational sessions on mothers' knowledge regarding their children sexuality education
- 2) Assessing the effectiveness of educational sessions on mother's attitude towards their children sexuality education
- 3) Mother's likelihood to act based on the knowledge gained

Methodology

This study was done in Isfahan in Jun 2016. A pilot test was done among Baha'i kindergartens by inviting children's parents to investigate the effectiveness of this approach across Isfahan. Convenience sampling was used in this study. There are eight private Baha'i kindergartens in north and east of Isfahan. One class of 3-year-old children, three classes of 4 year-old, three classes of 5 year-old and one class of 6 year-olds.

The plan was explained to authorities of these eight kindergartens and the permission was granted by the person in charge. After finishing kindergarten, when mother came for their children, mothers were visited and invited to an introduction to sexuality education sessions. In the briefings, the project was explained to them; the importance of these classes was explained. They were asked to participate in these sessions and they were assured that it was a free training course. Among all 64 mothers, 27 of them volunteered to participate in these classes and counted as case group. The others who refused to participate, among them 27 mothers were selected for control group.

After consulting with the manager of a research center named "Mana" near to the researcher's home, a specialist with the master degree in psychology consultant was invited. Mana is a scientific-research center of psychology which hired specialist with master and PHD degree in different fields of psychology. These specialists work on different psychological research projects. They also work on publishing new books in the field of psychology. Mana center also have private counseling sessions for children, parents and teenagers. One of their specialists, who has been used in this research as a trainer, in addition to researching on center's projects, has classes for children and private counseling sessions for parents on sexuality education and CSA prevention. The specialist's final master's thesis is on the "positive effect of sexuality education on knowledge and attitude of mothers and children in

the first grade” (Jaberzadeh, 2015). For providing this educational seminar for mothers in Isfahan, she was compensated by the researcher of the study. Needed coordination was done with her about the project. She works in Mana as child consultant in the field of sexuality education. After explaining the subject, she enthusiastically agreed to cooperate. The specialist also mentioned that most of the works in the field of child sexuality education until now focused on 7-12 and teenager periods. Meanwhile the importance of pre-school years in sexuality education and laying the foundation for a healthy sexual development is vital (Kenny, Capri, Ryan, Thakkar-Kolar, Ryan & Rumyon, 2008; Kenny & Wurtele, 2010; Kenny & Wurtele 2012;Merghati-Khoei & Abolghasemin, 2014).

In the search for appropriate research tools, two questionnaires were found to be reliable and valid. These two questionnaires included "parental attitude questionnaire in the case of sexuality education of children" and "parental knowledge questionnaire about children's sexuality".

- *Parental attitude questionnaire in the case of child's sexuality education:*

Mortezavi and Kahdooie (Jaberzadeh, 2015; Hajizadeh, 2015), designed this 21-question toll in 2014, based on clinical experiences, to assess parental attitude towards sexual issues. To determine the reliability of this questionnaire, it was examined on a group of 100 parents who visited a counseling center in Yazd, for their children.

This questionnaire has 21 questions with the range of answers from "I absolutely agree"," I agree", "I have no idea", "I disagree" and " I absolutely disagree". In this way, the minimum score in this questionnaire is 21 and the maximum score is 105. The questions of 3,4,6,9,11,12,13,16,17,18,19 and 20 have reverse score. As the score of respondents increases in this questionnaire, it indicates that the parental attitude is more positive towards their child's sexuality education. Father or Mother can complete this questionnaire.

- *Parental knowledge questionnaire about children's sexuality:*

Mortezavi and Kahdooie (Jaberzadeh, 2015; Hajizadeh, 2015), also designed this questionnaire in 2014, to assess sexual knowledge of parents. Like the other tool, to determine the reliability of this questionnaire, it was examined on a group of 100 parents who visited a counseling center in Yazd, for their children.

This questionnaire has 36 questions and the answers have two options (Yes=1, No=2). As a result, the minimum score in this questionnaire is 0 and the maximum score is 36. The question number 19 has reverse score. As the score of respondents is higher in this questionnaire, it reflects that the parental knowledge is more in the field of their child's sexuality. Father or Mother can complete this questionnaire.

In pre-test level both case and comparison groups answered the both questionnaires; "Parental attitude questionnaire in the case of child's sexuality education" and "Parental knowledge *questionnaire about children's sexuality*". Mothers in the case group were invited to the first session. Before starting the education, learning process was explained to them briefly. They were assured that their information would be anonymous and secret. Then the questionnaires were handed to them and they were asked to answers questions without talking to each other and if there was any question, they could ask to clarify it for them. Mothers in the comparison group were visited separately at their home and asked to fill out the questionnaires.

There were five 90 minutes sessions for the case group. The sessions were held in the participants' home. Sessions starts at 4pm and end at 6pm. The extra 30 minutes was assigned to mother's questions. The specialist, Ms. Shaghayegh Jaberzadeh answered their questions based on her specialty on sexuality education and also psychological knowledge as she is child consultant in scientific-research center of psychology "Mana". The response to

mothers' questions needed not only the knowledge of sexuality education, but also the knowledge of psychology regarding healthy and appropriate children/parent interactions. After finishing educational sessions, the posttest was administered to the case and comparison groups, where they answered the same questionnaires.

The contents of educational sessions:

The educational sessions were held as workshop. The content of the workshop were presented as PowerPoint presentation, educational short clips about CSA prevention and child question about sexuality, discussions and short movies

Sessions topics:

First session: Welcoming, running pre-test, talking about the main goals and program's framework, Understanding mothers' goal of participation in this program, understanding the necessity of children's sexual development, the concept of sexuality education, appropriate environment for sexuality education, talking about parental concerns and answering mothers' questions.

Second session: Review the previous session, stages of sexual development, explaining the sexual physiology, sexual behavior in children, preventing early sexual awakening, normal and abnormal sexuality in each stage, correcting misconceptions about sexual issues and answering questions.

Third session: Review the previous sessions, the proper age for education, checking the appropriate situation for education, the limit of children sexuality education to 5 years of age and 9 years of age, the correct responses to children's questions in each stage of sexual development, unpleasant consequences of inappropriate sexuality education by parents and answering questions.

Fourth session: Review the previous sessions, the concept of masturbation in children and its reasons, the appropriate reaction to the child in these situations, how children are deceived during games by strangers, how they need to react, how to prevent this and answering questions.

Fifth session: Review the previous sessions, ways to prevent CSA, false belief about CSA and correcting them, factors affecting on a child not to report sexual abuse, recognition of sexual abuse in children, signs of sexual abuse in children, correct reactions of parents in these situations, how to prevent CSA and answering the questions.

Data analysis

There were 54 mothers in this study (27 in case group and 27 in comparison group). The most frequent age group, is the age of 31 – 35 years with the frequency percentage of 50 and the least frequent age group is 41-50 years with frequency percentage of 3.7.

Table 1. Frequency percentage of age groups

Age group	Frequency	Frequency percentage
25 – 30	11	20.4
31 – 35	27	50.0
36 – 40	14	25.9
41 – 45	2	3.7

In the case group the mean of mothers' age is 33.7 with standard deviation of 3.63. In comparison group the mean of mothers' age is 33.6 with standard deviation of 3.33.

Table 2. Comparison of age average in case and comparison groups

Group Variable	Case Group Number=27	Comparison Group Number=27	P-value
	Mean ±Standard deviation	Mean ±Standard deviation	
Age (year)	33.7± 3.63	33.6±3.33	0.969

According to the normality of data and equality of variances in both groups, the age of mothers was examined by Independent T-test. With P-value = 0.969, it can be concluded that the mean of mothers' age in both groups is similar and in terms of age, they have the same status.

In relation to the education level, mothers had diploma, 2 years of college or bachelor degree. In the case group 66.7 % of mothers had a diploma, 22.2 % had 2 years of college, and 11.1 % had bachelor degree. In comparison group, 59.3 % of others had diploma, 14.8 % had 2 years of college and 25.9 % had bachelor degree.

With Chi-square test, the level of education in both case and comparison groups were evaluated and with P-value = 0.379 it showed that the level of education in two groups has the same status.

Table 3. The comparison of frequency of mothers' education in case and comparison groups

Group	Case group		Comparison group		P-value
	Number = 27		Number = 27		
Mother education	Percentage	Frequency	Percentage	Frequency	0.998
Diploma	66.7	18	59.3	16	
2 years of collage	22.2	6	14.8	4	
Bachelor	11.1	3	25.9	7	
Total	100	27	100	27	

Table 4. The comparison of knowledge level before and after intervention in case and comparison group

Knowledge	Case group	Comparison group
Before intervention	27.70	26.74
After intervention	34.55	26.37
Changes	- 6.85	0.37
P-value	$\square$ 0.001	0.18

The level of knowledge was examined by Paired t-test and the P-value in the case group was less than 0.001. Given that this is a very small number, it can be concluded that there is a significant difference between means before and after intervention in case group and H_0 based on equality of means is not accepted and because the difference between means is a negative number, it can also be concluded that the level of knowledge has increased after intervention and the educational program could have its effects on improvement of mothers' knowledge. In comparison group P-value = 0.1, which is higher than 0.05 and as a result it can be concluded that there is no significant difference between means before and after intervention. The mean of knowledge in comparison group before and after intervention is the same and has not changed.

According to the given information, we can conclude that the educational program has had positive effect on attitude and knowledge of mothers.

Table 5. The comparison of frequency distribution of attitude regarding question 1 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
1) If I talk with my child about sexuality topics he or she will be encouraged towards sexual thoughts				
I totally agree (1)	(%3.7)1	(%3.7)1	(%3.7)1	(%0)0
I agree (2)	(%3.7)1	(%3.7)1	(%7.4)2	(%0)0
I have no idea (3)	(%25.9)7	(%14.8)4	(%22.2)6	(%0)0
I disagree (4)	(%44.4)12	(%51.9)14	(%44.4)12	(%18.5)5
I completely disagree (5)	(%22.2)6	(%25.9)7	(%22.2)6	(%81.5)22
P-value	0.911		< 0.001	

The level of positive attitude was examined by chi-square test. The results of chi-square test showed that before the intervention, there is no significant difference between case and comparison group in answering question one “If I talk with my child about sexuality topics he or she will be encouraged towards sexual thoughts” (p-value: 0.911). But after the educational intervention, there is significant difference between case and comparison groups for answering question one (p-value < 0.001). So the educational sessions had positive effect on mothers’ attitude in relation to question one.

Table 6. The comparison of frequency distribution of attitude regarding question 2 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
2) Talking with my child about sexuality issues is immoral				
I totally agree (1)	(%0)0	(%3.7)1	(%0)0	(%0)0
I agree (2)	(%7.4)2	(%0)0	(%3.7)1	(%0)0
I have no idea (3)	(%7.4)2	(%3.7)1	(%11.1)3	(%0)0
I disagree (4)	(%37)10	(%44.4)12	(%33.3)9	(%7.4)2
I completely disagree (5)	(%48.1)13	(%48.1)13	(%51.9)14	(%92.6)25
P-value	0.622		<0.005	

The results of chi-square test showed that before the intervention, there is no significant difference between case and comparison group in answering question 2 “Talking with my child about sexuality issues is immoral” (p-value: 0.622). After the educational intervention, there is significant difference between case and comparison groups for answering question 2 (p-value < 0.005). As a result the educational sessions had positive effect on mothers’ attitude in relation to question 2.

Table 7. The comparison of frequency distribution of attitude regarding question 3 in case and comparison group before and after the intervention.

Group \ Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
3) Talking with my child about sexuality issues makes him aware and prevent damages in this issues.				
I totally agree (5)	(51.9%)14	(51.9%)14	(48.1%)13	(96.29%)26
I agree (4)	(33.3%)9	(37%)10	(37%)10	(3.7%)1
I have no idea (3)	(7.4%)2	(3.7%)1	(7.4%)2	(0%)0
I disagree (2)	(7.4%)2	(3.7%) 1	(7.4%)2	(0%)0
I completely disagree (1)	(0%)0	(3.7%)1	(0%)0	(0%)0
P-value	0.998		<0.001	

According to the chi-square results, before the intervention, there is no significant difference between case and comparison group in answering question 3 “Talking with my child about sexuality issues makes him aware and prevent damages in this issues.” (P-value: 0.998).

Meanwhile, after the educational sessions, there is significant difference between case and comparison groups for answering question one (p-value < 0.001). As a result, the educational sessions had positive effect on mothers’ attitude in relation to question 3.

Table 8. The comparison of frequency distribution of attitude regarding question 4 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
4) Talking with my child about sexuality issues is useful as other training issues.				
I totally agree (5)	(62.96%)17	(55.55%)15	(59.26%)16	(100%)27
I agree (4)	(22.2%)6	(44.4%)12	(25.9%)7	(0%)0
I have no idea (3)	(7.4%)2	(0%)0	(7.4%)2	(0%)0
I disagree (2)	2(7.4%)2	(0%)0	(7.4%)2	(0%)0
I completely disagree (1)	(0%)0	(0%)0	(0%)0	(0%)0
P-value	0.068		<0.001	

The results of chi-square test revealed that before the intervention, there is no significant difference between case and comparison group in answering question 4 “Talking with my child about sexuality issues is useful as other training issues.” (P-value: 0.068). But after the educational sessions, there is significant difference between case and comparison groups for answering question 4 (p-value < 0.001). So the educational sessions had positive effect on mothers’ attitude in relation to question 4.

Table 9. The comparison of frequency distribution of attitude regarding question 5 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
5) I teach my child that genitalia is one dirty and ugly body organs that needs to be hidden.				
I totally agree (1)	(7.4%)2	(0%)0	(7.4%)2	(0%)0
I agree (2)	(0%)0	(0%)0	(0%)0	(0%)0
I have no idea (3)	(22.2%)6	(3.7%)1	(22.2%)6	(0%)0
I disagree (4)	(22.2%)6	(11.11%)3	(25.9%)7	(7.4%)2
I completely disagree (5)	(48.1%)13	(85.18%)23	(44.4%)12	(92.6%)25
P-value	< 0.017		< 0.001	

In question 5, “I teach my child that genitalia is one dirty and ugly body organs that needs to be hidden”, the p-value before the educational sessions is 0.017 which is less than 0.05 and H_0 is rejected. As a result there is no significant difference between case and comparison groups regarding answering question 5. The p-value after the educational sessions is < 0.001 then 0.05 and H_0 is rejected again. As a result, there is no significant difference between case and comparison group regarding question 5. Actually, private parts in children are referred to as “don’t say it” by mothers or mentioned as “forbidden word”. In the material of educational sessions it was emphasized that genitalia is as respectable and venerable as eye, heart, hand and etc. and mothers need to teach their children to respect this part and call it “private part” until the age of nine and after that girls should call their genitalia as “vagina” and boys should call it “penis”. Mothers in comparison group may have read books or participated in other classes or even watched educational programs about this specific topic.

Table 10. The comparison of frequency distribution of attitude regarding question 6 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
6) I teach my child that genitalia is a private part of the body and just like other body organs has its own especial and precious action.				
I totally agree (5)	(62.96%)17	(66.66%)18	(59.26%)16	(100%)27
I agree (4)	(29.63%)8	(33.3%)9	(33.3%)9	(0%)0
I have no idea (3)	(3.7%)1	(0%)0	(7.4%)2	(0%)0
I disagree (2)	(0%)0	(0%)0	(0%)0	(0%)0
I completely disagree (1)	(3.7%)1	(0%)0	(0%)0	(0%)0
P-value	0.998		<0.001	

The results of chi-square test revealed that before the intervention, there is no significant difference between case and comparison group in answering question 6 “I teach my child that genitalia is a private part of the body and just like other body organs has its own especial and precious action” (P-value: 0.998). But after the educational sessions, there is significant difference between case and comparison groups for answering question 6 (p-value < 0.001). So the educational sessions had positive effect on mothers’ attitude in relation to question 6.

Table 11. The comparison of frequency distribution of attitude regarding question 7 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
7) If I see my child playing sexual games (doctor games or showing up their genitalia), I will punish him or her harshly				
I totally agree (1)	(0%)0	(3.7%)1	(0%)0	(0%)0
I agree (2)	(14.81%)4	(3.7%)1	(14.81%)4	(0%)0
I have no idea (3)	(14.81%)4	(0%)0	(14.81%)4	(0%)0
I disagree (4)	(25.9%)7	(33.3%)9	(29.63%)8	(7.4%)2
I completely disagree (5)	(44.4%)12	(59.26%)16	(40.74%)11	(92.6%)25
P-value	0.082		<0.001	

The results of chi-square test showed that before the intervention, there is no significant difference between case and comparison group in answering question 7 “If I see my child playing sexual games (doctor games or showing up their genitalia), I will punish him or her harshly” (P-value: 0.082). Meanwhile, after the educational intervention, there is significant difference between case and comparison groups for answering question 6 (p-value < 0.001). So the educational sessions had positive effect on mothers’ attitude in relation to question 7.

Table 12. The comparison of frequency distribution of attitude regarding question 8 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
8) I do not answer my child's sexuality questions and I render him or her from asking such questions				
I totally agree (1)	(0%)0	(3.7%)1	(0%)0	(0%)0
I agree (2)	(3.7%)1	(3.7%)1	(3.7%)1	(0%)0
I have no idea (3)	(14.81%)4	(0%)0	(14.81%)4	(0%)0
I disagree (4)	(37%)10	(33.3%)9	(44.4%)12	(7.4%)2
I completely disagree (5)	(44.4%)12	(59.26%)16	(37%)10	(92.6%)25
P-value	0.192		<0.001	

The results of chi-square test revealed that before the intervention, there is no significant difference between case and comparison group in answering question 8 “I do not answer my child's sexuality questions and I render him or her from asking such questions” (P-value: 0.192). But, after the educational intervention, there is significant difference between case and comparison groups for answering question 8 (p-value < 0.001). So the educational sessions had positive effect on mothers’ attitude in relation to question 8.

Table 13. The comparison of frequency distribution of attitude regarding question 9 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
9) I respond my child's questions with clear answers based on reality and appropriate to his or her age.				
I totally agree (5)	(0%)0	(77.77%)21	(0%)0	(96.29%)26
I agree (4)	(51.9%)14	(22.2%)6	(44.4%)12	(3.7%)1
I have no idea (3)	(25.9%)7	(0%)0	(33.3%)9	(0%)0
I disagree (2)	(18.51%)5	(0%)0	(18.51%)5	(0%)0
I completely disagree (1)	(3.7%)1	(0%)0	(3.7%)1	(0%)0
P-value	0.033		<0.001	

The results of chi-square test showed that before the intervention, there is no significant difference between case and comparison group in answering question 9 “I respond to my child's questions with clear answers based on reality and appropriate to his or her age.” (P-value: 0.033). After the educational intervention, there is significant difference between case and comparison groups for answering question 9 (p-value < 0.001). So the educational sessions had positive effect on mothers’ attitude in relation to question 9.

Table 14. The comparison of frequency distribution of attitude regarding question 10 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
10) I punish my child's curiosity intensely about sexual issues, so he or she never repeats that again.				
I totally agree (1)	(0%)0	(3.7%)1	(0%)0	(0%)0
I agree (2)	(3.7%)1	(3.7%)1	(0%)0	(0%)0
I have no idea (3)	(7.4%)2	(0%)0	(11.11%)3	(0%)0
I disagree (4)	(22.2%)6	(14.81%)4	(37%)10	(3.7%)1
I completely disagree (5)	(66.66%)16	(77.77%)21	(51.9%)14	(96.29%)26
P-value	0.505		<0.001	

The results of chi-square test depicted that before the intervention, there is no significant difference between case and comparison group in answering question 10 “I punish my child's curiosity intensely about sexual issues, so he or she never repeats that again” (P-value: 0.505).

After the educational intervention, there is significant difference between case and comparison groups for answering question 10 (p-value < 0.001). So the educational sessions had positive effect on mothers' attitude in relation to question 10.

Table 15. The comparison of frequency distribution of attitude regarding question 11 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
11) I have calm and mild reaction to my child's curiosity about sexual sues				
I totally agree (5)	(70.37%)19	(77.77%)21	(55.55%)15	(92.6%)25
I agree (4)	(25.9%)7	(18.51%)5	(40.74%)11	(7.4%)2
I have no idea (3)	(3.7%)1	(0%)0	(3.7%)1	(0%)0
I disagree (2)	(0%)0	(0%)0	(0%)0	(0%)0
I completely disagree (1)	(0%)0	(3.7%)1	(0%)0	(0%)0
P-value	0.632		0.019	

The results of chi-square test showed that before the intervention, there is no significant difference between case and comparison group in answering question 11 “I have calm and mild reaction to my child's curiosity about sexual issues” (P-value: 0.632). But after the educational intervention, there is significant difference between case and comparison groups for answering question 11 (p-value: 0.019). So the educational sessions had positive effect on mothers' attitude in relation to question 11.

Table 16. The comparison of frequency distribution of attitude regarding question 12 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
12) I believe that parents are the most important people who are responsible for sexuality education of children.				
I totally agree (5)	(85.18%)23	(70.37%)19	(81.5%)22	(100%)27
I agree (4)	(11.11%)3	(29.63%)8	(14.81%)4	(0%)0
I have no idea (3)	(3.7%)1	(0%)0	(3.7%)1	(0%)0
I disagree (2)	(0%)0	(0%)0	(0%)0	(0%)0
I completely disagree (1)	(0%)0	(0%)0	(0%)0	(0%)0
P-value	0.175		0.051	

In question 12, “I believe that parents are the most important people who are responsible for sexuality education of children.” the p-value before the educational sessions is obtained 0.175, and as it is higher than 0.05, H_0 is accepted. It means that mothers in both case and comparison groups had the same answers. After the educational sessions, the p-value is obtained 0.051. As this number is very near to 0.05, we can conclude that H_0 is rejected. As a result we can say that the answers of mothers in case and comparison groups are different after the educational session.

Table 17. The comparison of frequency distribution of attitude regarding question 13 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
13) The type of my parenting has a key role in my child's sexual behavior in the future.				
I totally agree (5)	(74.07%)20	(59.26%)16	(70.37%)19	(96.29%)26
I agree (4)	(22.2%)6	(37%)10	(25.9%)7	(3.7%)1
I have no idea (3)	(3.7%)1	(3.7%)1	(3.7%)1	(0%)0
I disagree (2)	(0%)0	(0%)0	(0%)0	(0%)0
I completely disagree (1)	(0%)0	(0%)0	(0%)0	(0%)0
P-value	0.678		0.024	

According to the results of chi- square test, before the intervention, there is no significant difference between case and comparison group in answering question 13 “The type of my parenting has a key role in my child's sexual behavior in the future.” (P-value: 0.678). But after the educational intervention, there is significant difference between case and comparison groups for answering question 13 (p-value: 0.024). As a result, the educational sessions had positive effect on mothers’ attitude in relation to question 13.

Table 18. The comparison of frequency distribution of attitude regarding question 18 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
14) If I inform my child about sexuality issues, it causes him or her experiences early puberty.				
I totally agree (1)	(0%)0	(3.7%)1	(0%)0	(0%)0
I agree (2)	(3.7%)1	(3.7%)1	(3.7%)1	(0%)0
I have no idea (3)	(29.63%)8	(22.2%)6	(25.9%)7	(0%)0
I disagree (4)	(29.63%)8	(48.1%)13	(33.3%)9	(11.11%)3
I completely disagree (5)	(37%)10	(22.2%)6	(37%)10	(88.88%)24
P-value	0.554		< 0.001	

The results of chi- square test showed that before the intervention, there is no significant difference between case and comparison group in answering question 14 “If I inform my child about sexual issues, it causes him or her to experience early puberty” (P-value: 0.554). Meanwhile, after the educational sessions, there is significant difference between case and comparison groups for answering question 14 (p-value < 0.001). As a result, the educational sessions had positive effect on mothers’ attitude in relation to question 14.

Table 19. The comparison of frequency distribution of attitude regarding question 15 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
15) If I talk with my child about sexuality issues our parent-child relationship will ruined and privacy will be broken.				
I totally agree (1)	(0%)0	(0%)0	(0%)0	(0%)0
I agree (2)	(0%)0	(3.7%)1	(0%)0	(0%)0
I have no idea (3)	(18.51%)5	(3.7%)1	(22.2%)6	(0%)0
I disagree (4)	(48.1%)13	(59.26%)16	(44.4%)12	(7.4%)2
I completely disagree (5)	(70.37%)19	(33.3%)9	(33.3%)9	(92.6%)25
P-value	0.282		< 0.001	

According to the results of chi-square test, before the intervention, there is no significant difference between case and comparison group in answering question 15 “If I talk with my child about sexual issues our parent-child relationship will be ruined and privacy will be broken” (P-value: 0.282). After the educational intervention, there is significant difference between case and comparison groups for answering question 15 (p-value < 0.001). As a result, the educational sessions had positive effect on mothers’ attitude in relation to question 15.

Table 20. The comparison of frequency distribution of attitude regarding question 16 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
16) When I encounter my child's sexuality games (doctor games or showing up their genitalia), I keep insentience and distract him or her to other things				
I totally agree (5)	(70.37%)19	(51.9%)14	(66.66%)18	(85.18%)23
I agree (4)	(14.81%)4	(40.74%)11	(18.51%)5	(11.11)3
I have no idea (3)	(7.4%)2	(3.7%)1	(7.4%)2	(3.7%)
I disagree (2)	(3.7%)1	(3.7%)1	(0%)0	(0%)0
I completely disagree (1)	(3.7%)1	(0%)0	(7.4%)2	(0%)0
P-value	0.348		0.245	

In question 16, “When I encounter my child's sexual games (doctor games or showing up their genitalia), I keep insentient and distract him or her to other things”, the p-value before test is 0.245 which is higher than 0.05, so H_0 is accepted. It means the answers of mothers in case and comparison groups are similar. After educational sessions the p-value is obtained 0.348 and because it is higher than 0.05 the H_0 is accepted again. It showed that mothers in both case and comparison groups have had similar answers even after the sessions. The reason behind this, can be that all parents are trained well in different educational courses that they should never have harsh reaction to any of their children's mistakes, since parent's backlash could worsen the situation. This could be a reason for this evidence. In addition, in educational sessions mothers were trained how to encounter this situation. They need to stay calm and distract the child to other things, plus, they must never punish their children in these situations.

Table 21. The comparison of frequency distribution of attitude regarding question 17 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
17) I teach my child to know his or her private parts and respect them.				
I totally agree (5)	(74.07%)20	(55.55)15	(0%)0	(100%) 27
I agree (4)	(22.2%)6	(44.4%)12	(0%)0	(0%)0
I have no idea (3)	(3.7%)1	(0%)0	(22.2%)6	(0%)0
I disagree (2)	(0%)0	(0%)0	(44.4%)12	(0%)0
I completely disagree (1)	(0%)0	(0%)0	(33.3%)9	(0%)0
P-value	0.148		< 0.001	

Based on chi-square test results, before the intervention, there is no significant difference between case and comparison group in answering question 17 “I teach my child to know his or her private parts and respect them.” (P-value: 0.148). After the educational intervention, there is significant difference between case and comparison groups for answering question 17 (p-value < 0.001). As a result, the educational sessions had positive effect on mothers’ attitude in relation to question 17.

Table 22. The comparison of frequency distribution of attitude regarding question 18 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
18) I teach my child that no one is allowed to touch his or her private parts without his or her permission.				
I totally agree (5)	(96.29%)26	(88.88%)24	(92.6%)25	(100%) 27
I agree (4)	(3.7%)1	(11.11%)3	(7.4%)2	(0%)0
I have no idea (3)	(0%)0	(0%)0	(0%)0	(0%)0
I disagree (2)	(0%)0	(0%)0	(0%)0	(0%)0
I completely disagree (1)	(0%)0	(0%)0	(0%)0	(0%)0
P-value	0.610		0.491	

Table 23. The comparison of frequency distribution of attitude regarding question 19 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
19) By role playing I teach my child that if someone touches his or her private part or harm my child he or she should tell me about it.				
I totally agree (5)	(92.6%)25	(85.18%)23	(92.6%)25	(100%) 27
I agree (4)	(3.7%)1	(11.11%)3	(3.7%)1	(0%)0
I have no idea (3)	(0%)0	(3.7%)1	(0%)0	(0%)0
I disagree (2)	(0%)0	(0%)0	(0%)0	(0%)0
I completely disagree (1)	(3.7%)1	(0%)0	(3.7%)1	(0%)0
P-value	0.478		0.491	

For question 18 “I teach my child that no one is allowed to touch his or her private parts without his or her permission” and 19 “By role playing I teach my child that if someone touches his or her private part or harm my child he or she should tell me about it”, the p-value before sessions were obtained 0.610 and 0.478 respectively and as these numbers are higher than 0.05, H_0 is accepted. This means that mothers in both case and comparison groups had the same answers. The p-value after the educational sessions for question 18 and 19 were 0.491 and as it is higher than 0.05 the H_0 is accepted. As a result the answers of mothers in both case and comparison groups are similar after educational sessions.

Table 24. The comparison of frequency distribution of attitude regarding question 20 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
20) I do not scare my child about sexual abuse issues.				
I totally agree (1)	(3.7%)1	(3.7%)1	(0%)0	(0%)0
I agree (2)	(0%)0	(3.7%)1	(0%)0	(0%)0
I have no idea (3)	(22.2%)6	(3.7%)1	(33.3%)9	(0%)0
I disagree (4)	(22.2%)6	(48.1%)13	(40.74%)11	(14.81%)4
I completely disagree (5)	(51.9%)14	(40.74%)11	(25.9%)7	(85.18%)23
P-value	0.080		< 0.001	

According to chi-square test results, before the intervention, there is no significant difference between case and comparison group in answering question 20 “I do not scare my child about sexual abuse issues” (P-value: 0.466). After the educational intervention, there is significant

difference between case and comparison groups for answering question 20 (p-value: 0.002). So, the educational programs had positive effect on mothers' attitude in relation to question 20

Table 25. The comparison of frequency distribution of attitude regarding question 21 in case and comparison group before and after the intervention.

Group Attitude	Comparison (n=27)group	Case (n=27)group	Comparison (n=27)group	Case (n=27)group
	Before		After	
21) When I take care of my child, there is no need to talk about sexual abuse issues.				
I totally agree (5)	(77.77%)21	(59.26%)16	(66.66%)18	(100%) 27
I agree (4)	(7.4%)2	(22.2%)6	(22.2%)6	(0%)0
I have no idea (3)	(0%)0	(14.81%)4	(7.4%)2	(0%)0
I disagree (2)	(11.11%)3	(0%)0	(0%)0	(0%)0
I completely disagree (1)	(3.7%)1	(3.7%)1	(3.7%)1	(0%)0
P-value	0.466		0.002	

The results of chi-square test depicted that before the intervention, there is no significant difference between case and comparison group in answering question 21 “When I take care of my child, there is no need to talk about sexual abuse issues” (P-value: 0.080). After the educational intervention, there is significant difference between case and comparison groups for answering question 21 (p-value < 0.001). So, the educational programs had positive effect on mothers' attitude in relation to question 21.

According to the given data, question 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 17, 20 and 21 have p-value higher than 0.05 before educational sessions. It means H_0 is accepted and mothers in both case and comparison groups had the same answers, which is normal because

before training they had similar attitudes. But after sessions the p-value is obtained less than 0.05 and H_0 is rejected. It means that after training sessions, mothers in case and comparison groups have had different answers. It shows us that mothers' attitude in case group have changed significantly, but the attitude of mothers in comparison group have not changed significantly.

Focus group

A focus group was established to evaluate the effects of this educational intervention on maternal behavior after eight months. Six mothers participated and a series of ten questions was asked. These ten questions were selected according to the content of five educational sessions. At the conclusion of the focus group, the mothers were asked for suggestions as to how they would improve the program in the future.

1. On the topic of a child raising questions pertaining to gender or sexuality, what were the circumstances that initiated the child to derive such questions?

They all mentioned that because of the importance of this education they tried to provide a situation that they can explain these issues to their children or their children ask their questions. One of the mothers had become pregnant and after delivery it motivated her child's curiosity. Her child asked how she became pregnant with her sister and the mother explained the answers appropriate to her child's age. Four of mothers mentioned that kindergarten was the main place that triggers their questions. They had asked what difference exists between girls and boys. One mother told that one day her child said that a girl in their class became a boy, because she cut her hair and became a boy. One other child asked her mother how her friend's aunt had become pregnant; Mothers also told that bathing and toileting the children were also the stimulation for asking questions. When they are washing their children's genitalia they were asked about it. Three of mother also said that in the bathroom their children asked them to show their breast and genitalia because the mothers could see and wash children's.

2. Mothers were asked a question pertaining to the topic of what questions their child has asked and what explanations they had provided.

They all had different experiences. One of them had used pollination of plants to explain about the birth. There were two berry trees in their garden one male and one female. She told her son that in the spring the male tree pollinates and inseminate the female tree and helps her to give fruit. The other had used mating pet birds to answer her child's question about birth. They had two robins, one male and one female. After a while, the female robin hatched and by showing the eggs to her child, mother had explained about the birth of the robins' chicks. One of the mothers to answer her child's question had explain that hair length or clothing style are not determinants of gender and if a girl cut her hair she would not become a boy and in some part of world men wear skirt and they would not become women. They searched in the Internet and saw that in some society men wear skirt and they still are men. The other mother to answer her child's question (I want to have big breast. Good for you that yours are very big), explained that as a girl grew older her breast grew gradually and when she became 15 the size of the breast would grow, but now it is natural that her breast are small and it showed that she was healthy. One of the mothers that her boy started to touch his genitalia, tried not react harshly and just once said "if you touch your private part permanently, you might become ill and it might burn when you pee". After that whenever she saw her son touching her genitalia, she distracted him by different things. The last thing that they talked about was about using the bathroom, "no one is allowed to see you in the bathroom, the door should be closed and you should wear your underwear before getting out of the bathroom ."

3. Mothers were then asked on the topic of how comfortable they felt when they talked to their child about gender or sexuality.

All mothers mentioned that because they were trained well, they felt very comfortable and had no stress when they talked to their children in terms of sexuality education. They also

mentioned as they knew what to say according to the educations and their feeling would influence on their children and their conversation, they were very relaxed and had no stress, anxiety or shame.

4. Mothers were asked on the topic of what type of question their children asked. If it was body part curiosity. The children's question included:

How I was born?

How did you get pregnant mom?

How did my friend's aunt get pregnant?

What are these? (Pointing to the testicles)

Can I see your private part mom?

Can I see you your breast mom?

Is it just for peeing? (Pointing to the vagina)

Why can I not see daddy having bath?

Is my friend allowed to see me peeing?

When will I have big breast like yours?

5. Another thing that was talked about was that if their children felt comfortable to talk about body parts and sexuality.

All the mothers mentioned that children were very comfortable. Two mother told that sometimes it seemed that the topic was surprising for them, but after explaining well, they reacted normally. All mother believed that they had no fear or shame when asking their questions.

6. Mothers were next asked on the topic of if they talked to their child about the genitalia being body parts with specific biological function.

All of the mothers had positive answers.

7. The other question was that if they told their child that no one is allowed to touch her or his private parts.

The answer of all mothers was again yes.

8. The next question was that if mothers had told their children if someone does touch their private part, they should tell them

They all responded "yes" to this question.

9. Mother were asked that if they believed it was important to talk to their child about sexual abuse.

All of them had positive answer; they said "yes of course".

10. On the topic of the effectiveness of the seminar, mothers were asked if they thought that the training seminar (empowered) helped them feel competent to talk to their child about these topics.

Their answers was yes and they all said that the education was very great and complete. All mothers mentioned that as they had limited information about sexuality education of children before the sessions, they did not know how to start a conversation with their children or even answer their questions, so they avoided any conversations and answered their children's questions with unreal answers or even suppressed their curiosity. They used to believe that in the future in adolescence and youth, children themselves would find their answers or even teachers in school may teach them. But in educational sessions mothers were taught that the role of parents in sexuality education of children is vital, they are the first teachers of their children and by the information they gave, mothers were ready to start conversation with children and respond to their questions. Mothers also mentioned

that before training they avoided answering their children questions because they did not know what to say, they were afraid that if their conversation went wrong, it would cause future problems. The mothers stated that the information imparted to them by the seminar adequately equipped them to answer their children's questions on these sensitive topics.

Mothers' suggestions:

- Two mothers suggested to hold these educational sessions for fathers.
- One of them suggested that there would be extra session to ask more questions.
- Two of them suggested that these educational sessions continue for mothers in future.
- The last mother mentioned everything was great and she had no suggestion

Discussion

According to the findings of this study, we can concluded that the educational program has had positive effect on mothers' attitude, knowledge and behavior towards sexuality education and child sexual abuse. Mothers in the case group has had higher score on their questionnaires – both attitude and knowledge questionnaire- than mothers in comparison group. In addition after eight months a focus group was conducted to evaluate if mothers remember any issue related to the program and if they had any real positive change in their behavior towards sexuality education. The results of the session was also hoping and it showed mothers' behavior has had major improvement.

Based on the results, the age and education of mothers in case and comparison group had no significant differences and mothers in the comparison group included those who had similar age and education as mothers in the case group. Before the educational sessions, there was no variation in the responses in knowledge and attitude questionnaires between case and comparison groups. After the educational program, the findings indicated that the level of mothers' attitude in comparison group not only had any progress, but it has diminished over time and the level of their knowledge has not changed. However, based on the findings, the level of knowledge and attitude of mothers in case group has increased.

As mentioned earlier, the importance of sexuality education of children is widely accepted. (Andrade, Mello, Sousa, Makuch, Bertoni, & Faundes, 2009; Asekun-Olarinmoye, Dairo, Abodurin, & Asekun-Olarinmoye, 2011; Merghati-Khoei & Abolghasemin, 2014). Although the old perspective still exists in Iran that if parents talk about sexuality issues with their children, children will become sexually active (Merghati-Khoei & Abolghasemin, 2014) in these educational sessions, mothers were trained that this belief is incorrect and the lack of appropriate sexuality education and unawareness can cause this problem (Andrade, Mello,

Sousa, Makuch, Bertoni, & Faundes, 2009; Asekun-Olarinmoye, Dairo, Abodurin, & Asekun-Olarinmoye, 2011; Merghati-Khoei & Abolghasemin, 2014). In addition, mothers were taught that for each age group what explanations and warning about CSA need to be given for children.

The findings from this study point to the same findings as the research by Merghati-khoei and abolghasemi in 2014 that there is a need for educating parents and empower them to gain sufficient skills and knowledge in their interaction with their children on sexuality education. As Wakley in 2001 also mentioned, the sexuality education of children need to start as soon as possible, in this study also mothers with 3 – 6 year old children were educated. In addition like Walker's research (2001), mothers in our study were trained that in their interaction with their child, they need to be very natural and calm. Explaining about private parts should not have any difference when talking about hand, stomach and etc. The results of focus group pointed that mothers were pleased with the education, since their awareness about child sexuality education has increased, they learnt how to response their child curiosity and protect them from CSA. Mothers also suggested that this education also needs to be conducted for fathers to empower them and prepare them for appropriate sexuality education of their children. The results of this study point to the same findings as the research by Izugbara in 2008; Merghati-Khoei, Abolghasemi, & Taghdisi in 2013; Wight & Fullerton in 2013 and Lukolo & Dyk in 2015. In this study mothers were trained to teach their child the correct terms of genital body parts. Other studies also recommended the importance of children knowing the correct name of body parts (Kenny & Wurtele 2008; Kenny, Capri, Ryan, Thakkar-Kolar, Ryan & Rumyon, 2008).

The other topic that was considered in this study was CSA. Mothers were made aware about different types of CSA and to prevent it. This study has highlighted the importance of

teaching children self-protection skills and mothers were trained how to do it. Actually the knowledge of parents about CSA and its prevention ways and also teaching children how to protect themselves, are very important for CSA prevention. These results are similar to other studies in the field of CSA (Mathoma, Maripe-Perea, Khumalo, Mbayi & Seloilwe, 2006; Kenny, Capri, Ryan, Thakkar-Kolar, Ryan & Rumyon, 2008; Zhang, Chen, Feng, Li, Zhao & Luo, 2013).

According to the results, mothers' attitudes has changed in case group after educational sessions. These changes included:

Mothers did not think any more that talking with their child about sexuality issues is immoral and would encourage him or her towards sexual thoughts. Actually, in the focus group mothers mentioned that educating sessions taught them that talking with their child appropriate to their age about sexuality topics, makes the child aware and they are less likely to have early sexual thoughts or sexual activity. The importance of talking with children about genitalia and its biological function's now clear for mothers. Mothers also learned that they must avoid having harsh reaction to their child playing sexual games, in fact they need to keep calm and just distract him or her. The other important effect of these educational session on mothers' attitude is that they learnt it is really necessary to respond to their child's curiosity about sexuality issues with clear answers based on accurate facts and appropriate to their age. Actually, they must never reprimand their child from asking such questions and they need to have mild and calm reaction to their child's curiosity. After the sessions mothers believe that the type of their parenting has a key role in their child's sexual behavior in the future. Mothers now learnt that educating about sexuality issues will not causes their child to experience early puberty or ruin their parent-child relationship. The other important changes in mothers' attitude belongs to personal safety. After sessions mothers in the case group

believe that they need to teach their child to know and respect his or her private part and by role playing educate them that no one is allowed to touch their genitalia without permission and if someone does touch it they should tell parents immediately. Mothers learned that by role playing they would be able to teach these topics to their children, not by scaring them about sexual abuse. The last result was that mothers in case group do not believe any more as they take care of their child, there is no need to talk about sexual abuse issues.

Three criteria are measured in this study including the knowledge, attitude and most importantly the behavior of mothers. Eight months after the educational session a focus group was conducted to evaluate if parents remembered anything about the sessions and if they had applied what they learned in their behavior and interaction with their child. This meeting made us aware that how efficient was the program and evaluate if the educational program was really practical and useful. For example, mothers in focus group mentioned that they tried to provide a situation for their child to ask his or her question or even triggered them to ask questions. Mothers used different methods to explain about birth including pollination, birds ad etc. Another example is that mothers said that because they were trained well, they felt very comfortable when they talked to their children in terms of sexuality education for example they had talked to their child about the genitalia being a body part with specific biological function. They also believed it was important to talk to their child about sexual abuse and protect them from CSA.

There are limitations in this study too. The limitation of the study include: The case and comparison groups are just composed of mothers because time constraints for fathers made it difficult to include fathers. As a result, mothers were just selected for this study.

For question 16, 18 and 19 there were no significant difference between case and comparison groups before and after educational sessions. The reason behind these data could

be that parents may read books, watch educational program on television or participate in other educational sessions and have some knowledge in this filed. The other possible reason can be that mother saw the questions and decided it was important to answer what she thought was correct, not what is actually true. In fact, self-reported data has this limitation, and answers what they think is expected or correct, and so they may not answer the truth.

Conclusion

The findings from this 27 participant suggests that this study can be done on larger sample and in different cities of Iran since the curriculum in this study was localized based on Iranian culture. In addition fathers need to be included in these programs sine awareness of both mothers and fathers is important in child sexuality education and CSA prevention.

This study was conducted in the city of Isfahan, in central part of Iran. There were 27 mothers in each case and comparison groups. The case group participated in 5 educational sessions about child sexuality education and CSA prevention. The findings have shown that educational sessions have had positive effects on the knowledge and attitude of mothers towards sexuality education of their children. In addition, the results of the focus group have shown that mothers did show change in behavior based on the training they had received and they used their knowledge to educate their children. These changes in knowledge, attitude and behavior can lead to more informed and healthier child upbringing.

The results of this study are in agreement with the findings from other studies. For example the findings showed that mothers are more aware of the importance of sexuality education of children (Andrade, Mello, Sousa, Makuch, Bertoni, & Faundes, 2009; Asekun-Olarinmoye, Dairo, Abodurin, & Asekun-Olarinmoye, 2011; Merghati-Khoei & Abolghasemin, 2014). The results of the study at hand also indicated that educational intervention program could help mothers respond their child curiosity and potentially help protect them from CSA by adequately educating them. Both results agree with the findings researched by Izugbara in 2008, Merghati-Khoei, Abolghasemi, & Taghdisi, 2013; Wight and Fullerton in 2013 and Lukolo and Dyk in 2015. The traditional perspective of Iranian parents that talking about sexuality issues with children, can make them sexually active (Merghati-Khoei & Abolghasemin, 2014) was no longer accepted by mothers after these educational

sessions and they now know that inappropriate or lack of sexuality education and unawareness can possibly cause harm to their children. This result agrees with others studies of Andrade, Mello, Sousa, Makuch, Bertoni, & Faundes (2009), Asekun-Olarinmoye, Dairo, Abodurin, & Asekun-Olarinmoye (2011) and Merghati-Khoei & Abolghasemin (2014). As Wakley in 2001, in this study mothers were trained that sexuality education needs to be taught to children as soon as possible. In addition the educational sessions, similar to methods published by Kenny & Wurtele (2008), and Kenny, et al (2008) mothers were trained to teach their child the correct name of genital body parts.

The educational sessions in this study emphasized the importance of teaching children self-protection skills. Mothers learned about CSA, its prevention ways and also how to teach children to protect themselves and this was in concordance with the studies of Mathoma, Maripe-Perea, Khumalo, Mbayi & Seloilwe (2006), Kenny, Capri, Ryan, Thakkar-Kolar, Ryan & Rumyon (2008) and Zhang, Chen, Feng, Li, Zhao & Luo (2013).

Although child sexuality education is important, there are some serious obstacles in many countries and among different communities including Iran, which avoid such educations. Further qualitative studies are needed to explore what these barriers are, how they can be dealt with and how the infrastructure can be put in place for parental education to be established.

Based on the findings from focus group, there is an important demand on educating fathers on sexuality education of children and CSA prevention. Also mothers asked that this program be included in parent – teacher meeting programs in the kindergarten at the first and during the year. The future qualitative studies are needed to be conducted on strategies to include more fathers' participation in the educational sessions. Also these studies should explore if the gender of the consultant providing the education is important or fathers'

participation, when in more conservative communities. Questions such as: Would it help if the counselor is a male? What conditions are needed for fathers' participation? Does the presence of both mother and fathers encourage participation? What makes both parents more likely to participate? What location is most welcome place for this educational program? Should the trainer have psychological education or any parson who has training on sexuality education and CSA prevention can educate parents? What qualifications should be required of trainers for educating parents?

As this program was conducted in Baha'i community in the city of Isfahan, would other kindergartens in Isfahan be receptive considering they are Muslims, and perhaps more reserved? Would Muslim parents be receptive? Would other cities with different culture be receptive? What changes needed to be done according to each city's culture, to make participation more likely?

Child sexuality education and CSA prevention programs are among the vital programs that need governmental, non-governmental and private funding and resources. Since these resources may will not be provided by government or private part, in socio-economic developed areas, parent can be encouraged to pay small fee to attend the educational seminars. In low socio-economic areas where people may not be able to pay for seminars and it cause them not to attend, search for funders may be helpful for providing parents with these educational seminars. The community, teachers, caregivers and most importantly, parents should be taught how to deal with these issues, since misinformation or lack of information and adequate training, can potentially cause harm to children and/or lead to various disorders, later in life.

References

- 1) American Psychological Association. (2001). Understanding child sexual abuse: Education, prevention, recovery. Retrieved February 29, 2008, from: <http://www.apa.org/releases/sexabuse/>
- 2) Andrade, H. H., Mello, M. B., Sousa, M. H., Makuch, M. Y., Bertoni, N., & Faundes, A. (2009). Changes in sexual behavior following a sex education program in Brazilian public schools. *Cadernos Saude Publica*, 1168–1176
- 3) Asekun-Olarinmoye, E. O., Dairo, M. D., Abodurin, O. L., & Asekun-Olarinmoye, I. O. (2011). Practice and content of sex education among adolescents in a family setting in rural southwest Nigeria. *International Quarterly of Community Health Education*. 57–71
- 4) Berk, L.E. (2008). Development Through the Lifespan. (Y. Seyedmohammas, Trans.) Tehran: Arasbaran.
- 5) Duncan GJ, Ziol-Guest KM, Kalil A. (2010). Early-childhood poverty and adult attainment, behavior, and health. *Child Dev*. 81(1):306-325
- 6) Elliott, M., Browne, K., & Kiloyne, J. (1995). Child sexual abuse prevention: what offenders tell us. *Child Abuse & Neglect*, 579-594.
- 7) Eser, M., & Celikoz, N. (2009). Impact of parental attitude towards sexual identity development on child's sexual identity development. *ScienceDirect* , 1408-1413.
- 8) Finan, S. (1997). Promoting healthy sexuality: guidelines for infancy through preschool. *THE NURSE PRACTITIONER*, 22(10), 79-80, 83-6, 88

- 9) Hajizadeh, M. (2015). The effectiveness of Educational package of sexuality education of children on knowledge and attitude of parents in Yazd. Master thesis. *Yazd University*.
- 10) Halfon N. (2009). Life course health development: A new approach for addressing upstream determinants of health and spending. Washington: Expert Voices, National Institute for Health Care Management Foundation. Available from: http://www.nihcm.org/pdf/ExpertVoices_Halfon_FINAL.pdf [PDF - 91 KB]
- 11) Izugbara, C. O. (2008). Home-Based sexuality education, Nigerian parents discussing sex with their children. *Youth and Society* , 575-600.
- 12) Jaberzadeh, S. (2015). The positive effect of sexuality education on knowledge and attitude of mothers and children in the first grade. *Alzahra University* , 62- 82.
- 13) Kendall-Tackett, K. (2012). The long-term health effects of child sexual abuse. *Handbook of Child Sexual Abuse: Identification, Assessment, and Treatment*, 49-67.
- 14) Kenny, M.C., Capri, V., Ryan, R., Thakkar-Kolar, Ryan, E. E., & Rumyon, M.K. (2008). Child sexual abuse: from prevention to self-protectin. *Child Abuse Review*, 36-54.
- 15) Kenny, M. C., & Wurtele, S. K. (2008). Toward Prevention of Childhood Sexual Abuse: Preschoolers' Knowledge of Genital Body Parts. *Proceedings of the Seventh Annual College of Education Research Conference: Urban and International Education Section*, 74-79.
- 16) Kenny, M. C. (2010). Child sexual abuse education with ethnically diverse families: A preliminary analysis. *Children and youth services review* , 981-989

- 17) Kenny, M. C., & Wurtele, S. K. (2010). Partnering with parents to prevent childhood sexual abuse. *Child Abuse Review*, 130-152.
- 18) Kennym, M., & Wurtele, S. (2012). Preventing Childhood Sexual Abuse: An Ecological Approach. *Journal of Child Sexual Abuse*, 361-367.
- 19) Kurtuncu, M., Akhan, L. U., Tanir, I. M., & Yildiz, H. (2015). The sexual development and education of preschool children: Knowledge and opinion from doctors and nurses. *Sex Disabil*, 207-221
- 20) Liew, J. (2012). Effortful control, executive functions, and education: Bringing self-regulatory and social-emotional competencies to the table. *Child development perspectives*. 6(2), 105-111.
- 21) Luby J, Belden A, Botteron K. (2013). The effects of poverty on childhood brain development: the mediating effect of caregiving and stressful life events. *JAMA Pediatr*. 167(12), 1135-1142
- 22) Lukolo, L. N., & Dyk, A. v. (2015). Parents' Participation in the Sexuality Education of Their Children in Rural Namibia: A Situational Analysis. *Global Journal of Health Science*, *Global Journal of Health Science*, 7(1), 35-45.
- 23) Maniglio, R. (2009). The impact of child sexual abuse on health: a systematic review of reviews. *Clin Psychol Rev*, 647-657.
- 24) Martin, K. A., & Torres, J. (2014). Where did I come from? US parents' and preschool children's participation in sexual socialisation. *Sexuality education*, 174-190.
- 25) Mathoma, A., Maripe-Perea, D., Khumalo, L., Mbayi, B., & Seloilwe, E. (2006). Knowledge and Perceptions of Parents Regarding Child Sexual Abuse in Botswana and Swaziland. *Pediatric Nursing*, 21 (1), 67-72.

- 26) Merghati-Khoei, E., Abolghasemi, N., & Taghdisi, M. (2013). Child sexual health: qualitative study, explaining the views of parents. *Scientific Journal of School of Public Health and Institute of Public Health Research*, 11(2), 65-75.
- 27) Merghati-Khoei, E., & Abolghasemin, N. (2014). Children are Sexually Innocent”: Iranian Parents’ Understanding of Children’s Sexuality. *Archives of Sexual Behavior*, 587-595.
- 28) Pereda, N., Guilera, G., Forns, M., & Gomez-Benio, J. (2009). The prevalence of child sexual abuse in community and student samples: A meta-analysis. *Clinical Psychology Review*, 328-338.
- 29) Polonko, K.A., Adam, N., Naeem, N., & Adinolfi, A. (2016). Child Sexual Abuse in the Middle East and North Africa: A Review. *ResearchGate*, 191-200.
- 30) Schultz, D. P., & Schultz, S. E. (2008). *Theories of personalities*. (Y. Mohammdi, Trans.) Tehran: Virayesh, 68-76.
- 31) Shonkoff JP, Boyce WT, McEwen BS. (2009). Neuroscience, molecular biology, and the childhood roots of health disparities: building a new framework for health promotion and disease prevention. *JAMA* . 301(21), 2252-2259.
- 32) Shtarkshall, R. A., Santelli, J. S. & Hirsch, J. S. (2007). Sex Education and Sexual Socialization: Roles for Educators and Parents. *Perspectives on Sexual and Reproductive Health*, 39 (2), 116-119.
- 33) Zhang, W., Chen, J., Feng, Y., Li, J., Zhao, X., & Luo, X. (2013). Young children's knowledge and skills related to sexual abuse prevention: a pilot study in Beijing, China. *Child abuse and neglect* , 623-630.
- 34) Wakley,G. (2011). Helping parents with sex education. *The journal of family health care*, 21(2), 30-33.

- 35) Wasserman, B. (2009). *Felling good again: guide for parents and terapists of sexually abused children* (1 ed.). (F. Hesami, Trans.) Tehran: Savalan
- 36) Walker, J. L. (2001). A qualitative study of parents' experiences of providing sexuality education for their children: The implications or health education. *Health Education Journal* , 132-146.
- 37) <http://www.who.int/mediacentre/factsheets/fs150/en/>
- 38) <http://www.who.int/whr/2002/chapter4/en/index9.html>

Appendix 1***Focus group questions:***

1. On the topic of a child raising questions pertaining to gender or sexuality, what were the circumstances that initiated the child to derive such questions?
2. What questions did your child ask and what explanations did you provide?
3. How comfortable did you feel when you talked to your child about gender or sexuality?
4. What type of question did your children ask? If it was body part curiosity or example or other questions.
5. Did your children feel comfortable to talk about body parts and sexuality?
6. Did you talked to your child about the genitalia being body parts with specific biological function?
7. Did you tell your child that no one is allowed to touch her or his private parts?
8. Did you tell your child if someone does touch their private part, they should tell them?
9. Do you believed it is important to talk to their child about sexual abuse?
10. On the topic of the effectiveness of the seminar, do you think that the training seminar (empowered) helped you feel competent to talk to their child about these topics?

Appendix 2***Parental knowledge questionnaire about children's sexuality:*****Name:****Age:****The age of children****Education:**

The sentences below are about children sexuality. Answer "yes" if you agree and "no" if you disagree.

	Questions	Yes	No
1	Children have sexuality.		
2	It is possible that children under the age of 12 experience orgasm.		
3	Children under the age of 12 cannot distinguish between sexual behavior and orgasm.		
4	Sexuality in children is about exploring their own bodies.		
5	Sexuality forms gradually.		
6	Sexuality in children is different with adults.		
7	The genitalia of boys can have erection even in infancy.		
8	The vagina of girls can become lubricious even in infancy.		
9	Looking at each other's body is interesting for children and is because of curiosity.		
10	Touching of genitalia in children is related to exploring their own body		

11	Attention to the child's need to be touched and caress will cause healthy development of sexuality.		
12	Child automatically experiences pleasure by touching his or her genitalia.		
13	Touching genitalia in children, like sucking thumb is a behavioral habit.		
14	Sexual identity and the difference between boys and girls are formed between 2-4 years old.		
15	Girls start to explore their own genitalia later than boys.		
16	Between 1-3 years old, children say bad words to make reactions in adults.		
17	Playing such as doctor game and mom game in children are because they want to explore themselves and others' sexual organs.		
18	Children ask about birth and pregnancy between 4-6 years old.		
19*	The questions children ask about birth and pregnancy are related to their curiosity regarding sexual intercourse.		
20	6-8 years old is the libido incubation period and children do not show attention to sexuality.		
21	Masturbation appears between 8-10 years old.		
22	Children become interested to their parents' sexual relationship between 10-12 years old		
23	Discussions with children about sexuality helps parents transfer their values and norms to their children.		
24	Having physical contact with infant is vital as food and water.		
25	People who had discussion about sexual issues with their own elders and became aware, in puberty have much less risky behaviors than people who had not these discussions.		

26	Enlightenment about sexual issues is the duty of parents.		
27	Personal training method of parents has effect on the manner they talk to their children about these issues.		
28	It is needed that children's questions about sexual topics be answered shortly, clearly and honestly.		
29	Sex education of a child is part of the child's educational affairs.		
30	The most appropriate time to explain about sexual issues to children is when they ask.		
31	In child's mind birth has no relevance to sexual intercourse.		
32	Inappropriate attitude towards child's sexual behavior will cause negative assessment from his/her own body.		
33	The danger of sexual abuse as fire accident and drowning, must be explained to the child		
34	We need to teach the child that if someone touches his or her body, he or she should report it to others.		
35	If the child witnesses his or her parent's sexual intercourse, he or she will be scared.		
36	The child should not play doctor game with older children.		

Appendix 3***Parental attitude questionnaire in the case of child's sexuality education:*****Name:****Age:****The age of children****Education:**

	Sentences	I totally agree	I agree	I have no idea	I disagree	I completely disagree
1	If I talk with my child about sexuality topics he or she will be encouraged towards sexual thoughts.					
2	Talking with my child about sexuality issues is immoral.					
3	Talking with my child about sexuality issues makes him aware and prevent damages in this issues.					
4	Talking with my child about sexuality issues is useful as other training issues.					
5	I teach my child that genitalia is one dirty and ugly body organs that needs to be hidden.					
6	I teach my child that genitalia is a private part of the body and just like other body organs hast its own especial and precious action.					

7	If I see my child playing sexual games (doctor games or showing up their genitalia), I will punish him or her harshly.					
8	I do not answer my child's sexuality questions and I render him or her from asking such questions.					
9	I respond my child's questions with clear answers based on reality and appropriate to his or her age.					
10	I punish my child's curiosity intensely about sexual issues, so he or she never repeats that again.					
11	I have calm and mild reaction to my child's curiosity about sexual issues.					
12	I believe that parents are the most important people who are responsible for sexuality education of children.					
13	The type of my parenting has a key role in my child's sexual behavior in the future.					
14	If I inform my child about sexuality issues, it causes him or her experiences early puberty.					
15	If I talk with my child about sexuality issues our parent-child relationship will be ruined and privacy will be broken.					
16	When I encounter my child's sexual games (doctor games or showing up their genitalia), I keep silent and distract him or her to other things.					
17	I teach my child to know his or her private parts and respect them.					

18	I teach my child that no one is allowed to touch his or her private parts without his or her permission.					
19	By role playing I teach my child that if someone touches his or her private part or harm my child he or she should tell me about it.					
20	I do not scare my child about sexual abuse issues.					
21	When I take care of my child, there is no need to talk about sexual abuse issues.					