



The Effects of Reproductive Health Education on Girls' Premarital and Post-Marital Needs

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ABSTRACT: Marriage changes the nature of sexual and reproductive health needs. The lack of attention to the varied nature of sexual and reproductive health needs in different situations would reduce the effectiveness of educational programs. The purpose of this study is to report educational needs of young people in the field of sexual and reproductive health and compare premarital and post-marital educational needs.

In a cohort study in 2014, we selected 280 marriage candidates in Tehran by random stratified sampling method. Using a researcher-made questionnaire, we investigated premarital and post-marital educational needs in various aspects of sexual and reproductive health with Likert five-point scale. Then we analyzed the data using SPSS v.16, t-test and paired t-test.

The mean scores of premarital and post-marital educational need were 3.56 ± 0.95 and 3.72 ± 0.82 respectively. Post-marital educational need was more than pre-marital educational need, but the increase was not statistically significant (P value = 0.096). The most important educational topic before marriage was "sexual relation health" and after marriage was "the best physical, mental and social conditions of woman for pregnancy".

The findings of this study suggest that appropriate educational contents should be designed and implemented based on sexual and reproductive health needs of the young people with consideration to their cultural and social status.

Keywords: Educational need, sexual health, reproductive health, marriage

INTRODUCTION

Nowadays, one fifth of the world's population is between 10-19 years old, with 85% of them living in developing countries (Tegegn *et al.*, 2008). Over 500 million adolescent girls live in developing countries. This part of the population plays a significant role both in the health of society and in the health of future generations, so investment for their health is vital to the fulfillment of long-term goals (United Nations Population Fund 2009).

Iran, with 15 million adolescents, is one of the youngest countries in the world (Statistics Center of Iran 2005). The promotion of adolescents' health calls for understanding their needs, their awareness about the available self-care services, and their use of available services. Understanding the health needs of adolescents is crucial to the development of efficient solutions for prevention of risky behaviors among adolescents, provision of self-care services to them, and promotion of their health which in turn promotes the health of society. The first step in investigating the health needs of adolescents is to explore their health priorities from their own viewpoints.

This can be accompanied by the experiences and opinions of other sources being aware of their health needs (World Health Organization 2001). Families, particularly parents, can help the health team and contribute to effective implementation of health promotion programs by giving their views and opinions (Ford *et al.*, 2009). Health care providers are another source whose views are of great importance in the exploration of adolescents' health needs (Mngadi *et al.*, 2008, Warenius *et al.*, 2006, Saewyc *et al.*, 2006).

One of the most important needs of adolescent girls is educational need on reproductive health as distinct from that of adults. Adolescents have difficulty obtaining reproductive health services as their attempts might be prevented by adults. Compared with adults, this age group has less information, experience and facilities for the protection of their reproductive health (Shaw, 2009). Therefore, they are exposed to risky behaviors which may affect their health in adulthood. Annually, 2.5 million unsafe abortions occur among adolescents, which is one of the major causes of death among them. Also, the age group of 15-19 constitutes the most prevalent sexually-transmitted diseases such as HIV (World Health Organization 2006, 2009).

Despite the emphasis of World Health Organization on the provision of reproductive health services needed by adolescents and promotion of adolescent friendly services, such needs have not been satisfied in many points of the world (International Conference on Population and Development 1994).

Investigation of Iranian centers providing reproductive health services to adolescents indicates that these centers are in medium-to-low level in terms of standards and instructions of World Health Organization (Ramezanzadeh *et al* 2010). Reproductive health services needed by adolescents in various cultural, social and economic contexts of the societies may be defined and prioritized in different ways (Asadi-Lari *et al.*, 2003, Bennett and Tonkin 2003). The existing information suggests that there has not been a deep and comprehensive understanding of reproductive health services needed by adolescent girls in Iran. Therefore, it is necessary to make a deeper investigation about what Iranian adolescents conceive as the needed reproductive health services. The existing gap in this connection and the big share of adolescents in Iran's population make it essential to conduct such studies. In this study, we explore the structure of reproductive health services needed by adolescent girls using qualitative research method, which gives a rich description and deep understanding of human phenomena and experiences (Burns *et al.*, 2003). The purpose of this study was to determine the concept and mental structure of reproductive health services from the viewpoint of Iranian adolescent girls.

RESEARCH METHOD

After obtaining scientific and ethical confirmation from Tehran University of Medical Sciences, we conducted this cohort study in 2014 on the participants in pre-marriage counseling program before and after marriage. Using randomized stratified sampling method, we selected the samples in different days in pre-marriage and post-marriage groups from among single people with the ability of reading and writing. 280 people were selected before participation in pre-marriage counseling program and were given the questionnaire. 200 people in pre-marriage group and 200 people in post-marriage group agreed to be followed up six months later. Generally, questionnaires were completed via telephone by a questioner of the same sex for 190 people before marriage and 90 people after marriage and finally 280 questionnaires were analyzed.

We collected the data using a researcher-made questionnaire consisting of two parts: the first part contained questions about social and individual characteristics and the second part embraced 11 educational topics concerning sexual and reproductive health. The samples were asked to express to what extent they needed education in each topic based on Likert five-point scale (ranging from 1, i.e. very low, to 5, i.e. very high). To determine the validity and

reliability of the questionnaire, we used reference books, questionnaires used in similar studies, and views of experts, specialists and faculty members. To assess the validity, we delivered the questionnaire to four midwifery experts with at least three years of experience in family health affairs asking them to determine the validity of form and content. Content validity index was 0.79 (CVI). To assess the reliability, we delivered the questionnaire to 20 females and 20 males and investigated internal consistency of the questionnaire by two methods of Cronbach's Alpha and splitting the questions. In Cronbach's Alpha method, an alpha coefficient of 0.97 was obtained. In the method of splitting, the questions were divided into even and odd questions and Spearman correlation coefficient of 0.96 was obtained.

We analyzed the data using SPSS v.16. In order to determine the amount of educational need, we computed mean scores of need feeling for each topic and compared the means in each topic before and after marriage. To determine and compare the amount of educational need for sexual and reproductive health before and after marriage, we added up need feeling scores in each topic and then computed the mean score. We compared the means between two sexual groups using independent t-test and compared the means between two time periods using paired t-test. P-value was set on less than 0.05. From the whole samples, 61 people (52.1%) were single and 56 people (47%) were married. The mean and standard deviation of age in males was 3.00 ± 27.70 and in females was 3.82 ± 23.96 . 57.4% of singles and 82.1% of married participants had academic degrees. Singles had a monthly income between 500,000-1,000,000 Toman, but most of married participants had no income.

FINDINGS

The young women believed that the ideal number of children was 2, and there was no significant difference between pre-marriage and post-marriage attitudes in this respect ($p=0.948$). Most of the participants believed that the decision for having a child rests with both husband and wife, and there was no significant difference between pre-marriage and post-marriage attitudes in this connection ($p=0.150$). Most of the participants believed that the decision for using contraception methods rests with both husband and wife, and there was no significant difference between pre-marriage and post-marriage attitudes ($p=0.149$). Table 1 contains the amount of educational need to each educational heading.

Pre-marriage and post-marriage attitudes regarding the most appropriate educational method shows a significant difference ($p = 0.000$) (Figure 1). But pre-marriage and post-marriage attitudes regarding educational courses which are being held in the province does not show a significant difference ($p = 0.799$).

Table 1: Relative frequency distribution of educational need scores of young women with respect to reproductive health and sexual problems.

Question	Unaware	Average	Aware
Reproductive system	33.9	45.0	21
Menstruation and intercourse health	28.4	37.7	33.9
Pregnancy and development of fetus	21.4	34.8	43.8
Emergency contraception method	42.1	26.9	31.1
Contraception methods	35.2	35.6	29.2
Contraception tools	38.7	31.3	30.0
Sexually-transmitted diseases and prevention methods	22.7	28.3	49.0
Risky and unwanted pregnancies and their consequences	19.8	25.0	55.3
Congenital diseases and prevention methods	16.7	25.0	58.9
Prevalent cancers prevention methods before and after marriage	18.4	22.9	58.7
Prevalent disorders in sexual relations	17.9	31.3	50.9
Necessary preparedness before sexual, psychological and environmental relations	34.4	28.8	36.9
Sexual arousal methods	37.9	28.1	34.0
Sexual relation and intercourse	37.5	29.0	33.5
Sexual satisfaction	39	26.3	34.8

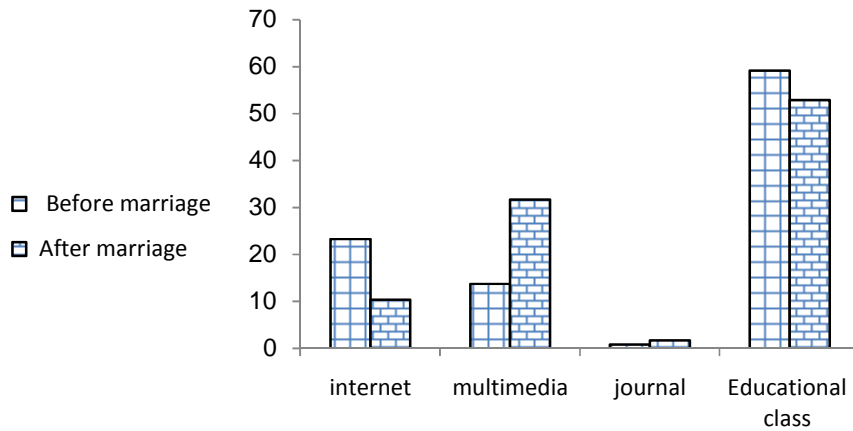


Fig. 1. The most effective educational method from the viewpoint of young women.

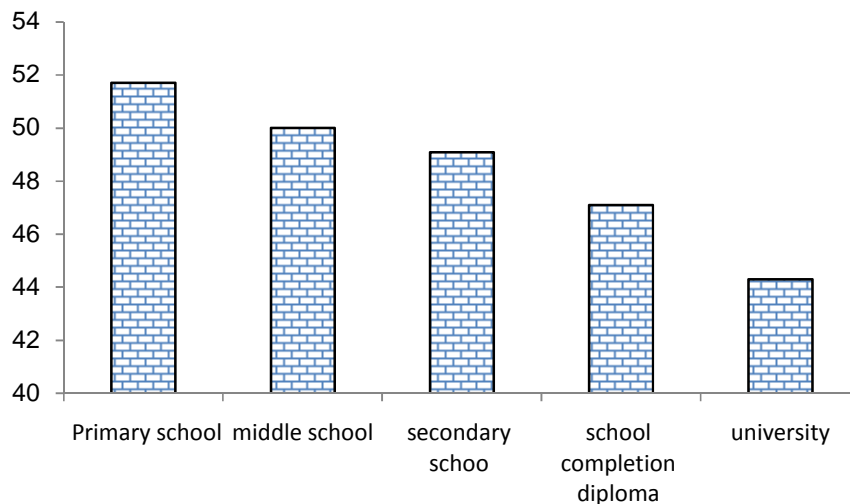


Fig. 2. Educational need and educational level.

There was a significant difference between pre-marriage and post-marriage attitudes regarding educational packages distributed in pre-marriage counseling classes (P=0.000). The participants believed

that educational packages were more appropriate. The mean scores of educational need indicated there was no significant difference between educational need before and after marriage (P=0.075).

There was a significant difference between educational need of the people with different occupations (P=0.000). Those who worked in home and unskilled workers needed more education. The results suggested that the lower the age of marriage, the more education is needed. However, the difference was not statistically significant (P=0.318). Rural women needed more education than urban women did and the difference was statistically significant (P=0.000).

We also investigated other educational needs of young women. 65% of women believed that educational materials were sufficient and 10% requested for more materials about sexual relations. There was a significant difference between the amount of other educational needs among young women before and after marriage (P=0.000).

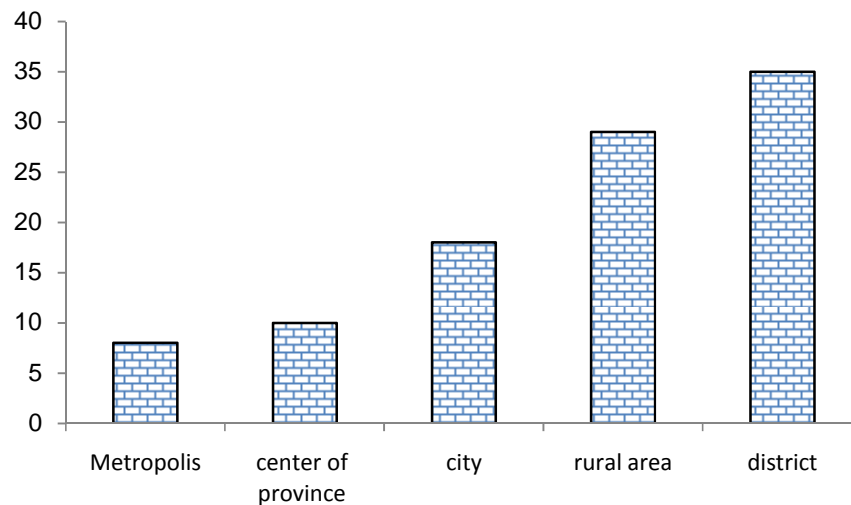


Fig. 3. Educational need and residence place.

Table 2: Comparison of means of sexual and reproductive health educational need before and after marriage.

Before marriage	P value (Independent t-test)	After marriage	P value (Independent t-test)
3.50±1.03	0.266	3.66±0.87	0.490

DISCUSSION AND CONCLUSION

In this study, we investigated educational need among the young women in various topics. The results indicated that most of young women needed education on reproductive system before and after marriage. 66% of the participants stated that they needed such educations at medium, high and very high level. In the study of Aghdak and coworkers, educational need on reproductive system before and after marriage is lower than this research and is among the last priorities (Aghdak *et al.*, 2009). With regard to educational need on menstruation and intercourse health, 28.4% of the participants chose "low" and "very low" and 33.9% chose "high" and "very high". In the study of Davoud Pourmarzi and coworkers, educational need on this topic has been reported to be in medium level (Pourmarzi, Rimaz *et al.* 2013). In the study of Aghdak and coworkers, educational need on menstruation

health is lower than this research. As regards the pregnancy and development of fetus, 43.8% of young women chose "high" and "very high". This indicates that there is more educational need on this topic. The occurrence of pregnancy when a woman is not physically, mentally, socially and even financially ready to become pregnant can cause many problems for both woman and her child. Education of girls, particularly pre-marriage education, is one of the ways for preventing such problems (Moodi and Sharifzadeh 2008).

Educational need on contraception methods was in a low level. In the question regarding emergency contraception method, 42.1% of the participants chose "low" and "very low". Also, educational need on various contraception methods was in a low level. In this question, only 29.2% of the participants chose "high" and "very high".

Educational need on appropriate contraception tools at the beginning of marriage was also in low level, because only 30% of participants chose "high" and "very high". This indicates that pre-marriage educational classes might have dealt with this issue more than other topics. In the question regarding educational need on sexually-transmitted diseases and prevention methods, 22.7% of the participants chose "low" and "very low", while 49% chose "high" and "very high". This indicates that young women need more education on this subject. Annually, over 8 billion dollars is spent for diagnosis and treatment of sexually-transmitted diseases (Eng and Butler 1997). It seems that young couples are the best target population for beginning the activities regarding prevention of sexually-transmitted diseases, because, considering the culture of our society, most of young people do not receive proper and comprehensive education on disease prevention methods from parents and schools until the age of marriage (Mir *et al.* 2006).

The results indicate that educational need on risky and unwanted pregnancies and their consequences is in very high level. In the question concerning this issue, 19.8% of the participants chose "low" and "very low", while 55.3% chose "high" and "very high". Therefore, this item is the third priority of educational needs. In the study of Davoud Pourmarzi and coworkers, educational need on "risky and unwanted pregnancies" is the second priority in post-marriage period. This indicates that this item should be paid special attention in educational courses. The results indicated that educational need on congenital diseases and prevention ways was in a very high level. In the question on this topic, 16.1% of the participants chose "low" and "very low", while 58.9% chose "high" and "very high". This indicates that this item should be the first priority in educational programs. Unfortunately, this topic is not sufficiently dealt with in pre-marriage counseling programs. In the study of Davoud Pourmarzi, "congenital diseases and prevention ways" is the third priority in post-marriage period. At present, congenital diseases is the third cause of mortality and disability of children in developed countries. The major congenital malformations exist in 2-3% of infants. This rate increases by about 3% until the age of five and reaches 8% in the age of 18. Minor congenital disorders exist in about 15% of infants. In general, congenital malformations cause one fifth of mortalities among infant (Dastgerdi S. Congenital malformations. Hatami *et al.*, 2006).

Educational need on prevention of prevalent cancers before and after marriage was in a very high level. 18.4% of the participants chose "low" and "very low", while 58.7% chose "high" and "very high". This item is the second priority in our study and needs to be paid more attention.

In the study of Sharareh Davazdah Emami and coworkers under title of "comparison of educational needs before and after marriage" which was conducted in Mollahadi pre-marriage counseling center of Esfahan in 2004, mean scores of educational need on prevention

of prevalent cancers showed that there was no significant difference between two groups before and after marriage (Davazdahemami *et al.*, 2004). Educational need on prevalent disorders in sexual relations was in a high level as 17.9% of the participants chose "low" and "very low", while 50.9% chose "high" and "very high". This item is the fourth priority of educational needs. In the study of Davoud Pourmarzi, the item of "prevalent disorders in sexual relations and their treatment" was the fourth priority in post-marriage period. In the study of Aghdak, this item was the seventh priority between 21 topics. In the section of necessary preparedness before sexual relations (mental and environmental preparedness), 36.9% of the participants chose "high" and "very high". Therefore, education need on this topic is in medium level.

With regard to sexual arousal, 37.9% of the participants chose "low" and "very low", while 34.0% chose "high" and "very high". In the question on sexual relations and intercourse, 5.37% of the participants chose "low" and "very low", while 33.5% chose "high" and "very high". In a study conducted in Egypt, sexual relations was the most important subject to newly-married young people (Tahseen Project 2004). With regard to educational need on sexual satisfaction, 39% of the participants chose "low" and "very low" and 34.8% chose "high" and "very high". Since sexual satisfaction is one of the main goals of marriage, education on sexual relation and promotion of people's knowledge at the beginning of marital life will enhance the happiness of young people (Pakgozar *et al.* 2005, Farnam *et al.*, 2011).

Regarding the most appropriate educational package, the participants gave different answers and there was a significant difference between the groups before and after marriage ($p=0.000$). Compared with males, females were more willing to participate in educational classes. Also, females mostly preferred educational books while men preferred educational CDs. In the investigation about appropriateness of information provided in pre-marriage counseling centers, 40.2% of the participants believed the classes were appropriate. Also, there was no significant difference between the attitudes before and after marriage ($p=0.799$). In the study of Pakgozar, the women in control group who had received ordinary consultation of health centers evaluated the quality of classes to be in medium level. In the study of Shahin Salarvand, 59% of females and 55.8% of males evaluated the educational contents to be in good level (Salarvand and Bahri 2012). There was a significant difference between pre-marriage and post-marriage attitudes concerning educational packages distributed in counseling centers ($p=0.000$). Compared with males, females were more willing to receive educational packages.

As regards the educational level, the mean scores indicated that people with lower educational level needed more education. There was a significant difference between groups with different educational levels ($p=0.000$).

In the study of Aghdak and coworkers, the more educated men needed more education, while educated women needed less education. With regard sex, the mean score of educational need indicated that there was no significant difference between educational need before and after marriage ($p=0.075$). In the study of Davoud Pourmarzi, females needed more education than males did, but the difference was not statistically significant. In other study, there was a significant difference between educational need before and after marriage.

With regard to occupation, the mean score of educational need indicated that those who worked in home needed more education. Unskilled workers, housewives and self-employed people were in the next position. There was a significant difference between educational needs among people with different occupations ($p=0.000$). In the study of Aghdak and coworkers, there is a significant relationship between educational need and occupation of women ($p<0.001$) and men ($p<0.05$). The mean score of educational need indicated that people who marry in lower age needed more education, but the difference was not significant ($p=0.318$). In the study of Khousheh Khaleghinejad under title of "pre-marital educational needs from the viewpoint of women referring to health centers of Mashhad", educational need in all aspects in both males and females is above medium level and there is no significant difference between pre-marital and post-marital educational need. Relation with spouse and mental health were most needed educational topics in both groups. Also, both groups were willing to participate in educational sessions (Khaleghinejad *et al.*, 2008). As regards residence place, mean score of educational need indicated that rural women needed more education than urban women did. This difference was statistically significant ($p=0.000$). In the study of Aghdak and coworkers, there is no significant difference between educational needs among urban and rural people.

According to the results of this study, young women believed that the educational classes are useful to some extent. But certain topics have not been sufficiently dealt with in such classes. To solve this problem, appropriate educational texts should be prepared and provided in complementary classes. For example, counseling classes have been successful in the education of contraception methods, but have not managed to meet the needs of participants in other subjects. Therefore, designing educational contents based on educational needs may be an effective step in line with meeting educational needs of young women in the field of sexual and reproductive health. According to our results, educational priorities are: congenital diseases and prevention ways, premarital and post-marital prevalent cancers, risky and unwanted pregnancies, prevalent disorders in sexual relations,

sexually-transmitted diseases and prevention ways, and pregnancy and development of fetus. It is recommended that females be provided with educational books and males be provided with educational CDs. Premarital and post-marital educational packages should be prepared and distributed separately. People with lower educational level need more education, so post-marriage complementary classes should be held for such people. Rural people also need more education, so complementary classes should also be held for them. Pre-marriage counselors should be aware of these needs and prepare appropriate educational programs and equipment accordingly. One of the limitations is this study was the inaccessibility of some participants due to change of their residence place and telephone number. In such cases we used replacement method to complete the sample size.

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