

# The effect of instruction on knowledge and attitude of couples attending pre-marriage counseling classes

Mitra Moodi<sup>1</sup>, Mohammad-Reza Miri<sup>1</sup>, Gholam Reza Sharifirad<sup>2</sup>

<sup>1</sup>Department of Public Health, School of Health and Social Determinants of Health Research Center, Birjand, <sup>2</sup>Department of Health Education and Promotion, Health School, Isfahan University of Medical Sciences, Isfahan, Iran

## ABSTRACT

**Backgrounds:** Marriages and establishing a family is one of the most important events in the life of each person. It has significant effects on personal and social health, if it occurs with sufficient knowledge in the proper conditions. The aim of this study is to determine the effect of pre-marriage instruction on the knowledge and health attitudes of the couples attending the pre-marriage counseling classes. **Materials and Methods:** This pre and post quasi-experimental study was conducted on 250 couples attending the pre-marriage counseling classes. The required information was collected using an autonomous questionnaire designed based on the research objectives. The questionnaire included three parts: Demographic information, knowledge (27 questions) and attitude (18 questions). The questionnaire was filled out before and after the pre-marriage counseling program, which was presented as lectures. The effect of the instructional program was analyzed using a statistical test. **Results:** The results showed that 83.2% of the couples had poor knowledge, 16% average, and 0.8% had good knowledge before the intervention. After the intervention, 60.4% of couples had poor knowledge, 31.6% average and 8% had good knowledge. The results also revealed that that the difference in mean scores of knowledge and attitudes regarding reproductive health, family planning, genetic diseases and disabilities was statistically significant ( $P < 0.001$ ). **Conclusions:** Despite the mean scores of knowledge and attitude of the couples had increased after the instructional intervention, the increase in knowledge level was not very high. So the knowledge score of the couples increased just 4.3%, and only 8% of the couples had good knowledge after the instructional intervention. Therefore, to achieve a relatively stable behavior change in individuals and improving the health level of the young couples, it is recommended that more attention pay to the quality of the instructional classes.

**Key words:** Attitude, couple, instruction, knowledge, pre-marriage consultation

**Address for correspondence :** Dr. Mitra Moodi,  
Department of Public Health , School of Health and Social Determinants  
of Health Research Center, Birjand, Iran.  
E-mail: mitra\_m2561@yahoo.com

Access this article online	
Quick Response Code:	Website: www.jehp.net
	DOI: 10.4103/2277-9531.119038

## INTRODUCTION

Marriage creates a family, result in proliferation and generation survival. In monotheistic religions, especially Islam with a special sanctity, if marriage done with sufficient awareness and requirements, it may have significant effects on personal and social health. On the other hand, physical, mental and social health of the young couples is related to family health and creating a healthy generation.<sup>[1]</sup> The young couples build the future of any country. The community health depends on physical, mental and social health of the young couples. The root of many major health problems such as population

Copyright: © 2013 Moodi M. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

This article may be cited as: Moodi M, Miri M, Sharifirad GR. The effect of instruction on knowledge and attitude of couples attending pre-marriage counseling classes. J Edu Health Promot 2013;2:52.

growth, infant and child death, genetic abnormalities and so on should be sought in the pre-marriage and pre-pregnancy period.<sup>[2]</sup>

Parents have always dreamed of having healthy children. A child with pediatric patients, congenital and genetic disorders will lead to numerous problems that cause stress and even the disintegration of the family.<sup>[3]</sup> Yearly, about 529,000 of women lose their lives in the world due to pregnancy complications and childbirth.<sup>[4]</sup>

Premature birth is the most common cause of death in 50% of cases with congenital abnormalities.<sup>[5,6]</sup> Pre-marriage training of the couples can play an effective role for prevention of the disabilities and death.<sup>[7]</sup> In 1999, Pre-marriage education plan was ratified and notified to the provinces. After that, in all provinces, Pre-marriage counseling clinics were established. Wedding administrators were obliged to perform the marriage contract just when the couples give a certificate on their health and attending the instructional course. The aim of this study is to improve the knowledge level of the couples about the importance and necessity of population control and health reproductive, different methods of contraception, prevention of diseases, especially the genetic and sexually transmitted infections (STI), and familiarity with centers of health services.<sup>[8]</sup>

The young couples require adequate information on various aspects of reproductive health at the beginning of the married life. Information on high-risk pregnancies, importance of family planning methods and selection of appropriate methods to prevent pregnancy in early years of married life, the use of genetic counseling to prevent genetic diseases are major health problems in the early years of the married life. Therefore, holding pre-marriage counseling classes by experts is one of the important health services. The counseling program helps the couples to obtain information about reproductive health problems, and to establish their marriage on the right basis.

In 1997, Sullivan showed that attending the pre-marriage counseling classes reduces the risk of marital dysfunction. The couples attending these classes face a lower risk for marital problems and had a better marriage.<sup>[9]</sup> In 1998, Schumma found that pre-marriage counseling increases the marriage satisfaction. Also, the couples attending the classes address the pre-marriage counseling as a pleasant and satisfactory experience.<sup>[10]</sup>

Furthermore, other studies in this field indicate the necessity of pre-marriage counseling.<sup>[3,11-15]</sup> Disease prevention is one of the important objectives of pre-marriage counseling.<sup>[1]</sup> Employing training programs and pre-marriage counseling, unwanted pregnancy and sexually transmitted infections (STI) can be prevented. North Carolina and Georgia researchers found that counseling about contraception methods has increased the usage of contraceptive methods like condoms and pills, significantly.<sup>[16]</sup> Couples should be familiar with

various methods of contraception before marriage. This issue should be considered in training programs and pre-marriage counseling. A research in Malawi showed that counseling about methods of transmission and prevention of sexually transmitted infections (STI) results in increasing knowledge about condom use and also increasing concern about the sexual partner and reducing the health costs.<sup>[17]</sup>

Considering the importance of pre-marriage counseling services in health, marriage continuity, the importance of having a healthy generation and protection of health and the quality of family life, the current study aimed to determine the effects of pre-marriage counseling classes on the knowledge and attitude of the couples.

## MATERIALS AND METHODS

This pre and post quasi-experimental study was conducted on 250 couples attending the pre-marriage counseling classes during the autumn of 2006 in pre-marriage Counseling Center of Birjand Health Center. The samples were selected among the couples attending the pre-marriage counseling classes after explaining the goals of the plan using a simple non-probability method.

The data was collected using an autonomous questionnaire that the reliability of its content had been approved by some faculty members. The questionnaire consisted of three parts: Demographic data, knowledge and attitude questions, respectively. The knowledge test includes 27 questions (4 questions of reproductive health, 18 questions of family planning, and 5 questions of genetic diseases and disabilities), respectively. The score of (1) was given to the correct answers and a score of (0) was allocated to the wrong, and (I do not know) answers. The maximum achievable score was 27.

Attitude's questions included 18 questions (5 questions of reproductive health, 4 questions of family planning, and 9 questions of genetic diseases and disabilities), which classified using 3-level Likert scale. A score of one to three was given to each question. The maximum achievable score was 54 in this assay. The knowledge and attitude level was classified in three levels; mainly weak (lower than 50% of total score), moderate (50-75% of total score) and good (above 75% of total score). The questionnaires were distributed among the couples before and after attending pre-marriage counseling classes. The questionnaires were collected after filling out.

For intervention, instructional programs about reproductive health, family planning and genetic diseases and disabilities was held by an expert as 40-50 min lectures for the couples in 20-30 persons classes (9 sessions). Due to lack of access to the samples in the days after the training, knowledge and attitude of the couples were evaluated immediately after completion of the educational program. This is one of the limitations in the current study. Data were analyzed in two stages in SPSS software using paired and independent *T*-test, one-way analysis of variance (ANOVA) and Chi-square at a level of  $\alpha=0.05$ .

## RESULTS

This study was conducted on 250 couples attending the counseling classes, which filled out the questionnaire completely before and after the intervention. One hundred and twenty five subjects were men with average age of  $23.4 \pm 4.7$  years old and 125 subjects were women with average age of  $22.4 \pm 4.1$  years old. Two subjects were illiterate (0.8%), 213 (46%) were engaged and 135 (54%) had no engagement period of pre-marriage. Also, 186 (74.4%) of the studied population were obtained reproductive health issues and family planning information before marriage. The main source of obtaining information were books (48.7%), parents (20.6%), radio and television (10.6%), high school or university (9.5%), friends (7.4%) and newspapers (3.2%), respectively.

Comparison of the average knowledge and attitude scores before and after the intervention showed that the mean score of the knowledge and attitude increased by 3.7 and 4.9 scores, respectively. These differences were statistically significant [Table 1] Furthermore, significant differences in the knowledge and attitude of the couples were observed in the fields of reproductive health, family planning and genetic diseases and disabilities before and after attending pre-marriage counseling classes [Tables 2 and 3].

Comparison of the average knowledge and attitude scores before and after attending the classes showed no significant difference in the terms of gender and the source of health information. Furthermore, significant differences in the mean changes of the knowledge and attitude scores in terms of having engagement period and education level was not observed ( $P > 0.05$ ). Table 4 shows the comparison between the knowledge and attitude level of the couples before and after intervention. A significant difference between the knowledge and attitude before and after the intervention was observed ( $P < 0.001$ ).

## DISCUSSION

The young couples build the future of the country. The health of community depends on the health of young couples. Health education programs are the most important and confident way to ensure community and family health. Therefore, informing the couples of reproductive health issues before marriage is very important. For contraception and proper interval between the children and planning the desired family size, the necessary information should be given to the early married couples. Pregnancy may results in considerable problems, if couples do not have readiness to accept it in terms of economical, social and mental aspects. On the other hand, controlling the population growth largely depends on knowledge, attitude and behavior of the couples. Pre-marriage period is one of the best and most appropriate opportunities for training of the couples. Nowadays, holding pre-marriage counseling classes for the young couples is one of the important tasks of Health Centers.<sup>[18]</sup>

**Table 1: Comparison of the knowledge and attitudes scores before and after the instructional intervention**

Variable	Before education <i>n</i> =250 $\bar{X} \pm SD$	After education <i>n</i> =250 $\bar{X} \pm SD$	Paired T-test
Knowledge	8.7±4.8	12.4±5	$P < 0.001$
Attitude	42.6±4.9	47.5±4.3	$P < 0.001$

**Table 2: Comparison of the average knowledge score of the couples in different areas before and after the intervention**

Knowledge	Total score	Before education <i>n</i> =250 $\bar{X} \pm SD$	After education <i>n</i> =250 $\bar{X} \pm SD$	Paired T-test
Reproductive health	4	2.05±1.4	3.02±1.2	$P < 0.001$
Family planning	18	4.4±3	6±3.5	$P < 0.001$
Genetic disease and disabilities	5	2.3±1.6	3.4±1.6	$P < 0.001$

**Table 3: Comparison of the average attitude score of the couples in different areas before and after the intervention**

Attitude	Total score	Before education <i>n</i> =250 $\bar{X} \pm SD$	After education <i>n</i> =250 $\bar{X} \pm SD$	Paired T-test
Reproductive health	15	11.7±1.8	12.5±1.9	$P < 0.001$
Family planning	12	9.5±1.7	10.3±1.7	$P < 0.001$
Genetic disease and disabilities	27	21.3±2.7	24.7±2.1	$P < 0.001$

**Table 4: Comparison of the knowledge and attitude level of the couples in different areas before and after the intervention**

Knowledge and attitude level	Knowledge		Attitude	
	Before education <i>n</i> (%)	After education <i>n</i> (%)	Before education <i>n</i> (%)	After education <i>n</i> (%)
Weak	208 (83.2)	151 (60.4)	-	-
Moderate	40 (16)	79 (31.6)	101 (40.4)	32 (12.8)
Good	2 (0.8)	20 (8)	149 (59.6)	218 (87.2)
<i>P</i> value	$P < 0.001$		$P < 0.001$	

The results showed that the mean scores of knowledge and attitude of couples after training intervention increased by 3.7 and 4.9 scores, respectively. This difference was significant in terms of awareness ( $P < 0.001$ ). Several studies indicate the important role of education and pre-marriage counseling on increasing the knowledge and attitude level of the couples.<sup>[3,9,10,17-19]</sup>

The knowledge and attitude of the couples were investigated in three areas; namely reproductive health, family planning, and genetic disease and disabilities, separately. Familiarity with reproductive health issues, appropriate pregnancy age, high-risk pregnancies and its complications are items that should be considered before marriage. These are also the

objectives of the pre-marriage counseling courses. The results showed that the average knowledge and attitude scores of the couples in reproductive health area increased from  $2.05 \pm 1.4$  to  $3.02 \pm 1.2$  and  $11.7 \pm 1.8$  to  $12.5 \pm 1.9$ , respectively. This difference was statistically significant ( $P < 0.001$ ). The researchers believe that pre-marriage education has a significant effect on the reproductive health and sexual health behaviors for youth in all communities, so, their management and education is necessary.<sup>[20-22]</sup> Haji-Kazemi *et al.* revealed that girls' knowledge about reproductive health increased after counseling program.<sup>[18]</sup>

The use of condoms and oral contraceptive pills are suitable methods for the couples in the first years of the married life. Therefore, familiarizing the couples with the contraception methods and family planning programs are of the other purposes of pre-marriage programs. The results showed that the knowledge and attitude mean scores of the couples in family planning area increased from  $4.43 \pm 3$  to  $6 \pm 3.5$  and  $9.5 \pm 1.9$  to  $10.3 \pm 1.7$ , respectively. This difference was statistically significant ( $P < 0.001$ ). Haji-Kazemi *et al.* found that the girls' scores about the importance of family changed after counseling compared to the earlier stage of consultation. However, the statistical test did not confirm the significance of this change.<sup>[18]</sup> The results of the regional population office in India showed that 59% of young people in Pakistan and 63% of youth in India were aware of new techniques such as injections and oral tablets. They believed that education and counseling will increase their knowledge. Receiving complete information and easy access to reproductive health and family planning services will help their health. These studies also showed that, although the majority of women had heard something about a contraceptive method, but they were not informed about the characteristics of each method, especially condoms. So, only 18% of newly married young girls in Pakistan and 45% of them in Sri Lanka were aware of the condoms.<sup>[22-24]</sup>

Prevention of the genetic disease and disabilities are one of other objectives of the pre-marriage counseling programs. Pre-marriage period is the best time for genetic counseling. In genetic counseling, patients and families who are subjected to a genetic disorder aware about disease probability, transmission of disease to children and prevention methods.

The results of the current study showed that the knowledge and attitude mean scores of the couples in the field of genetic disease and disabilities increased from  $2.3 \pm 1.6$  to  $3.4 \pm 1.6$  and  $2.3 \pm 2.7$  to  $24.7 \pm 2.1$ , respectively. This difference was statistically significant ( $P < 0.001$ ). Kosarian showed that the genetic counseling and Thalassemia prevention program in the Mazandaran province has been successful in reducing major Thalassemia. About, 51% of minor thalassemia couples withdrawal from the marriage after genetic counseling.<sup>[13]</sup> The results obtained in this study showed a significant difference between the knowledge and attitude level of the couples before and after the educational intervention. However, this increase was not very high in the knowledge level. Only 8%

of the couples had a good knowledge after the educational intervention.

Obviously, education and counseling of sexual and reproductive health issues should be done with effective and constructive communication to have the required impact. International Health Organization is also stressed on applying a contraceptive education strategy for young people in Asian countries.<sup>[25]</sup> Therefore, it is recommended to hold the pre-marriage counseling classes using various training aids such as educational movies, slides, and powerpoint. Furthermore, must attention should be paid to the presentation of instructional content, education principles such as suitable time and location for improving the health level of the young couples.

The results of this study also showed that radio and television and newspapers constitute only 13.8% of the source of information in the field of reproductive health and family planning before marriage. Considering that we live in the age of technology and communications, the radio and television as important sources of information can have a valuable role in the reproductive health issues and pre-marriage counseling. Since the inter-section coordination is an important principle in primary health care, it is recommended that the medical assistants of medical sciences universities have necessary cooperation with authorities of broadcasting media for preparation and distribution of short-term training programs in the field of reproductive health and pre-marriage counseling from local IRIB to increase the people knowledge, especially newly married couples.

The knowledge and attitude mean scores of the couples increased after educational intervention. However, the knowledge increase was not very high. So, the knowledge score of the couple increased just 4.3%. After the educational intervention, only 8% of them had a good knowledge.

Basically, the aim of education is obtaining knowledge that leads to changes in the learner's behavior. So to achieve this important goal, namely an almost stable behavior change in individuals and health promotion for young couples more emphasis should be done on the quality of training classes.

The low impact of pre-marriage counseling classes has several reasons. One of them is that the training classes are mixed. Furthermore, restriction of the expert to overview the educational contents and lack of sufficient time for question and answer and emphasizing the speech as the educational method are the other reasons. Therefore, it is suggested that besides holding counseling classes, more attention paid to sexual segregation of the classes, using the group discussion methods, and educational movies for active participation of the couples.

## REFERENCES

1. Hatami H, Razavi SM, Eftekhar AH, Majlesi F, Sayednozadit M, Parizadeh S. Mj. Textbook of public health. Vol 3. 1<sup>st</sup> ed. Tehran: Arjomand Press; 2006. p. 1537-45.

2. Behnoudi Z. Family Health and management. 1<sup>st</sup> ed. Tehran: Boshra Press; 2001. p. 30.
3. Motamedi B, Soltan Ahmadi ZH, Nikian Y. Effect of premarriage counseling on girls' knowledge. *Feyz, Kashan University of Medical Sciences and Health Services* 2004;29:101-7.
4. Glasier A, Gülmezoglu AM, Schmid GP, Moreno CG, Van Look PFA. Sexual and reproductive health: A matter of life and death. *The Lancet* 2006;368:1595-607.
5. Mavalankar DV, Gray RH, Trivedi CR. Risk factors for preterm and term low birthweight in Ahmedabad, India. *Int J Epidemiol* 1992;21:263-72.
6. Bahrami SAR, Parizadeh SMJ. Report of healthy people until 2010. Vol 2. 1<sup>st</sup> ed. Mashhad: Mashhad university of Medical Sciences; 2005. p. 17.
7. Lemyre E, Infante-Rivord C, Dalliers L. Prevalence of congenital anomalies at Birth among off spring of women at risk for a genetic disorder and with abnormal second trimester ultrasound. *Teratology* 1999;60:240-4.
8. Marandi SAR, Azizi F, Larijani B, Jamshidi HR. Health in Islamic Republic of Iran. Ministry Of Health and Medical Education, UNICEF. Tehran: 1<sup>st</sup> Press; 2000:120-21.
9. Sullivan kT, Brodurg TN. Are premarital Prevention Programs Reaching Couples at Risk For Marital Dysfunction?. *J Consult Clin Psychol* 1997;65:24-30.
10. Schumm WR, Resnick G, Silliman B, Bell DB. Premarital counseling and marital satisfaction among wives of military service members. *J Sex Marital Ther* 1998;24:21-8.
11. Hasan Zadeh-Nazarabadi M, Rezaeetalab Gh, Dastfanf. Study of Youth, s Knowledge, Behavior and Attitude towards Consanguineous Marriage. *Iranian J Public Health* 2006;65:47-53.
12. Hajian KO. Attitude and knowledge of couple about Thalassemia at the stage of marriage in Babol. *J Med Faculty Guilan Univ Med Sci* 2000;34-33:103-10.
13. Kosaryan M, Okhvati A, Babamahmoodi F. How much we have been successful in nation wide preventive program for Thalassemia in Mazandaran University of Medical Sciences in 1992-2002. *J Mazandaran Univ Med Sci* 2004;41:47-54.
14. Zahiroddin AR, Khodaie Far F. Personality inventory of individuals referring to Tehran Family Court for divorce. *Feyz, Kashan Univ Med Sci and Health Services* 2003;25:1-7.
15. El-Hazim MA. Pre-marital examination as a method of prevention from blood genetic disorders. *community views. Saudi Med J* 2006;27:1291-5.
16. Researchers from centers in north Carolina and Georgia. Counseling boots contraception use. *Contraception* 2003;377-83.
17. Wynendaale B. Impact of counseling on safer sex and STD occurrence among STD patients in Malawi. *International Journal of STD patients in Malawi. Int J STD AIDS*; 1995; 6:105-9.
18. Haji Kazemi E, Mohammadi R, Hosseini F. Study on the Effect of Premarital Health Counseling on Girls' Awareness. *J Iran Univ Medical Sci* 2006;52:93-100.
19. Moshiri Z, Mohaddesi H, TermeYosefi O, Vazife Asle M, Moshiri S. Survey of Education effects on sexual health in couples referred to marriage consultation centers in West Azarbaijan. *J Urima Nurs Midwifery Faculty* 2004;3:135-42.
20. Grawick A, Nerdahl P, Banken R, Muenzenberger Bretl, Sieving R. Risk and protective Factors for sexual risk talking among adolescents inoleved in prime time. *J Pediatr Nurs* 2004;19:340-50.
21. FisherJA, Bowman M, ThomasT. Issues for south Asian Indian Patients surroning sexuality, fertility and child birth in the us health care system. *J Am Board Fam Pract* 2003;16:151-5.
22. National Teen Pregnancy Research Center. What do Parent Know about contraceptive. *Perspective On Sexual and Reproductive Concerns. J Adolesc Health* 2004;34:112-24.
23. Population council, s Regional Office. Contraceptive use in Asia. *Int Family Planning Perspective* 2002;28:186-95.
24. School of Medicine in Philadelphia. Adolescents, contraception concerns. *J Adolesc Health* 2004;34:112-24.
25. Osis MJ, Duarte GA, Crespo ER, Espejo X, Padua KS. Choice of contraceptive method by woman attending a public. *Cad Saude Publica* 2004;20:1586-94.

**Source of Support:** Birjand University of Medical Sciences, **Conflict of Interest:** None declared