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RESEARCH ARTICLE

Knowledge of Reproductive Health in Men on the Verge of Marriage

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Abstract:

Aim:

The present study aimed to assess the knowledge of reproductive health in men on the verge of marriage.

Background:

Active involvement of men has many advantages and significant benefits for the health and development of their family.

Objective:

The present study aimed to find an answer to the question as to whether marriage counseling classes for couples on the verge of marriage can increase men's reproductive knowledge. To this end, the study was conducted on Iranian men.

Methods:

This research was an analytical cross-sectional study carried out on 205 subjects. After obtaining and filling out the written consent forms, the subjects consciously entered the research and answered the self-researcher-made questionnaire before and after participating in the formal counseling classes in Shahroud city, Iran. 19 questions were designed and ranked at three levels of poor, average (50% - 70%), and above 70% as good knowledge. The data were analysed by SPSS 18 using Wilcoxon sum-rank test and paired t-test.

Results:

The mean age of the samples was 24.3 ± 3.96 years old. 38.1% (72 subjects) of men had higher diploma education, and 2.6% (5 subjects) were illiterate. Before training, the mean of reproductive health knowledge was 6.62±3.14. After attending the premarital counselling class, the mean of reproductive health knowledge increased significantly (9.12±2.84, P=0.001).

Conclusion:

This study showed that current formal premarital reproductive health classes meet the needs of men's knowledge in the field of reproductive health, but it is recommended that the educational content of these classes should be improved. Considering the training needs of this group can be the first step for young couples in planning their family.

Keywords: Knowledge, Attitude, Men's health, Reproductive health, Marriage, Training.

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1. INTRODUCTION

One of the factors critical to sustaining the marital relationship and the quality of this relationship is support in reproductive health. Regarding the role of men, many reproductive health programs have been revealed to be inefficient. There are several reports confirming the inefficacy of reproductive health programs with regard to the role of men's reproductive health knowledge, attitudes, and practices of Iranian and Afghan men in Tehran province [1, 2]. The needs assessments conducted in Iran and Afghanistan indicated that men's attitudes toward reproduction is an important factor in the efficacy of family planning, the prevalence of STIs (Sexual Transmitted Infections), and the problem of unwanted pregnancies [3 - 6]. According to the 1994 International Conference on Population and Development (ICPD) Program

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of Action call, the governments were asked to take action to enhance gender equality in all spheres of life, including family and community life. Further, it called the governments to encourage and enable men to take responsibility for their sexual and reproductive behavior and their social and family roles. The main focus of this program was addressing men's SRH (Sexual Reproductive Health), and the need to train men and adolescent boys, together with women and girls, as equal partners in the provision of SRH services. A number of trainings were developed during the sessions of ICPD, such as husbands' participation in preparation prenatal class, husbands' support in postnatal visit, and husbands' active involvement in care of newborns. Men's reproductive knowledge and active involvement have many advantages and significant benefits for the health and development of their newborn babies. By participating in prenatal visits and receiving maternal health education, men will be able to provide life-saving support to their partners [7 - 9]. Despite the teaching of pregnancy and childbirth issues to men in Iran, education related to other areas of reproductive health, such as sexually transmitted diseases and safe sex, is less provided [10].

Men are more likely to have multiple partners, leading to STI. They usually have negative attitudes towards condom use as well. Men's willingness to get involved and provide support is limited due to the socio-cultural norms that hold family planning and childcare as women's responsibility [11 - 13]. One study in Iran showed about 35% of young men to have sex before marriage. About 85% had multiple sexual partners during their lifetime. 54% reported inconsistent condom use in the past month. Respondents had a very low level of HIV/STI risk perception. Only 6.5% were worried about getting HIV in the last year [14]. A cross-sectional-analytical study was conducted on 205 men participating in classes in Iran on the attitudes to reproductive health. It showed that these classes did not change the attitude of men regarding reproductive health [15]. If men and women are treated as equal partners, they can expect effective decision-making and better outcomes in SRH. Getting the correct information that can help men to make decisions about the roles they can play to promote sexual health is not considered in family health programs. Formal marriage preparation classes for couples provide an opportunity for men to access the right information about reproductive and sexual health. These classes were given to couples in Iran in the year 2001 at the beginning of marriage, and by entering these classes and receiving the certificate, the couple was allowed to officially marry.

The educational content of marriage preparation classes includes male and female anatomy, reproductive physiology, sexual health, and family planning methods. It seems that the educational content of these classes is not enough to familiarize men with their problems about sexual and reproductive health. In this research, we will check whether the content needs to be improved or not.

The present study aimed to find an answer to the question if marriage counseling classes for couples on the verge of marriage can increase men's reproductive knowledge. To this end, it was conducted on the Iranian men.

2. METHODOLOGY

This research is an analytical cross-sectional study aimed at examining marriage counseling classes on men's knowledge of reproductive health in 205 males. These classes were conducted to provide information about sexual and reproductive health to men. Sampling was performed in the city of Shahroud. There is a center in this city, where 10-15 couples visit daily for compulsory reproductive and sexual health counseling. Inclusion criteria were first marriage and age 20-45 years. After obtaining the approval of Shahroud University of Medical Sciences, a questionnaire containing demographic questions and information on the issues related to men's knowledge of reproductive-sexual health was provided to men before and after the informal class. As mentioned in the introduction, these classes were given to couples in Iran in the year 2001 at the beginning of marriage, and by entering these classes and receiving the certificate, the couples were allowed to officially marry. The educational content of marriage preparation classes includes male and female anatomy, reproductive physiology, sexual health, and family planning methods. It takes 2 hours, and it is held as group education.

After filling out the written consent forms, the subjects consciously entered the research and answered the questionnaires before and after participating in the counseling classes. The Reproductive-Sexual Health Awareness Questionnaire was compiled by reviewing the texts and considering the opinions of several faculty members of Shahroud Medical Sciences. 19 questions were designed in the questionnaire, including 5 questions on family planning, 3 questions on women's and men's screening tests, 5 questions on safe pregnancy, 4 questions on AIDS and sexually transmitted diseases, one question on infertility, and one on menstrual health. The maximum score of the questionnaire was 19 (1 score for correct response and 0 for I don't know or incorrect response). Men who answered half of the questions correctly were considered on the level of good knowledge, those having between 9-5 score were considered to have moderate knowledge, and score below 5 was categorized as having low level knowledge. The data were analyzed using SPSS 18. Wilcoxon sum-rank test, Chi-square, and paired t-test were used for analysis.

3. RESULTS

The mean age of the samples was 24.3 ± 3.96 years old. 38.1% (72 subjects) of men had higher diploma education and 2.6% (5 subjects) were illiterate. In terms of employment, 13.9% (26 subjects) were workers, 26.7% (50 subjects) were employees, 55.6% (104 subjects) were self-employed, and 3.7% (7 subjects) were unemployed. The present study showed a significant relationship between the level of education and awareness, so 66.7% of men with higher education had good awareness (P=0.001). No significant relationship was found between occupation and level of awareness (P=0. 01).

Before training, the mean of reproductive health knowledge was 6.62±3.14. After attending the premarital counseling class, the mean of reproductive health knowledge increased significantly (9.12±2.84, P=0.001) (Table **1**). 49.5% of men had good knowledge before class, which increased to

58.5% after the class Table **2**. The reproductive health questionnaire items are described in Table **2**.

Table 1. The mean of reproductive health knowledge in men on the verge of marriage.

Knowledge Level	Time		P-value
	Before N	After N	
Good	100	120	**0.001
	49.5%	58.5%	
Moderate	50	75	
	24.8%	36.6%	
Low	52	10	
	25.7%	4.9%	
Mean ±SD of knowledge	6.62±3.14	9.12±2.84	*0.001
	100.0%	100.0%	

Note: *Paired t-test, **Chi-square.

Table 2. The items of the knowledge questionnaire on reproductive health given to men on the verge of marriage.

Knowledge of Men Regarding Reproductive Health	-	N	Mean Rank	Sum of Ranks	Z	P-value
The maternal inter-pregnancy interval should be more than 3 years	Negative ranks	19[a]	105.00	1995.00	14.104	0.001
	Positive ranks	272[b]	148.86	40491.00	-	-
	Ties	106[c]	-	-	-	-
	Total	397	-	-	-	-
Condom does not protect against sexually transmitted diseases	Negative ranks	41[a]	105.50	4325.50	11.631	0.001
	Positive ranks	230[b]	141.44	32530.50	-	-
	Ties	127[c]	-	-	-	-
	Total	398	-	-	-	-
	Total	398	-	-	-	-
AIDS can be transmitted sexually	Negative ranks	1[a]	103.00	103.00	17.406	0.001
	Positive ranks	379[b]	190.73	72287.00		
	Ties	14[c]	-	-	-	-
	Total	394	-	-	-	-
Newlywed women should not take birth control pills	Negative ranks	91[a]	110.00	10010.00	5.987	0.001
	Positive ranks	166[b]	139.42	23143.00		
	Ties	141[c]	-	-	-	-
	Total	398	-	-	-	-
AIDS can be transmitted to the fetus during pregnancy	Negative ranks	8[a]	106.50	852.00	16.587	0.001
	Positive ranks	352[b]	182.18	64128.00		
	Ties	38[c]	-	-	-	-
	Total	398	-	-	-	-
Women should start breast examination on their own from the age of 20	Negative ranks	111[a]	107.50	11932.50	2.164	0.001
	Positive ranks	125[b]	128.27	16033.50		
	Ties	162[c]	-	-	-	-
	Total	398	-	-	-	-
After the first year of marriage, every woman should see a doctor to prevent cervical cancer	Negative ranks	8[a]	109.00	872.00	16.129	0.001
	Positive ranks	332[b]	171.98	57098.00		
	Ties	58[c]	-	-	-	-
	Total	398	-	-	-	-
Vasectomy in men is a temporary method of contraception	Negative ranks	46[a]	96.50	4439.00	11.426	0.001
	Positive ranks	226[b]	144.64	32689.00		
	Ties	126[c]	-	-	-	-
	Total	398	-	-	-	-

(Table 2) contd.....

Knowledge of Men Regarding Reproductive Health	-	N	Mean Rank	Sum of Ranks	Z	P-value
Tubal ligation in women is a temporary method of contraception	Negative ranks	33[a]	87.00	2871.00	10.879	0.001
	Positive ranks	196[b]	119.71	23464.00		
	Ties	169[c]	-	-	-	-
	Total	398	-	-	-	-
All women need pregnancy care, even if they have normal and uncomplicated pregnancy	Negative ranks	6[a]	110.50	663.00	16.897	0.001
	Positive ranks	362[b]	185.73	67233.00		
	Ties	30[c]	-	-	-	-
	Total	398	-	-	-	-
If a young couple does not get pregnant after one year of sexual intercourse without the use of contraceptives, they should take actions to treat infertility	Negative ranks	25[a]	103.50	2587.50	14.982	0.001
	Positive ranks	311[b]	173.73	54028.50		
	Ties	62[c]	-	-	-	-
	Total	398	-	-	-	-
Following a suspicious pregnancy, it can be prevented by using a contraceptive method	Negative ranks	27[a]	90.50	2443.50	12.680	0.001
	Positive ranks	237[b]	137.28	32536.50		
	Ties	134[c]	-	-	-	-
	Total	398	-	-	-	-
Examination of testicles to prevent prostate cancer	Negative ranks	58[a]	127.00	7366.00	12.025	0.001
	Positive ranks	267[b]	170.82	45609.00		
	Ties	73[c]	-	-	-	-
	Total	398	-	-	-	-
Women can have sex during menstruation	Negative ranks	24[a]	111.50	2676.00	15.340	0.001
	Positive ranks	324[b]	179.17	58050.00		
	Ties	50[c]	-	-	-	-
	Total	398	-	-	-	-
It is essential to take iron pills during pregnancy	Negative ranks	19[a]	111.50	2118.50	15.152	0.001
	Positive ranks	310[b]	168.28	52166.50		
	Ties	69[c]	-	-	-	-
	Total	398	-	-	-	-
Women need to get the rubella vaccine before getting pregnant	Negative ranks	15[a]	108.00	1620.00	14.461	0.001
	Positive ranks	277[b]	148.58	41158.00		
	Ties	106[c]	-	-	-	-
	Total	398	-	-	-	-
Pregnancy under the age of 18 years old is not dangerous for the mother and fetus	Negative ranks	61[a]	105.00	6405.00	10.780	
	Positive ranks	228[b]	155.70	35500.00		
	Ties	109[c]	-	-	-	-
	Total	398	-	-	-	-
Sexually transmitted diseases can also affect men	Negative ranks	5[a]	90.00	450.00	15.601	0.001
	Positive ranks	309[b]	158.59	49005.00		
	Ties	84[c]	-	-	-	-
	Total	398	-	-	-	-
Like women, men need to be treated for sexually transmitted diseases	Negative ranks	2[a]	103.00	206.00	16.792	0.001
	Positive ranks	353[b]	178.42	62984.00		
	Ties	43[c]	-	-	-	-
	Total	398	-	-	-	-

Note: Wilcoxon Sum-rank Test.
a= Negative ranks, b= Positive ranks, c= Ties

4. DISCUSSION

According to the results of this study, only half of the men on the verge of marriage had good knowledge about reproductive health. The present study showed that participating in a 2 hours group training session was not very effective in increasing the men's knowledge, and they demonstrated the need for more training or even changing the content of the training. Men's inadequate knowledge of reproductive health can affect important factors, such as their responsibility in decision-making for childbearing, use of contraceptives, and preventing sexually transmitted diseases. In addition, maternal needs during pregnancy have not been emphasized previously, which is an important issue to be

reported [5].

To investigate men's knowledge on reproductive health, a study was carried out in the southwest part of Tehran province and Afghan refugees and Iranian men's knowledge, attitudes and practices, were assessed. Findings showed the mean scores for knowledge, attitudes and practices to be low in Iranian and Afghan men [1]. Regarding various aspects of SRH, a semi-qualitative study involving sixty-four participants was conducted across Delhi. Data analysis showed the participants' knowledge of HIV/AIDS to be at good level, but their knowledge of STRs/RTIs was poor. The rural participants had inadequate knowledge and negative attitudes toward SRH and condom use. They believed that they and their partners could have life-long protective benefits through comprehensive SRH information provision [2].

The present study indicated the men's knowledge of the protective role of condom against sexually transmitted diseases to be poor, but it changed after they participated in the training classes. On the other hand, the findings showed men to have good knowledge about the fact that they can be affected by sexually transmitted diseases and should be treated like women. However, studies have indicated that men are less likely to refer to clinics for treatment or inform their wives about their disease or treatment process due to cultural reasons [16 - 18]. This study showed less than half of the men to have knowledge of getting the rubella vaccine before pregnancy, but the majority of them considered pregnancy care as essential and were aware of receiving iron during pregnancy.

According to the result of a study conducted in Bangladesh, men's knowledge of maternal care in the intervention group (the communities were empowered through social mobilization and advocacy) was higher than the control groups. For example, 50% knew about receiving tetanus injection during antenatal care. The knowledge of the participants in the intervention group related to birth preparedness (buying delivery kit = 18%) and newborn care (cord cutting with sterile blade = 36%, cord tying with sterile thread = 11%) was at a low level [19].

Perceived challenges to greater father involvement include sociocultural norms, difficulty encountered by couples in engaging before the first pregnancy, the physical layout of clinics, and health worker workloads and attitudes [20]. The present study showed men's knowledge of pregnancy prevention methods to be at a low level, and less than half of them believed that young women can take birth control pills in the early years after marriage, and that tubal ligation is not a temporary method of contraception. The present study also indicated that men's knowledge in this regard increased after the training session; therefore, it seems that the training classes held for young couples may be effective in increasing the couples' knowledge, but these classes need to be longer than 2 hours, especially for men.

Perhaps, the cultural content and barriers prevent the information on sexual and reproductive health from being well transferred and well understood by the participants. Moreover, the short time of these classes and the large amount of the content that should be presented in these classes (including male and female anatomies, reproductive physiology, sexual health, contraceptive methods, and menstrual health) may have adverse effects on the participants' effective learning. African-context studies have indicated that limited knowledge about family planning plays a key role in men's negative perception of and lack of engagement in family planning [21].

A descriptive study on 400 men and women in Abyek, Iran, evaluated men's awareness and attitude toward engagement in family planning. The results showed a low mean score of awareness and practice in family planning, revealing the need for training programs of family planning for men [22]. The present study showed men to have limited knowledge about breast cancer screening in relation to breast self-examination, but their knowledge of cervical and prostate cancer screening was at a good level. Reproductive health areas are of a wide range, and men are expected to have good knowledge of them in order to perform well in terms of their responsibility towards their wives' sexual and reproductive health [21]. One of the strengths of the research is the appropriate sample size and attention to the educational needs of men about reproductive health. This research also involved limitations, such as a lack of internal reliability.

CONCLUSION

This study showed that current premarital reproductive health classes meet the needs of men's knowledge in the field of reproductive health, but the educational content of these classes should be improved. Considering the training needs of this group can be the first significant step contributing to the young couples' family planning.

AUTHORS' CONTRIBUTION

KV devised the main concept and took part in sampling. AK analysed the data and wrote the first draft. KV wrote the final draft.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

This research was approved by the Research and Ethics Committee of Shahroud University of Medical Sciences.

HUMAN AND ANIMAL RIGHTS

No animals were used for studies that are the basis of this research. All the human procedures used were in accordance with the ethical standards of the committee responsible for human experimentation (institutional and national), and with the Helsinki Declaration of 1975, as revised in 2013 (http://ethics.iit.edu/ecodes/node/3931).

CONSENT FOR PUBLICATION

All the participants signed the informed consent. Also, all participants had the right to withdraw from the study whenever they wanted.

STANDARDS OF REPORTING

STROBE guidelines were followed.

AVAILABILITY OF DATA AND MATERIALS

The datasets generated and/or analyzed in the present study are not publicly available due to the moral rules of Shahroud University of Medical Sciences.

FUNDING

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CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

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