

Male condom use errors according to the female partner reports

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SUMMARY

The condom is important for the prevention of sexually transmitted infections, but its success depends on its correct use. The aim of this study was to examine male condom use errors according to the reports of the female partner. This was a descriptive study, and the study group consisted of 160 married women. A questionnaire was used to collect data. Chi-square and logistic regression tests were used for statistical analyses. Of the participants 77.5% reported one or more errors related condom use. The most common problems were "not checking the expiration date" (56.9%), "not examining for breakage after sex" (52.5%), "starting intercourse without a condom or taking it off later" (34.4%). Not receiving instruction about correct condom use was a risky factor in terms of "condom use error". Condom use errors were common and generally associated with insufficient instruction.

Key words: Female partner, male condom, risk factors, use errors

ÖZET

Kadın partnerin bildirimine göre erkek kondomu kullanım hataları

Kondom cinsel yolla bulaşan enfeksiyonlardan korunmada önemlidir, ancak başarısı doğru kullanılmasına bağlıdır. Bu çalışmanın amacı kadın partnerin bildirimine göre erkek kondomu kullanım hatalarının incelenmesidir. Bu çalışma tanımlayıcı bir çalışmadır ve çalışma grubu 160 evli kadından oluşmuştur. Veri toplamada bir anket formu kullanılmıştır. İstatistiksel analizlerde ki-kare ve logistik regresyon testleri kullanılmıştır. Katılımcıların %77.5'i bir ya da daha fazla kondom kullanım hatası bildirmişlerdir. En yaygın sorunlar "son kullanım tarihini kontrol etmeme" (%56.9), "cinsel ilişki sonrası hasar kontrolü yapmama" (%52.5), "cinsel ilişkiye kondomsuz başlama ya da sonradan çıkarma"dır (%34.4). Erkeklerin doğru kondom kullanımını konusunda eğitim almaması "kondom kullanım hatası" için risk faktörüdür. Kondom kullanım hataları yaygın olarak bulunmuştur ve genellikle yetersiz eğitim ile ilgilidir.

Anahtar kelimeler: Kadın partner, erkek kondomu, risk faktörleri, kullanım hataları

Introduction

Condom is an effective family planning method commonly being used all around the world and also in Turkey. Condom is easily available and also easy to use. It is the most suggested family planning method (FPM) by the World Health Organization (WHO) and health professionals to protect oneself against sexually transmitted infections (STI) such as HIV (1-3). Male condom is the second rank method among most used family planning methods (11%) in Turkey and 17% of couples prefer to use condom (4) and it is preferred especially by those who have kids (28.5%) (4-6).

Condom is one of the most preventive and most used family planning method, and also makes men have responsibility for family planning. Primary health care centers (PHC) provide consulting services about condom use and they deliver condoms free of charge in Turkey. Therefore, the cost of condom is not a problem for those who choose it (2). According to Turkish Demographic and Health Survey 2003 (TDHS) 40% of the condom users stop using it within twelve months. It is important to find out the reasons of stopping the use of condom, although it is easy to use and readily available (3).

Some of the problems in condom use are starting sexual intercourse without wearing a condom or taking it off during (7.8%) and continuation of intercourse without condom (2.6%), slippage during intercourse or ejaculation (4.1-6.5%), slipping off completely (1.5%), breakage (5.6%) or experiencing all of them at the same time (10.9%). These problems are experienced mostly by those who are young, have low level of education and income and who are inexperienced in using condoms (7-10). Inexperienced men need consulting services to decrease the problems such as slippage, breakage during condom use and use the condom in a better way (11). Crosby et al. report that 43% of men put condoms on during sex, 32% of them report losing erection and one-

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third report breakage or slippage during sex (12). The reason of the problems, such as slippage, breakage during sex and losing erection, was mostly related to improper use and could be prevented with sufficient consulting (13).

Although there are a lot of studies on regular condom use (1,11,14-17), the number of studies related to condom use errors is limited (1,12), Regular use of condom does not mean free of errors. This study will help to put forth condom use errors for consideration so increase effective condom use, help prevent unwanted pregnancy and other related problems. The aim of the study was to investigate male condom use errors and risk factors according to the report of the women among married couples.

Material and Methods

This was a descriptive study in order to discover male condom use errors according to the report of female partners who admit to PHC for getting free condoms.

Study group: Study group consisted of 160 women (15-49 years old), who admitted to the 15th PHC between April 1st and June 30th, 2007 for getting condom. Their husbands had used condom for at least three months. In Turkey, the women apply to PHC for utilizing family planning services mostly, so the women were informed about male condom use instead of men. Therefore, it was preferred to ask women's view about their partner's condom use errors in the study.

Data collection: A questionnaire questioning the socio-demographic and fertility characteristics and also condom use errors was used to collect data. Socio-demographic characteristics were age of the women and their husbands, level of education, monthly income, perceived economical situation, length of marriage and the number of children. The characteristics of condom use were having condom training, pregnancy during use, breakage or slippage. Condom use errors such as not examining expiration date, not leaving a space in the condom tip, intercourse without any condom, condom breakage during sexual intercourse and using the same condom more than once were also questioned. Those who had one or more errors were considered "having condom use errors" and those who had not any were considered "having no condom use errors".

Before the study written permission was taken from the local health authority and informed consent was taken from the women. Data were collected by two researchers with face to face interviews in a private room in the PHC.

Statistical analysis: SPSS 10.0 program was used to analyse data. Percentage, X², Mann-Whitney U and logistic regression analysis were used for statistical analyses. Two-sided "p" value was used for statistical significance and values below "0.05" were considered significant.

Results

The mean age of the women and their husbands were 30.8 and 34.1 years, respectively. Fifty five per cent of the women and 39.4 % of the men were literate or primary school graduates. Average monthly income was 487.9 \$ and 62.4% of the women perceived their income moderate, 91.9% of them had health insurance. Mean of the marriage time was 11.4±7.6 years and the mean number of children was 2.3±1.0 (Table I).

Table I. Descriptive characteristics of women (n=160)

Sociodemographic and fertility characteristics	N/Mean	SD/%
Age	30.8	7.4
Age of husband	34.1	7.5
Education		
Literate-primary school	88	55.0
Middle school	60	37.5
High school and ↑	12	7.5
Education of husband		
Literate-primary school	63	39.4
Middle school	48	30.0
High school and ↑	49	30.6
Monthly income (\$)	487.9	227.7
Perceived income		
Good	22	13.8
Average	100	62.4
Worse	38	23.8
Social security		
Yes	147	91.9
No	13	8.1
Length of marriage (Year)	11.4	7.6
Number of children	2.3	1.0

Regarding the characteristics of condom use, it was found that the mean of the use time was 46.7 months (median 24.0, mode 24) and 44.4% of women and 18.1% of men were informed about correct condom use. It was found that 11.9% of the women experienced slippage-elusion, 10.0% of them experienced problems of breakage, 5.6% of them experienced pregnancy and 60.6% of them did not know how to use condom. It was determined that 77.5% of them had one or more condom use errors (Table II).

Table II. The characteristics and errors of condom use (n=160)

Condom use characteristics	N/Mean	%/SD
Length of condom use (month)	46.7	54.3
Receiving correct condom use training (yes)	71	44.4
Receiving correct condom use training of husband (yes)	29	18.1
Slipped off during sex (yes)	19	11.9
Breakage during sex (yes)	16	10.0
Experiencing pregnancy (yes)	9	5.6
Knowledge of emergency contraception (yes)	63	39.4
Condom use errors (yes)	124	77.5
Condom use errors		
Don't check of expiration date	91	56.9
Don't control for breakage after sex	84	52.5
Starting intercourse without a condom	55	34.4
Don't leave space at the tip	36	22.5
Use condom more than ones	2	1.2

Regarding women's views, it was found that 56.9% of them did not check the expiration date, 52.5% of them did not examine for breakage after sexual intercourse, 34.4% of them started sexual intercourse without condom, 22.5% of them did not leave space in the tip and 1.2% of them used the same condom twice (Table II).

According to the Chi-Square test, relationship between condom use error and having instructions was found statistically significant ($p < 0.05$). The relationship between condom use errors and women's and men's ages, their educational background, income level, perceived income, the marriage time, the number of children were not found statistically significant ($p > 0.05$) (Table III). Logistic regression analysis showed that the risk associated with condom use error increased by 2.9 times in the men who did not have condom use training (OR:2.906, CI: 1.112-7.593) (Table III). It was seen that age, level of

education and income, length of marriage, number of children, length of condom use, correct condom use education of women were not risk factors for condom use error ($p > 0.05$).

Discussion

In the study, the length of condom use was approximately two years (mean 46.7 ± 54.3 , median 24, mode 24, minimum 3 and maximum 264 months) according to 160 women. It was found that only 18.1% of the men received training about correct condom use. Sixty point six per cent of the women had limited contraception knowledge (Table I).

While most of the couples believed that correct condom use helped prevent unwanted pregnancy and prevent STI, they experienced some problems while they were using condoms. The most commonly experienced problems were slippage-elusion and breakage-tear. Our finding of slippage-elusion (11.9%) was higher than those found in the other studies (1,7,18). Also, the percentage of breakage-tear (10.0%) found in our study was higher than other similar studies (5.6% and 4.1%) (1,7). Although finding related to elusion and breakage (23.0%) was higher than those of the other studies, this was lower than that of the study of Lindberg et al. (9) (Table II). It could be said that condom use problems were prevalent in our study group (8,12). Young couples and those who used condom for a short time or did not use condom regularly had a higher percentage of condom use errors (9,10,13). Regular condom users as sex workers had lower condom use errors (19). This means that the regular use is a very important factor to prevent condom use errors. Our study group was not so young, and it is significant to state that some couples had high percentage of condom use errors although they were married and used condom for at

Table III. Logistic regression analyses for risk factors of condom use error

Independent variables	Condom use error		OR (CI % 95)
	Yes N (%) Mean (SD)	No N (%) Mean (SD)	
Age	31.3 ± 7.5	29.2 ± 6.9	0.910 (0.771-1.074)
Age of husband	34.7 ± 7.6	32.0 ± 7.0	1.047 (0.886-1.237)
Education (Primary school and ↓)	68 (77.3)	20 (22.7)	1.360 (0.501-3.690)
Education of husband (Primary school and ↓)	46 (73.0)	17 (27.0)	0.626 (0.233-1.680)
Monthly income (\$)	620.8 ± 299.7	555.1 ± 210.4	1.001 (0.999-1.003)
Perceived income (worse)	30 (78.9)	8 (21.1)	1.029 (0.385-2.748)
Length of marriage (year)	12.0 ± 7.7	9.4 ± 7.0	1.066 (0.883-1.289)
Number of children (mean)	2.4 ± 1.0	2.1 ± 1.0	1.058 (0.591-1.896)
Length of condom use (Month) ^a	50.3 ± 59.0	34.1 ± 31.0	1.004 (0.993-1.016)
Correct condom use training (Women) (no)	70 (78.7)	19 (21.3)	0.820 (0.358-1.880)
Correct condom use training (Husband) (no) ^{b, c}	106 (80.9)	25 (19.1)	2.906 (1.112-7.593) ^c

^a t: 2.186; p: 0.031, ^b X²: 4.837; p: 0.029, ^c: Exp(B): 2.906; p: 0.029

least two years. Only a few of the men in the group (18.1%) received training about correct condom use and this might explain the high percentage of condom use errors. It is valuable to indicate that 5.6% of the couples in our study experienced pregnancy (Table II).

Most of the women (77.5%) stated that they had one or more of the condom use errors and this showed that condom use errors were common. The two most common reported condom use errors were "not checking the day of expiration" (56.9%) and "not examining breakage-tear after sex" (52.5%) similar to stated by Crosby et al. (12). In that study (12), the most common experienced error was "not checking the day of expiration" (61.0%) as in our study. In the same study, the percentage of not examining breakage-tear (30.0%) was lower than our finding. One of the most common experienced errors was "starting sexual intercourse without putting on a condom" (34.4%). While our findings related to the percentage of "starting sexual intercourse without putting on a condom" was similar to findings by Crosby et al. (12) (42.8%) and Peltzer (19) (55.0%), the percentage stated in one of the studies (7.8%) (20) was quite low. The percentage (40%) of those who did not leave space in the tip of the condom in study by Crosby et al. (12) was higher than our finding (22.5%). The least commonly experienced error was using a condom more than once (1.2%) (12) (Table II). Condom use errors in our study and other studies were quite common. It can be concluded that using condom will not help prevent pregnancy and STI unless condom is used in a correct way.

When condom use errors were analysed by Chi-Square test, the relationship between the length of condom use and received training was found statistically significant ($p < 0.05$). (Table III). It was seen that the couples who used condoms for a longer time and had instruction about condom use had less condom use errors. According to the results of logistic regression the men who did not receive condom use training were 2.9 times more likely to run the risk of condom use compared to men who received training (OR:2.906, CI: 1.112-7.593) (Table III). In one of the studies (18), condom use errors were found related to men's insufficient instructions about condom use. In another study (21), it was found that informing women about condom use was effective in long term use, but it did not decrease condom use errors. In the present study, it was seen that the instructions about correct condom use for women was not enough to use a condom in a correct way.

Condom use errors are quite common. When men do not receive training about correct condom use, condom use errors increase significantly. Informing women about condom use should not be considered sufficient to decrease condom use errors. Also it would be a useful strategy to include correct condom use in preparing the training programs about prevention of unwanted pregnancy and STI.

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