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Do Risky Sexual Behaviors in Women Affect the Level of Knowledge on Sexually Transmitted Diseases?

Kadınlarda Riskli Cinsel Davranışlar Cinsel Yolla Bulaşan Hastalıklar Bilgi Düzeyini Etkiler mi?

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Abstract: Objective: The aim of the study was to determine women's level of knowledge about STDs, their risky sexual behaviors and the effect of risky sexual behaviors on their level of knowledge about STDs. Methods: The population of this descriptive and cross-sectional study consisted of all women who applied to the gynecology outpatient clinic of a tertiary hospital in Izmir in one year (N=30233). It was determined that at least 380 women should be included in the sample group with the sampling formula with known population and the study was completed with 400 women. Data was collected by face-to-face/individual questionnaire filling method using the Individual Identification Form and Sexually Transmitted Diseases Knowledge Scale (STD-SQ) and analyzed with SPSS 25.0 package program. Results: When the STD knowledge levels of the participants were analyzed, it was found that the highest scores were obtained from the "general knowledge" sub-dimension, the lowest scores were obtained from the "cause and effect" sub-dimension and the total mean score of the test was 7.94±5.89. The mean age of the women was 40.41±12.07 years and the mean age at first sexual intercourse was 22.09±4.14 years. The mean STD knowledge test scores of women who had a history of STD, who had received information on this subject before, who had received this information from health professionals, and who wanted to access this information through health professionals or mass media were found to be statistically significantly higher. It was found that the STD knowledge levels of women who started sexual intercourse at an early age, had more than one partner, had more than one partner, had one-night sexual intercourse, did not use condoms during intercourse, and used alcohol and illicit drugs before intercourse were lower. Conclusions: As a result, it was found that women's knowledge of STDs was low and risky sexual behaviors affected the level of knowledge.
Keywords: Sexually transmitted diseases, Sexual behavior, Knowledge, Women.

Öz: Amaç: Çalışmanın amacı, kadınların CYBH hakkındaki bilgi düzeylerini, riskli cinsel davranışlarını ve riskli cinsel davranışların CYBH hakkındaki bilgi düzeyleri üzerindeki etkisini belirlemektir. Gereç ve Yöntem: Tanımlayıcı ve kesitsel tipte yapılan çalışmanın evrenini İzmir ilinde üçüncü basamak bir hastanenin kadın hastalıkları polikliniğine bir yılda başvuran tüm kadınlar oluşturmuştur (N=30233). Evreni bilinen örneklem formülü ile en az 380 kadının örneklem grubuna dahil edilmesi gerektiği belirlenmiş ve 400 kadın ile araştırma tamamlanmıştır. Veriler, Birey Tanıtım Formu ve Cinsel Yolla Bulaşan Hastalıklar Bilgi Ölçeği (CYBHB-Ö) kullanılarak yüz yüze/bireysel anket doldurma yöntemi ile toplanmış ve SPSS 25.0 paket programı ile analiz edilmiştir. Bulgular: Katılımcıların CYBH bilgi düzeylerine bakıldığında; "genel bilgi" alt boyutundan en yüksek, "neden sonuç" alt boyutundan en düşük puanların aldıkları ve testin toplam puan ortalamasının 7,94±5,89 olduğu saptanmıştır. Kadınların yaş ortalamasının 40,41±12,07, ilk cinsel ilişki yaş ortalamasının ise 22,09±4,14 olduğu belirlenmiştir. CYBH öyküsü olan, bu konuda daha önce bilgi almış olan, bu bilgiyi sağlık profesyonellerinden almış olan, bu bilgiye sağlık profesyonelleri veya kitle iletişim araçlarıyla erişmek isteyen kadınların CYBH bilgi testi puan ortalamaları istatistiksel olarak anlamlı düzeyde yüksek bulunmuştur. Erken yaşta cinsel ilişkiye başlama, birden fazla partner varlığı, eşin birden fazla partnerinin olması, tek gecelik cinsel ilişkide bulunma,

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ilişkide kondom kullanmama, ilişki öncesi alkol ve yasadışı uyuşturucu madde kullanımı olanların CYBH bilgi düzeylerinin daha düşük olduğu saptanmıştır. Sonuç: Sonuç olarak kadınların CYBH bilgilerinin düşük olduğu; riskli cinsel davranışların bilgi düzeyini etkilediği saptanmıştır.
Anahtar Kelimeler: Cinsel yolla bulaşan hastalıklar, Cinsel davranış, Bilgi, Kadın.

Introduction

Sexually Transmitted Diseases (STDs) are serious diseases that negatively affect public health (WHO, 2018). Chlamydia, trichomoniasis, human papilloma virus (HPV), syphilis, gonorrhea, AIDS are some of these diseases and there are more than 30 sexually transmitted diseases (WHO, 2018, Yıldırım and Erbil, 2021). Failure to diagnose and treat STDs at an early stage can lead to infertility, pelvic inflammatory disease (PID), ectopic pregnancy, eye infections leading to neonatal blindness, cancer and death (Lyons et al., 2017). With effective management of these diseases, it is possible to prevent the development of complications or sequelae. The increasing prevalence of STDs year by year makes it necessary to address this issue in terms of public health (Özcan, 2022).

Inadequate sexual education programs in developing countries, decreasing the age of sexual intercourse in developed and developing countries, polygamy, homosexuality, being with paid sexual partners, not using condoms, drug use, shared use of items such as manicure, pedicure tools and razors, use of instruments used in acupuncture, epilation, piercing, tattooing and dental treatment without sterilization are among the risk factors for STDs (Lyons et al., 2017; Özcan, 2022). In addition, some agents such as HBV, HIV and T. Pallidum can be transmitted by organ transplantation or blood transfusion because they are concentrated in the blood. Transmission from mother to infant can also occur. Gonorrhea, Chlamydia, HIV, Syphilis are infections that can be transmitted from mother to baby. In addition, some socio-demographic characteristics such as being single, being young or living in big cities have been found to be associated with the risk of STDs (Ulu et al., 2015). It is very difficult to know the actual rates of STDs due to reasons such as the asymptomatic course of the diseases, patients not seeking medical help, hiding their identities, and neglecting disease notifications (Diadhiou et al., 2019).

STDs harm the health levels and productivity of individuals, leading to a decrease in living standards and thus deterioration of public health (Diadhiou et al., 2019). It is extremely important for women's health that STDs are difficult to diagnose, frequent and long-term treatment. In people who start uncontrolled, unhealthy and inappropriate sexual intercourse at an early age, it is even more difficult to prevent these diseases due to insufficient or incorrect knowledge. For this reason, it becomes more meaningful to prioritize preventive methods and

counseling services rather than therapeutic methods (Yıldırım and Erbil, 2021). It is important for public health to prevent these diseases by educating women of all age groups who apply to health institutions for any reason, and to treat existing diseases without causing more problems (Ulu et al., 2015). When the literature is examined, it is seen that most of the studies on STDs were conducted with university students (Akalpler and Eroğlu, 2015; Ulu et al., 2015; Akçay and Akçay, 2019; Çalım et al, 2021; Sayar and Yarar, 2021), but no study examining STD knowledge level and risky sexual behaviors was found in studies conducted with women including adult age group (Karakaya, 2019; Emül et al., 2020; Akça and Türk, 2021; Ayaz and Zarakol, 2021; Karkın, et al., 2021).

With this study, the knowledge levels and risky sexual behaviors of sexually active women who apply to the outpatient clinic for any reason about STDs will be determined, and if their knowledge levels are low, a basic level of awareness will be created on what needs to be done to provide education and counseling services to change this situation in a positive direction. From this point of view, with this study:

- Determination of women's level of knowledge about STDs,

- Determination of risky sexual behaviors of women,

- It is aimed to determine the effect of women's risky sexual behaviors on STD knowledge level.

Methods

Study Design and Participants

The study was planned in cross-sectional-descriptive design.

Place and Time of the Study

The study was conducted between April 30 and October 30, 2023, with women who applied to the outpatient clinic of the Department of Obstetrics and Gynecology of a tertiary hospital in Izmir for any reason.

Population and Sample of the Study

The population of the study consisted of all women who applied to the Gynecology and Obstetrics outpatient clinic of a tertiary hospital in Izmir province in one year (N=30,233). The sample size was calculated with a 95% confidence interval and a margin of error of 0.05 using the sampling formula with known population, and it was found that at least 380 women should be included in the sample group, and the study was completed with 400 women. After the data

collection process was completed, a post hoc analysis was conducted to assess the adequacy of the sample size. Considering the number of participants and measurements, it was determined that at the α=0.05 significance level, the calculated effect size was above the 80% (0.80) power recommended in the literature (Kalaycıoğlu and Akhanlı, 2020). This showed that our results were statistically significant and reliable, the sample size was sufficient, and the effect of the intervention could be successfully evaluated.

Inclusion criteria for the study: All women who volunteered to participate in the study, were literate, sexually active and over 18 years of age were included in the study.

The exclusion criteria from the study: Women with any psychiatric diagnosis and women who could not speak, read and write Turkish were excluded from the study.

Data Collection

The research data were collected between April 30 and October 30, 2023, after obtaining ethics committee permission. Before the questionnaire was filled out, the women were informed about the purpose of the study, and the participants who accepted the study were asked to sign an informed consent form and their written consent was obtained. The research data were collected by the researchers in the outpatient clinic by face-to-face/individual questionnaire filling method.

Data Collection Instruments

Individual Introduction Form: It was developed by the researchers from the relevant literature (Karakaya, 2019; Emül et al., 2020; Akça and Türk, 2021; Ayaz and Zarakol, 2021; Karkın, et al, 2021; Sayar and Yarar, 2021), the form includes a total of 15 questions, including socio-demographic characteristics (6 questions) such as age, marital status, educational status, income-generating employment status, and the presence of social security, as well as the status of having STDs and knowledge on this subject (4 questions) and risky sexual behaviors (5 questions).

Sexually Transmitted Diseases Knowledge Scale (STD-S): In order to assess women's knowledge and awareness about STDs, the Sexually Transmitted Diseases Knowledge Scale (STD-SK) developed by Jaworski and Carey (2007) and Turkish validity and reliability study conducted by Dilcen et al. Correct answers to each item in the scale are scored as 1 point, and incorrect or don't know answers are scored as 0 points and the total score that can be obtained from the scale can be calculated. The highest total score that can be obtained from the scale is 25 and the lowest total score is 0. The items with correct answers when the "true" option is

selected are items 2, 3, 5, 7, 8, 10, 11, 12, 25; the items with correct answers when the "false" option is selected are items 1, 4, 6, 9, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24. The scale consists of a total of 25 items and 6 sub-dimensions, including general information (items 3,5,5,8,10,11,12,25), treatment and prevention (items 2,7,17,20), transmission and prevention (items 16,19,22,24), agent (items 1,4,23), symptom (items 9,13,18,21) and cause and effect (items 6,14,15). While the internal consistency coefficient was 0.86 in the original version of the scale, Cronbach's alpha value was found to be 0.84 in the validity and reliability study (Dilcen et al., 2023; Jaworski and Carey, 2007). In this study, Cronbach's alpha value was found to be 0.87.

Data Analysis

SPSS.25 (Statistical Package for the Social Sciences v25) statistical package program was used for data analysis. The conformity of the data to normal distribution was evaluated by Shapiro Wilk test and it was determined that the data conformed to normal distribution ($p>0.05$). Mean, standard deviation, number-percentage values were used to evaluate the socio-demographic characteristics of the participants. Independent t test was used to compare the difference between two groups in the comparison of independent data that fit the normal distribution, and one-way analysis of variance was used in the comparison of more than two group mean. Scheffe test, one of the Post Hoc tests, was used to find the group that made a difference between the mean. Pearson correlation analysis was applied when the relationship between continuous variables was normal. Statistically significance level $p<0.05$ was accepted.

Ethical Considerations

Permission to use the data collection tools was obtained from the scale owner via e-mail. Ethics committee permission was obtained in accordance with the Helsinki Declaration of Research Principles. In addition, institutional permission was obtained from the hospital where the research was conducted. The participants were informed that the information obtained would remain confidential and would not be shared anywhere else except for scientific publication, and written informed consent was obtained from the women participating in the study.

Results

When the STD knowledge levels of the participants were analyzed, it was found that the highest scores were obtained from the "general knowledge" sub-dimension, the lowest scores were obtained from the "cause and effect" sub-dimension and the total mean score of the test was 7.94±5.89 (Table 1).

Table 1: Distribution of Mean STD Knowledge Test Scores

Sub-dimension	min	max	X̄±SD
General information	0	7	3.42±2.20
Treatment prevention	0	4	1.19±1.23
Contagion prevention	0	4	1.96±0.46
Agent	0	3	1.11±0.83
Symptom	0	4	1.14±0.92
Cause and effect	0	3	0.75±0.60
Total	0	24	7.94±5.89

The mean age of women was 40.41±12.07 (min 20, max 80) and the mean age at first sexual intercourse was 22.09±4.14 (min 15, max 37). The distribution of women's socio-demographic characteristics and mean STD knowledge test scores are given in Table 2.

Table 2: Distribution of Mean STD Knowledge Test Scores According to Socio-Demographic Characteristics (n=400)

Socio-demographic characteristics	n	%	STD knowledge test X̄±SD
Age			
20-39 (a)	184	46.0	9.33±0.44
40-59 (b)	190	47.5	7.94±5.89
60-80 (c)	26	6.5	6.83±5.66
F			10.164
p*			**0.000**
Difference **			a>c
Education status			
Primary school (a)	90	22.5	3.93±3.87
High School (b)	118	29.5	6.37±5.47
Undergraduate level (c)	152	38.0	10.07±5.15
Postgraduate (d)	40	10.0	13.45±5.91
F			47.061
p*			**0.000**
Difference **			d>c>b>a
Employment status			
Yes	220	55.0	8.84±5.86
No	180	45.0	6.83±5.76
t			3.448
p***			**0.001**
Place of residence			
Province (a)	266	66.5	8.96±6.01
District (b)	118	29.5	5.86±4.85
Village (c)	16	4.0	6.25±4.72
F			12.672
p*			**0.000**
Difference **			a>b

**One way Anova test ** Scheffe test ***Independent Sample T test*

Distribution of participants' STD-related characteristics and mean STD knowledge test scores Table 3. The mean STD knowledge test scores of women who had a history of STDs, who had received information on this subject before, who had received this information from health professionals, and who wanted to access this information through health professionals or mass media were found to be statistically significantly higher.

Table 3: Distribution of Mean STD Knowledge Test Scores According to STD-Related Characteristics

STD-related features	**n**	**%**	**STD knowledge test $\bar{X}$±SD**
STD history (n=400)			
Yes	42	10.5	11.74±6.94
No	358	89.5	7.49±5.60
t			3.794
p***			**0.000**
Previous information about STDs (n=400)			
Yes	158	39.5	11.31±5.90
No	242	60.5	5.73±4.73
t			10.432
p***			**0.000**
Source of information on STDs (n=158)			
Health professional (a)	98	24.5	12.53±5.69
Relatives/friends (b)	10	2.5	8.80±2.78
Tv/radio/internet (c)	50	12.5	5.02±0.71
F			6.007
p*			**0.003**
Difference **			a>c
Who/where would you like to receive training on STDs (n=400)			
Health professional (a)	354	88.5	8.18±5.92
Relatives/friends (b)	22	5.5	4.72±2.47
Tv/radio/internet (c)	24	6.0	8.16±5.30
F			6.096
p*			**0.002**
Difference **			a, c>b

**One-way Anova test ** Scheffe test ***Independent Sample T test*

Distribution of mean STD knowledge test scores according to participants' risky sexual behaviors Table 4.

According to Pearson correlation analysis, there is a statistically significant relationship between the age at first sexual intercourse and the scale total score ($r=0.654$; $p<0.05$). There is an inverse relationship between age and scale total score ($r=-0.706$; $p<0.05$), which is statistically significant at a high level.

Table 4: Distribution of Mean Scores of Sexual Behaviors and STD Knowledge Test (n=400)

Sexual behavior	**n**	**%**	**STD knowledge test X̄±SD**
Age at first sexual experience			
15-19 (a)	116	29.0	6.00±5.63
20-24 (b)	176	44.0	9.32±6.26
25-29 (c)	84	21.0	8.02±4.92
30-37 (d)	24	6.0	9.08±5.34
F			6.753
p*			**0.000**
Difference **			b>a
Polygamy			
Yes	48	12.0	7.43±5.61
No	352	88.0	11.66±6.59
t			4.245
p***			**0.000**
The partner has more than one partner			
Yes (a)	80	20.0	6.23±4.76
No (b)	226	56.5	10.30±6.03
Does not know (c)	94	23.5	7.81±6.02
F			10.915
p*			**0.000**
Difference **			b>a
One-night sexual experience			
Yes	26	6.5	7.57±5.66
No	374	93.5	13.15±6.72
t			4.126
p***			**0.000**
Condom use			
Yes	156	39.0	9.80±5.98
No	244	61.0	6.74±5.52
t			5.141
p***			**0.000**
Pre-sexual alcohol use			
Yes	146	36.5	6.93±5.86
No	254	63.5	9.68±5.55
t			4.600
p***			**0.000**
Pre-sexual substance use			
Yes	20	5.0	6.74±5.52
No	380	95.0	9.80±5.98
t			3.972
p***			**0.001**

Discussion

In the study, women's level of knowledge about STDs was found to be low. The level of knowledge about STDs has a critical importance in terms of protecting the health of individuals, preventing diseases, managing early diagnosis and treatment processes well, increasing social health standards and evaluating the impact of educational programs. In a study conducted with

couples preparing for marriage, it was determined that women's knowledge about STDs was at an intermediate level, and more than half of the women did not receive education on this subject (Kısa et al., 2013). In the study conducted by Karkın et al. (2021), it was similarly observed that their knowledge levels were low (Karkın et al., 2021). In another study, it was found that approximately half of the women had no knowledge about STDs (Karakaya, 2019). These results suggest that women should be more informed about STDs and should be provided with access to comprehensive education programs, especially in the premarital period.

Sexually transmitted diseases have been seen at increasing rates all over the world in recent years. Determining the level of knowledge about STDs in the community is of great importance in terms of increasing awareness of these diseases and thus protecting and improving public health. For this reason, the data obtained in our study, which was planned to determine the STD knowledge levels and risky sexual behaviors of women admitted to the hospital for any reason, are similar to the literature.

Research in the field of women's health shows that age is an important determinant of reproductive and sexual health knowledge levels. In studies, it has been reported that STD knowledge levels of women aged 40 years and younger living in rural areas are higher than those of women over 40 years of age (Karkın et al., 2021; Green and Tones, 2018). Similarly, in a study conducted by Kısa et al. (2013) with women preparing for marriage, it was revealed that the STD knowledge scores of women under the age of 20 were significantly higher than those of older age groups. Nguyen et al. (2019) also found that younger age was strongly associated with higher level of knowledge about STDs. In the current study, similar to the literature, it was found that STD knowledge levels decreased with increasing age. The decrease in the level of knowledge with increasing age indicates that the frequency of sexual activity decreases, establishing secure relationships with marital bonds and women do not feel the need to receive information on this subject. The fact that young women have more knowledge can be explained by access to digital resources and opportunities to participate in modern health education programs.

In the study, it was determined that knowledge levels increased significantly with increasing educational level, employment in an income-generating job, and development of the place of residence. In the study by Karkın et al. (2021) examining the STD knowledge levels of women, it was observed that the STD knowledge levels of women living in the district were higher than those living in the village, and those with a bachelor's degree and above had higher STD knowledge levels than women with high school and below (Karkın et al., 2021). In a study

conducted by Ulu et al. (2015) to determine the level of knowledge about STDs in a region with low socioeconomic level in Ankara, the rate of those who stated that they did not have enough information on the subject was 52.2% and the rate of those who needed to learn more about STDs was 90% (Ulu et al., 2015). In the study conducted by Karakaya (2019) in Konya/Karatay district, it was determined that 82.3% of women did not work in an income-generating job, 87.5% had high school education or less, and 86.5% of women had no knowledge about STDs. In addition, it was also determined that the knowledge level of women living in the village was lower than those living in the district center (Karakaya, 2019). It is seen that as the socio-economic level of individuals increases, they have less difficulty in accessing the information they need. It is thought that individuals with higher socio-economic status are more knowledgeable about STDs because they generally have access to better educational opportunities, health services and information resources.

In the study, it was determined that more than half of the participants (60.5%) had not received information about STDs before, those who received information from health professionals had significantly higher levels of knowledge than those who received information from mass media such as TV/radio/internet, and those who wanted to receive information from relatives/friends had the lowest level of knowledge. Studies show that a significant proportion of women (60.5%) do not have information about sexual and reproductive health (SRH) and that the knowledge levels of those who receive information from health professionals are higher than those who receive information from the media or relatives/friends (Emül et al., 2020; Karkın et al., 2021). Similarly, in a study conducted with women who migrated from Syria, it was found that 60.4% of women received education on STDs, and most of this group indicated family or health personnel as the source of education (Emül et al., 2020). In Karakaya's (2019) study, it was found that only 13.5% of women received education on STDs, and that they received this information mostly from health institutions or the media. Nearly half (47.1%) of young people, who are considered to be in risk groups, stated that they need more information about STDs (Sayar and Yarar, 2021). In other studies, on the effect of education on the level of STD knowledge, it was determined that the level of knowledge increased as the level of education increased (Lyons et al., 2017; Vural et al., 2015). Women's low level of knowledge leads them to be unaware of the risks related to sexual health; therefore, it is of great importance for health professionals to take initiatives in this regard.

Individuals with early sexual experience may be at higher risk due to lack of access to adequate information on STDs. This, coupled with their lack of knowledge on prevention

methods, leads young people to take unconscious risks related to STDs (Diadhiou et al., 2019). In the current study, it was determined that the STD knowledge scores of those who had their first sexual intercourse in adolescence, had more than one sexual partner, had polyamorous sexual partners, and had one-night sexual intercourse were lower. In previous studies, it is stated that individuals who start sexual intercourse at an early age have limited awareness of STDs, whereas individuals who start sexual life at an advanced age make more informed choices (Balakrishnan et al., 2023; Osuafor and Okoli, 2021). In this context, postponing the age of first sexual intercourse to older ages and informing individuals about sexual health issues plays a critical role in preventing the spread of STDs.

Research on sexually transmitted diseases (STDs) shows that having multiple sexual partners, having more than one sexual partner, having sex with sex workers, and having recently changed sexual partners increase the risk of STDs. Such high-risk sexual behaviors play a critical role in the spread of STDs (Diadhiou et al., 2019; Balakrishnan et al., 2023). Osuafor and Okoli (2021) found that individuals with multiple sexual partners had insufficient knowledge about STDs and this deficiency increased the risk of STD development. It was observed that individuals with low STD knowledge were more likely to engage in risky behaviors such as having more than one partner (Osuafor and Okoli, 2021). In another study, it was emphasized that individuals who have a relationship with sex workers have insufficient STD knowledge, and this lack of knowledge may lead to risky behaviors. It was observed that this deficiency further increases the risk of STDs by increasing the rates of unprotected sexual intercourse (Tounkara et al., 2020). Balakrishnan et al. (2023) also stated that low level of knowledge about STDs is associated with risky sexual behaviors and this deficiency accelerates the spread of STDs. While these behaviors expose individuals more to various STD pathogens, the fact that these individuals generally have lower levels of knowledge makes it difficult for them to implement protection and prevention strategies and therefore may lead to further spread of STDs.

It was found that the STD knowledge level of condom users in sexual intercourse was higher than non-users. A high level of knowledge about condom use is an important factor in preventing risky behaviors and preventing the spread of STDs (Ayaz and Zarakol, 2021; Barriuso-Ortega et al., 2024; Weller and Davis, 2002). In the literature, it is stated that individuals who use condoms generally have higher levels of knowledge about STDs (Barriuso-Ortega et al., 2024; Weller and Davis, 2002). Weller and Davis (2002) stated that individuals

who use condoms are generally more prone to avoid risky sexual behaviors and are more aware of contraceptive methods.

In this study, the knowledge score of individuals who consumed alcohol and used substances before sexual intercourse was found to be lower than those who did not. Alcohol consumption before sexual intercourse is an important factor that can directly affect the sexual health behaviors of individuals. In previous studies, it has been determined that individuals who use alcohol have less knowledge about sexual health and pre-STD preventive measures and their ability to remember or use sexual health information may also be weakened (Testa, 2023; Sullivan et al., 2020). These findings emphasize the importance of designing sexual health education and information campaigns to address the risks associated with alcohol consumption. Similarly, substance use can also affect individuals' decision-making abilities and risk perceptions, leading to unprotected sexual intercourse and a weakened ability to control sexual behaviors. Individuals who use substances may be less aware of sexual health information and may have difficulty in applying this information (Cho and Yang, 2023). Sullivan et al. (2020) reported that individuals who use substances are more likely to have unprotected sex and less likely to practice sexual health protection behaviors. It was also reported that substance users were more likely to continue risky sexual behaviors and not to use contraceptive methods while maintaining these behaviors (Sullivan et al., 2020). In another study, it was pointed out that sexual health education and information activities should be carried out in a more comprehensive and specialized manner in communities where substance use is common (Testa, 2023). This situation shows that substance use not only makes it difficult for individuals to obtain sexual health information, but also to apply this information correctly.

Limitations

The limitations of the study are that it was conducted only with women and in a single institution.

Conclusion

This study examined the effect of risky sexual behaviors on women's knowledge about STDs. The findings of the study revealed that, in general, women do not have sufficient knowledge about STDs and this lack of knowledge is affected by risky sexual behaviors. In particular, age, education, employment status and place of permanent residence, history of STDs, getting information about STDs, source of information and from whom they wanted to get the information made a difference between the mean scores of knowledge levels about

STDs. In addition, it was found that women with higher levels of knowledge were less likely to engage in risky sexual behaviors.

Comprehensive STD education programs should be established for young women, detailed information about sexual health and prevention methods should be provided in these programs and supported with practical applications. In this sense, nurses should comprehend the importance of the subject, raise awareness in interviews with women, provide counseling, and carry out activities to correct misinformation. Counseling services and information seminars about STDs should be organized in community health centers, especially targeting women with low education levels. Public health campaigns should be conducted to raise awareness of STDs using various communication channels such as television, radio, internet and social media. These campaigns should inform about the risks of unprotected sexual intercourse, especially targeting the young population. Continuous data on STDs should be collected and in the light of this data, more research should be conducted on women's knowledge and risky sexual behaviors. These studies will contribute to the development of more effective programs to meet the needs of the community. These recommendations may help reduce risky sexual behaviors by increasing women's level of knowledge about STDs. In this way, sexual and general health in the community can be improved.

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