Effect of the Sexual Education Program on the Knowledge and Attitude of Preschoolers’ Mothers

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ABSTRACT
Introduction: Sexual instinct needs education and training similar to other aspects of the human life. Education can promote changes in knowledge and attitudes of parents, especially mothers. Education has a main role in teaching healthy sexual behaviours among pre-school age children.
Aim: To investigate the effect of the sexual education program on the knowledge and attitude of preschoolers’ mothers.
Materials and Methods: This quasi-experimental study was conducted in two healthcare centers in an urban area of Iran. Study subjects were preschoolers’ mothers, which were selected using a multistage method. For each control and experiment groups, 39 individuals each were selected. The experiment group participated in four educational sessions in four weeks, one session per week. A self-administered questionnaire was developed for data collection. Descriptive and inferential statistics were used for data analysis.

Results: Statistically significant differences in the mean score of knowledge and attitude between the groups immediately and eight weeks after the education program were reported (p < 0.001). The mean score of knowledge was increased from 27.23 to 34.2 immediately and to 37.44 eight weeks after the education program. The mean score of attitude in the experiment group significantly was increased from 48.54 to 59.15 immediately and to 64.49 eight weeks after the intervention (p < 0.001).
Conclusion: The sexual education program influenced the knowledge and attitude of preschoolers’ mothers. Therefore, mothers should be empowered regarding children’s sexual education.

Keywords: Awareness, Children, Opinion, Sexual training

INTRODUCTION
Preschool sexual education is one of the family’s main challenges and concerns across the globe [1,2]. While sexual issues are so common among teenagers and in teenage years, children are often avoided to learn about them. It is noted that sexual maturation does not appear all of a sudden in the teenage period and puberty. Sexual maturation is a process that starts right after birth and is required for the development of human’s sexual aspects [3].

Family as the child’s first source of education influences his/her sexual self-awareness and role as a boy or girl [4,5]. Parents have an outstanding role in the sexual socialization of children [6]. In the Iranian culture and context, owing to the superstitious customs including ‘modesty and shyness’, both in the family and the educational system makes dealing with sexual issues postponed to later ages [2]. The knowledge and attitude of families and especially mothers are important, because the family is the starting point of human life and spend the most time with children. While studies have emphasized the mothers’ significant role in sexual education, they still feel incompetence in this area [7-9].

While sexual education is of great importance no systematic plan is available for it in the Iranian formal and informal educational systems [5,8]. The scientific evidence indicates that a number of obstacles to communicate about sexual issues are a necessity for preserving the child’s purity and innocence and can lead to lack of knowledge about how to provide age-specific education to the child, feeling of discomfort and children’s criticisms and judgments [10]. However, studies indicated that the provision of answers to the child’s sexual curiosities not only does not bring about the child’s early sexual activities, but also postpone them [11,12]. In this regard, studies have shown that Latin and Asian mothers hardly ever talk on sexual issues with their children [5,13]. If the parents inform their children sufficiently of sexuality and are treated with honesty and

in accordance with the child’s age, the child does not show an extraordinary excitement for obtaining information. Such children accept the world’s surprise and they will feel satisfied in their role [14-16]. Parents who make their child aware of sex education by appropriate communication their children have a positive effect on sexual safety and outcome [10,17]. Therefore, sexual education for children is the basis for becoming a sexually healthy adult in the future [10,15].

There is some evidence about the significance of the child’s sexual education; it has not yet been considered a right for childcare [18]. It is believed that research on sexual education among preschool children is low compared with education to youth and adolescents [6]. A few studies have been conducted on sexual education in Iran [5,19]. A probable reason is the effect of culture that considers children sexually innocent [6]. On the other hand, cultural influences may change the efficiency of any education program on sexual issues [5,20]. Education programs are quiet established in developed countries, where sex education for children is widely recognized [21]. In Iran, similar to other conservative societies, there are cultural and political barriers for the sexual education of preschool children. Given the above-mentioned reasons and cultural taboos surrounding children’ knowledge about sexual issues [5], this study was conducted through the provision of educational materials based on the Iranian values and culture to instigate the effect of the sexual education program on the knowledge and attitude of preschoolers’ mothers.

MATERIALS AND METHODS
This was a quasi-experimental study. The study was conducted from March 2016 to February 2017. Subjects were the mothers of preschoolers (3-6-year-old) visiting two healthcare centers of Valfajr and Kazernian affiliated with Iran University of Medical Sciences in
an urban area of Iran. For preventing contact between the groups, distinct healthcare centers were chosen to study the subjects in control and experiment groups, one center for each group. Next, the healthcare centers were simple randomly allocated to either of the groups. For increasing the likelihood of similarities and demographic characteristics of the groups, two healthcare centers that were most possibly close to one another were chosen.

The sample size was determined to be 78 mothers according to the methods of dealing with children who do not ask any question, different methods of sexual education, the role of parents (especially mothers) in sexual education, the appropriate age of sexual education, child sexual questions and parents’ concerns about such questions, different methods of sexual education, how to respond to child sexual questions and masturbation and preventing sexual abuse in children. The above-mentioned items were collected through a review of literature and considering the society’s cultural background. The content of the educational program was reviewed and confirmed by sexual education specialists.

RESULTS

The data were analyzed using SPSS software version 23.0. Chi-square, Fisher’s-exact test and independent t-test were used to study the homogeneity of demographic variables in the two groups. The independent t-test was used to compare the mean score of knowledge and attitude in the experiment and control groups. The Analysis of Variance with repeated measures was used to compare the mean scores of knowledge and attitude before, immediately and eight weeks after the education program in the groups. p< 0.05 was considered statistically significant.

The experiment group with number six to ten individuals participated in four educational sessions, one session per week and received the sexual education program and educational movies related to each training session in the time. Grouping was done based on when mothers were able to participate in the training sessions, also the groups trained at different times during each week. Each session consisted of a lecture followed by questions and answers and group discussions by the mothers in Farsi on subjects predetermined in the educational program. Moreover, the mothers watched two short educational movies, which were in Farsi about different types of touch, the private parts of the body and abuse in a session, which was related to a variety of touches. Each session lasted for about one and hour a half. The experiment group completed the knowledge and attitude questionnaires in three phases, which are as follows before the education program; after the last training session and eight weeks after the last education session.

The control group received normal healthcare services similar to the experiment group, also filled out the questionnaires three times similar to the experiment group. Having completed the questionnaires for the third time, the control group received the sexual education program and movies and trained if they were willing.

**Statistical Analysis**

The data were analyzed using SPSS software version 23.0. Chi-square, Fisher’s-exact test and independent t-test were used to study the homogeneity of demographic variables in the two groups. The independent t-test was used to compare the mean score of knowledge and attitude in the experiment and control groups. The Analysis of Variance with repeated measures was used to compare the mean scores of knowledge and attitude before, immediately and eight weeks after the education program in the groups. p< 0.05 was considered statistically significant.

**RESULTS**

No attrition was reported in the groups, which could be attributed to the closeness of the samples’ houses to the research environment and the researcher’s full-time presence at the working hours in the healthcare centers.

The mothers’ mean ages were 35.92±4.68 years and 35.5±4.19 years in the experiment group and control group, respectively. Comparison in the terms of demographic variables in the experiment group with the control group are shown in Table/Fig-1.

[Table/Fig-2,3] Independent t-test was used to compare the mean scores of mothers’ knowledge and attitude before, immediately and eight weeks after the education program in the two groups.

[Table/Fig-4] indicated that no statistically significant difference in the mothers’ knowledge mean score before the education program,
immediately after the education, and eight weeks after the education in the control group ($F = 1.96, p = 0.15$). However, a statistically significant difference in the experiment group was reported ($F = 183.89, p<0.001$). With regard to the attitude of the mothers, no statistically significant difference between the mean scores of the attitude before, immediately after the education, and eight weeks after the education program was reported in the control group ($F = 2.72, p = 0.07$). However, a statistically significant difference in the experiment group was found ($F = 78.51, p < 0.001$).

**DISCUSSION**

The findings of this study indicated that the sexual education program increased level of knowledge and attitude in the subjects. The mean score of knowledge was increased from 27.23 to 34.2 immediately and to 37.44 eight weeks after the education program. The mean score of attitude significantly was increased from 48.54 to 59.15 immediately and to 64.49 eight weeks after the intervention. A few studies have been conducted on sexual education among Iranian preschoolers [2,19] indicating that mothers had a low level of knowledge and attitude with regard to children's sexual education. According to a study in Iran, social concern in the field of sexual education was mentioned by its negative effects [25]. Also, parents used inappropriate methods for sexual education, because of lack of knowledge and skill about it. Inability to distinguish normal behaviours related to children's growth and sexual development and abnormal behaviour confused the parents for employing the use of appropriate educational strategies for their children. [2,21]. While children need sex education, adults are unable to respond appropriately to child's questions and sexual behaviours. They are eager to receive more information [26].

In the present study, the subjects' level of knowledge and attitude was approximately average before the education program and was better than that of the previous studies done in Iran [19,27]. The findings of a descriptive study on the needs for sexual education of preschoolers' parents in Iran indicated that only 25.9% of mothers were able to answer their children's questions correctly; this shows the families' incapability with respect to sexual education for their children. A 23.7% of mothers stated that in response to sexual questions their children changed the subject and 8.1% stated that they were severely upset and punished their child. 41.6% answered that every time you grow up, you understand yourself [27].

This difference is likely due to the different educational levels of the study subjects and the ‘time and place’ of the study done. The present study was done in the Iranian capital, and all the participants had college education level or at least high school diplomas, but the participants' descriptive study had elementary to college education levels [2,19]. Some major changes in parents' attitudes about sexual education are needed. Now-a-days, parents have more positive attitudes about sexual education and believe that sexual education should be taken seriously [28]. The findings of a qualitative study in Iran indicated that most parents believed that the child's sexual development should be started in families [2].

Most studies on sexual education in children have focused only on elementary school and teenagers [29-32]. The findings of a study in Korea were consistent with those of the present study. While the aforementioned study aimed at investigating the effect of education on preschoolers' mothers before and after the intervention [22], in the present study, the level of knowledge and attitude was measured before the educational intervention, immediately after the education, and eight weeks after that. Therefore, the effect of sexual education on mothers' awareness and attitude was measured during the post-education period.

In the present study, an increase was observed in the mean score of attitude in the control group, both four weeks and eight weeks after the program, but the increase was not statistically significant [Table/Fig-4]. This increase was likely owing to the nature of the research.
topic and the items of the questionnaire that improved curiosity and motive in the control group. Therefore, they might have attempted to seek information from their friends, relatives and other sources. The findings of other studies on sexual education for elementary school and higher-level students were consistent with the findings of the present study [29-32]. These studies emphasized that the sexual education programs for elementary school students should consider an individual approach and focus on students’ strengths and different levels of understandings [31]. In a descriptive study in Turkey on physicians and nurses, 93.1% of subjects provided a high level of sexual education to children. Only 7.54% of subjects assumed that starting sexual education was ideal when children were in the age range of 7-12 years. Such a low percentage indicated a high level of attitude toward sexual education in the preschool age [23]. Given the participants’ level of education and job in the aforementioned study, it is quite logical and reasonable to expect such a high level of knowledge and attitude toward sexual education. Compared to the above-mentioned study, the mothers’ level of awareness were lower than that of doctors and nurses even after the intervention.

LIMITATION

 Fathers of children were not involved in educational sessions, which might have affected mothers’ views and attitudes on sexual education. Therefore, the mothers were provided with an educational booklet and were asked to study the booklet with their husbands. In case of having disagreements or questions on the booklet, they were asked to call the researcher. It is suggested that both parents are involved in future studies.

CONCLUSION

The findings of the present study indicated that the sexual education program affected the knowledge and attitude of preschoolers’ mothers. Therefore, it is recommended that sexual education program be implemented in health centers where preschool mothers visit for their children’s health care.

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REFERENCES