International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Tadayon M et al. Int J Reprod Contracept Obstet Gynecol. 2016 Aug;5(8):2629-2633
www.ijrcog.org
pISSN 2320-1770 | eISSN 2320-1789

DOI: http://dx.doi.org/10.18203/2320-1770.ijrcog20162634

Research Article

The relationship of male condoms and withdrawal contraceptive methods with female sexual function and satisfaction: a cross sectional study

Mitra Tadayon[1], Maryam Honarjoo[2], Zahra Abbaspoor[3]*

[1]Department of Menopause Andropause Research Center, Nursing and Midwifery School, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran
[2]Department of Midwifery, Nursing and Midwifery School, Ahvaz Jundishapur University of Medical Sciences, Ahvaz Iran
[3]Department of Reproductive Health Improvement Research Center, Nursing and Midwifery School, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran

Received: 31 May 2016
Accepted: 01 July 2016

***Correspondence:**
Dr. Zahra Abbaspoor,
E-mail: Abbaspoor_z762@yahoo.com

ABSTRACT

Background: Men's participation is an important issue in family planning and reproductive health. Coitus interruptus and condom use are two reversible and non-hormonal methods of contraception to engage men in family planning. The present study is aimed to evaluate the relationship of male condom use and withdrawal as contraception with female sexual function and satisfaction.

Methods: A cross-sectional study was conducted on 215 married women aged 15-45 years in Ahvaz. Necessary data were collected using three demographic, female sexual function index (FSFI), and female sexual satisfaction questionnaires. The data were analyzed using SPSS software version 22 and descriptive and analytical tests (independent t-test and Pearson's and Spearman's correlation coefficients) were used. A P level of less than 0.05 was considered significant.

Results: Although there was no significant difference in the areas of sexual desire (p=0.31), sexual arousal (p=0.18), vaginal lubrication (p=0.63), and pain (p=0.06) between two groups, but significant differences were found between the areas of orgasm (p=0.004), sexual satisfaction (p=0.009) and overall sexual function index (p=0.04) in both groups, which were higher in the condoms-used group. There was a significant direct relationship between female sexual function index and satisfaction in the condom method (p=0.001, r=0.48) and the withdrawal method (p=0.001, r=0.38).

Conclusions: Female sexual function and satisfaction in the users of male condoms is higher than the withdrawal method of contraception, while significant direct relationship was found between female sexual function and satisfaction in both methods. For a more detailed conclusion on female sexual function and satisfaction of users of these methods, longitudinal studies are suggested to be done by performing follow-up periods before, during and after cessation of method.

Keywords: Female sexual function, FSFI, Male condom, Coitus interruptus, Withdrawal method

INTRODUCTION

It is important to involve men in family planning.[1] Men's participation means the responsibilities of men in reproductive health and support of their spouses, in order to deal with problems in the sexual life includes a variety of situations, from sexual relations to delivery, education and nutrition of children and the use of contraceptive methods to other supports.[2]

Coitus interruptus and condoms are two reversible and non-hormonal methods of contraception to engage men in family planning.[3] As the oldest contraceptive method, coitus interruptus is estimated to be used by 85 million couples in different communities around the world.[4] Although this method is not officially part of the family planning programs in Iran, it is used as a popular method by 17.5% of people in the whole country.[5] However, this method is used in most communities is much higher than the published statistics.[6] No doubt, the condom is the most common mechanical method of contraception in the world so that it is used by 19 percent of users of contraceptive methods in the United States, whereas studies indicate that about % 24.4 of people use this method in Iran.[3,7] The tendency to use these methods has increased because the use of condoms and the withdrawal method have been proven to have no serious side effects, unlike hormonal methods of contraception.[8] A problem that has attracted less attention in these methods is the changes in sexual function and sexual satisfaction after use.[9] Sexual function and satisfaction are the important factors affecting women's health, which are influenced by biological and psychological (i.e., internal and external) factors.[10,11] Since contraceptive methods have direct effects on sexual systems, the created sexual dysfunction can pose a risk to the sexual health of the individual.[12] There are contradictory studies on female sexual function and satisfaction in these methods. A study by Mardani et al showed an increase in female sexual function in the condom users.[13] According to a study by Auslander, the use of condom is the only contraceptive method that increases female sexual satisfaction.[14] The study of Bahrami et al also showed that users of condoms and withdrawal method have greatest sexual satisfaction than other contraceptive methods, respectively while Higgins et al reported a decrease in female sexual satisfaction of condom users.[15,16] Given the large part of the target population of family planning use of the two above methods, which may have different effects on female sexual function and satisfaction, and since sexual activity and satisfaction derived from it, are the most basic aspects of life that have some influence on the strength of the family, this study attempted to compare female sexual function and satisfaction between user condoms and withdrawal methods.

METHODS

This cross-sectional study carried on 215 married women referring to the health care centers and used male condoms or coitus interrupt us as contraceptive methods in September 2013 to February 2014 in Ahvaz, Iran. Random cluster sampling method was used for selecting two health care centers, and samples were randomly selected using a random number table. Considering the 95% confidence level and acceptable maximum error of 10%, the sample size was calculated to be 105 women in each group. Inclusion criteria were including: age 15-45 years, using coitus interruptus or male condoms, having general physical and mental health and ability reading and writing, and exclusion criteria were including: performing gynecological surgeries such as hysterectomy and vaginoplasty, pregnancy, women undergoing infertility treatment, women who had used psychiatric drugs, women who had used a combination of several contraceptive methods or who did not completely fill out the questionnaire. The study instruments included three anonymous questionnaires: the first questionnaire concerning demographic data (including age, education, duration of marriage, duration of use of the method, the number of children, and income situation); the second self-administered questionnaire was related to sexual function (Rosen et al questionnaire) and the third questionnaire was related to sexual satisfaction (Larson et al questionnaire). To avoid the impact of face to face interview on people's answers, the self-administered (self-report) technique was used to collect information.

The sexual function questionnaire consists of 19 questions related to the areas of sexual desire (Q 1, 2), arousal (Q 3, 4, 5, 6), vaginal lubrication (Q, 7, 8, 9, 10) orgasm (Q 11, 12, 13), sexual satisfaction (Q, 14, 15, 16), and pain (Q 17, 18, 19). The areas of sexual desire, arousal and vaginal lubrication each had scores ranging from 1 to 5, while the scores for the areas of orgasm, pain and sexual satisfaction range was from 0 to 5. The score for each section was calculated by summing up the scores for questions related to that section, whose sums were multiplied by the coefficient of each section. We considered the coefficients of 0.6 for the section of sexual desire, 0.3 for the sections of arousal and lubrication factor, and 0.4 for the sections of orgasm, sexual satisfaction, and pain.[17] The total index score was obtained by summing up the scores of the six areas together. The total index score less than 11 was considered as severe dysfunction, 17-11 as moderate dysfunction, 23-18 as mild dysfunction, and more than 23 as without dysfunction.[18] Reliability and validity of the Persian version of the female sexual function questionnaire was approved by Mohammadi et al in Iran.[19] Also, female sexual satisfaction questionnaire consisted of 25 questions based on a 5-point Likert scale. To obtain an overall score of sexual satisfaction, the scores of 25 items were summed, and the following criteria were considered for the individual's score: 25-50 for lack of sexual satisfaction, 51-75 for low sexual satisfaction, 76-100 for moderate sexual satisfaction and 101-125 for high sexual satisfaction.[15] Reliability and validity of the questionnaire was confirmed in several studies.[15,20] After data collection, they were entered into

the Excel spreadsheet, and the final analysis was performed using SPSS software, version 22 and descriptive (mean and standard deviation) and analytical (independent t-tests and Pearson's and Spearman's correlation coefficients) tests. A P value of less than 0.05 was considered significant.

RESULTS

The average age of men and women were 29.7±6.49 and 34.33±7.09, respectively. Among women, 56.75% had a university education. Most of women were housewives (68.8%); and most men were self-employed (52.6%) and 43.7% were employee. They mostly had one (37.7%) or two (26.5%) children. Less than five years had been passed from the marriage of most subjects (39.5%). Most of them (52%) had a moderate economic situation with a monthly income between one and two million Tomans.

Although no significant difference was found between the areas of sexual desire, sexual arousal, vaginal lubrication, and pain in both groups, there were significant differences between the areas of orgasm, sexual satisfaction and overall sexual function index, that was higher in the group using condoms (Table 1).

Table 1: Mean and standard deviation of areas of female sexual function index in both groups.

Variables	Male condoms N=105	Coitus interruptus N=110	P-value
Desire	3.75±0.75	3.86±0.96	0.31
Arousal	4.33±0.85	4.15±1	0.18
Vaginal lubrication	4.05±1.09	3.98±1.05	0.63
Orgasm	4.9±0.86	4.5±1.04	0.004
Satisfaction	5.36±0/79	5.05±0.97	0.009
Pain	4.74±1.15	4.37±1.32	0.06
Female sexual function index	27.08±3.3	25.95±4.53	0.047

The average sexual satisfaction between the two groups were also compared using the Larson questionnaire, which showed a significant difference (P=0.006) that was higher in the group using condoms. There was a significant direct relationship between sexual function and sexual satisfaction in the condoms method (r=0.48, P=0.001) and the withdrawal method (r=0.38, P=0.001) so that individuals with higher sexual function index had greater sexual satisfaction.

Also, the frequencies of sexual dysfunction were studied in male condoms group and most subjects were found to have scores higher than 23 and were placed in the level of without dysfunction (Table 2). The evaluation of the frequency and percentage of sexual satisfaction in male condoms group showed that the most subjects had low sexual satisfaction (Table 3).

Table 2: Frequency and percentage of female sexual function Index in male condoms group.

Sexual dysfunction	Male condoms N=105	Female sexual function index N=110
Severe (<11)	0	0
Moderate (11-17)	2 (%1.9)	8 (%7.3)
Mild (18-23)	4 (%3.8)	20 (%16.3)
Without dysfunction (>23)	99 (%94.3)	82 (%76.4)

Table 3: Frequency and percentage of sexual satisfaction in male condoms group.

Sexual satisfaction	Male condom	Female sexual satisfaction
No satisfaction	0	0
Low	64 (%60)	79 (%71.8)
Moderate	32 (%31.4)	27 (%24.6)
High	9 (%8.6)	4 (%3.6)

There was a significant direct relationship between female sexual function index and education in the condom method (r=0.19 and P=0.005 for women; and r=0.14 and P=0.03 in men) and coitus interruptus method (r=0.24 and P=0.008 for women; and r=0.11 and P=0.02 in men) so that women with higher education had higher sexual function index. There was also a significant inverse relationship between female sexual function index and the number of children in the condom method (r=-0.35, P=0.03) and the coitus interruptus method (r=-0.15, P=0.02), which the former decreased with increasing the number of children. A significant inverse relationship was also found between female sexual satisfaction and the age of men in the male condoms method (r= -0.17, P= 0.01) and the coitus interruptus method (r= -0.31, P=0.03), so that the former decreased with increasing the age of men.

DISCUSSION

Based on the research findings, there was no significant difference between the areas of sexual desire, sexual arousal, vaginal lubrication, and pain in the users of condoms and coitus interruptus, while a significant difference was found in the areas of orgasm, sexual satisfaction, and total female sexual function index in the two groups, which was higher in the group using condoms. Sexual function of individuals has different sections, one of which includes having orgasm that is necessary for sexual satisfaction in women.[21] High scores of orgasm area in the condom users seem to be the main reason for their higher sexual function than users of coitus interruptus. Auslander argues that people with a better relationship with their wives and less emotional sensitivity in relationships are sexually active, use condoms and have a better sexual function.[14]

The results showed that there was a significant direct relationship between sexual satisfaction and sexual function index in the condoms and coitus interruptus methods so that those with higher sexual function index had greater sexual satisfaction. Bolourian et al also found a statistically significant relationship between sexual function and sexual satisfaction.[21]

Most subjects (85.35%) did not have a dysfunction of sexual relations, with scores greater than 23. It can be argued that the withdrawal method is a simple, convenient and safe method that does not cause sexual dysfunction in women.[3] Condoms also do not cause any interference between the stages of sexual response and had no physical and mental health consequences for women. In addition to benefit from its performance in contraception, women use its other applications on improving physical health, including the prevention of sexually transmitted diseases.[22]

In the present study, 60% and 71.8% of users had low sexual satisfaction with condoms and coitus interruptus, respectively, whereas in the study by Bahrami et al, 17.8%, and 35.3% of users had low sexual satisfaction with them, respectively.[15] However, the sexual satisfaction of people will be affected by several factors including the age of the woman, satisfaction with non-sexual relationship with wife, frequency of sexual activity, sexual satisfaction, and religious beliefs); and unfortunately, it is not possible to examine all these variables in most studies.[23]

The results showed that there was a significant direct relationship between female sexual function index and the education of women and men. Barrientos et al found that high levels of education are associated with better sexual performance.[24] Regardless of contraceptive method; education for over 12 years has been associated with a reduced risk of sexual dysfunction up to 36% in the general population, because the scientific attitude and awareness of sexual issues increase with level of education.[25]

According to the study, there was a significant inverse relationship between the number of children and female sexual function index so that women with more children had lower sexual function index. Having a child not only can affect the psychosocial processes relating the person, but also may indirectly affect the sexual function.[26] The latter relationship may also be related to factors such as fatigue, stress and aging, which themselves are associated with sexual dysfunction.[27]

Results showed that female sexual satisfaction had a significant inverse relationship with the age of men so that female sexual satisfaction decreased with increasing the age of men. Studies show that erectile dysfunction occurs with the increase in the age of 37% of men, which affect sexual function, and probably female sexual satisfaction.[28,29]

As the most private marital issue, sexual relations may not easily be expressed by people in the society due to cultural and religious restrictions. Thus, the absence of possible dishonesty of some individuals in expressing their sexuality was one of the study's limitations beyond the control of the researcher although the questionnaires were anonymous and were completed by a self-administered technique.

CONCLUSION

Compared with those using the withdrawal method of contraception, sexual function and sexual satisfaction are higher in the condom users, and there is significant direct relationship between sexual function and sexual satisfaction in both methods. For a more precise conclusion about sexual function and satisfaction of users of these methods, longitudinal studies are suggested to be done by performing follow-up periods before, during and after cessation of method.

ACKNOWLEDGEMENTS

This paper was the result of a research project No. Rhprc9304 approved by the Ahvaz Jundishapur University of Medical Sciences. The authors hereby express their gratitude to the Research Deputy of Ahvaz Jundishapur University of Medical Sciences for funding the project and all the women in the study.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Adewuyi A, Ogunjuyigbe P. The role of men in family planning: an examination of men's knowledge and attitude to contraceptive use among the Yorubas. African Population Studies. 2003;18(1):1043-49.
2. Hatami H, Razavi M, Eftekhar H, Maglesi F, sayednozadi M, Parizadeh M. Public Health. 2nd ed Tehran. Arjmand; 2006:1687-1688.
3. Rosenberg M. Pral contraceptive discontinuation: a prospective evaluation of frequency and reasons. AM J Obstet Gynecol. 1998;179(3):577-82.
4. Detels R, Beaglehole R, Lansang MA, Gulliford M. Textbook of public health. 5th ed London. Oxford University Press; 2011:1598.
5. Aghajanian A, Mehryar AH, Delavar B, Kazemipour SH, Hassaneini Z. Continuing use of withdrawal as contraceptive method in Oran. Canadian Studies Population. 2007;34(2):179-90.
6. Rachel K, Fennell JJ, Jennj A. Better than nothing or savvy risk reduction practice? The importance of withdrawal. Contraception. 2009;79:407-10.
7. Rahmani A, Sadeghi N, Allagholi L, Merghati A. The relation of sexual satisfaction and demographic factors. J Uni Sci Med Iran. 2010;23(66):14-22.

8. Ortayli N, Bulut A, Ozugurlu M, Cokar M. Why withdrawal? Why not withdrawal? Men's perspective. Rerod Health Matters. 2005;13(25):164-73.
9. Mohamadi KH, Heidari M, Faghihzadeh S. The female sexual function index (FSFI): validation of the Iranian vertion. Payesh. 2008;7(3):269-78.
10. Litzinger S, Gordon KC. Exploring relationships among communication sexual satisfaction, and marital satisfaction. J Sex Marital Taylor and Francis. 2005;31(5):409-24.
11. Tavakol Z, mirmolaie T, momenie Z, maksori A. Association between sexual satisfaction with sexual function. J Hamedan Uni Med Sci. 2011;36:50-6.
12. Christian W, Wallwiener MD. Prevalence of sexual dysfunction and impact of contraception in female German medical students. J Sexual Medicine. 2010;7(6):2139-48.
13. Mardani Hamoleh M, Ebrahimi E, Hedari H. The survey of sexual function and sexual satisfaction in contraceptive user. Payesh. 2012;11(3):371-6.
14. Auslander BA, Rosenthal SL, Fortenbrry JD, Biro FFM, Bemstein DI, Zimet GD. Predictors of sexual satisfaction in an adolescent and college population. Pediatric Adolescent Gynecology. 2007;20(1):25-8.
15. Bahrami N, Soleimani M, Shraifnia H, Masoodi R, Shaigan H, Mohammad RZ. Female sexual satisfaction with different contraceptive methods. Iran Journal of Nursing. 2012;25(76):53-63.
16. Higgins JA, Hoffman S, Graham CA, Sanders SA. Relationships between condoms, hormonal method, and sexual pleasure and satisfaction: an exploratory analysis from the women's well- Being and sexuality. Sexual Health. 2008;321-330.
17. Rosen R, Brown C, Heiman J, Leiblum S, Meston C, Shabsigh R, et al. The female sexual function index (FSFI): a multidimensional self-report instrument for the assessment of female sexual function. J Sexual Marital Therapy. 2000;26(2):191-208.
18. Safarinejad MR. Female sexual dysfunction in a population-based study in Iran: prevalence and associated risk factors. International of Impotence Research. 2006;18:382-95.
19. Mohammadi KH, Heydari M, Faghihzadeh S. The female sexual function index (FSFI): validation of the Iranian version. Payesh J. 2008;7(3):269-78.
20. Azari S, Shahnazi M, Farshbaf A, Abasnejad A. Sexual satisfaction in women using medicine and withdrawal contraceptive methods. J Azad Uni Sci Med. 2013;24(1):54-60.
21. Bolurian Z, Ganjloo J. Evaluating sexual dysfunction and some related factors in women attending Sabzevar Health Care Centers. Journal of Reproduction and Infertility. 2007;2(31):163-70.
22. Bianchi F, Perrin E, Ludicke F, Fert D. sexuality, partner relations and contraceptive practice after termination of pregnancy. J Psychosomatic Obstetrics Gynecology. 2001;22:83-90.
23. Young M, Denny G, Young T, Luqui R. Sexual satisfaction among married women. AM J Health Studies. 2000;16:73-84.
24. Barrientos J, Dario P, Psycholisocial variable of sexual satisfaction in Chile. J Sex Marital Ther. 2000;18:351-68.
25. Bayrami R, Satterzadeh N, Ranjbar Koochaksaraiie F, Pezeshki MZ. Sexual dysfunction in couples and related factores during pregnancy. J Reproduct Infertilit. 2008;9(3):271-82.
26. Bitzer J, Alder J. Sexuality during pregnancy and the postpartum. J Sex Education and Therapy. 2000;25(1):49-58.
27. Van Brummen HJ, Bruinse HW, Van de Pol G, Heintz AP, Van der Vaart CH. Which factors determine the sexual function 1 year after childbirth? BJOG. 2006;113(8):914-18.
28. Tessler S, Lindau MD, Philip Schumm MA. A study of sexuality and health among older adults in the United States. N Engl Med. 2007;357:762-74.
29. Jiann BP, Su CC, Tsai JY. Is female sexual function related to the male partner erectile function? J Sexual Medicine. 2013;10(2):420-9.

Cite this article as: Tadayon M, Honarjoo M, Abbaspoor Z. The relationship of male condoms and withdrawal contraceptive methods with female sexual function and satisfaction: a cross sectional study. Int J Reprod Contracept Obstet Gynecol 2016;5:2629-33.