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Kadınların HIV/AIDS'e Yönelik Bilgi Düzeyleri ve Tutumlarının Belirlenmesi

Determination of Women's Level of Knowledge and Attitudes towards AIDS

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ÖZ

Amaç: Bu araştırma, kadınların HIV/AIDS'e yönelik bilgi düzeyleri ve tutumlarının belirlenmesini amaçlamıştır.
Yöntem: Araştırmada kesitsel araştırma deseni kullanılmıştır. Türkiye'nin doğusundaki bir il merkezinde yer alan ASM'lere (Aile Sağlığı Merkezleri) kayıtlı 18-65 yaş arası kadınlarla Mayıs – Ağustos 2021 tarihleri arasında yürütülmüştür. Araştırmanın evrenini, söz konusu birimlere kayıtlı ve araştırma kriterlerini sağlayan kadınlar, örneklemi ise evrenin bilinmediği durumlarda kullanılan örnekleme yöntemine göre hesaplanarak toplamda 384 kadın oluşturmuştur. Araştırmanın verilerinin toplanmasında Tanıtıcı Bilgi Formu, AIDS Bilgi Ölçeği ve AIDS Tutum Ölçeği kullanılmıştır.
Bulgular: Kadınların yaş ortalamasının 26.91±9.20 olduğu, %74.7'sinin daha önce HIV/AIDS'i duyduğu, %62.5'inin ise HIV/AIDS hakkında bilgi sahibi olduğu ve bunların %75.8'inin arkadaş, sosyal çevre veya medya aracılığıyla bilgi edindiği belirlendi. Grubun HIV/AIDS Bilgi Ölçeği puan ortalamasının 7.81±4.92, HIV/AIDS Tutum Ölçeği puan ortalamasının ise 53.38±10.23 olduğu belirlendi. HIV/AIDS Bilgi Ölçeği puan ortalaması, üniversite mezunu olanlarda, çalışanlarda, ve HIV/AIDS hakkında bilgi sahibi olduğunu ifade edenlerde istatistiksel açıdan anlamlı fark bulundu ($p<0.05$). HIV/AIDS Tutum Ölçeği puan ortalamasının ise üniversite mezunu olanlarda istatistiksel açıdan anlamlı fark bulundu ($p<0.05$).
Sonuç: Bu araştırmada yüksek eğitim düzeyinin HIV/AIDS'e yönelik bilgi ve tutumu olumlu yönde etkilediği belirlendi. Halk sağlığı hemşireleri tarafından düşük eğitim düzeyine sahip kadınlara yönelik uygun eğitim materyalleri ve yöntemleri kullanılarak konu ile ilgili eğitim programları düzenlenebilir.

Anahtar Kelimeler: HIV/AIDS, Bilgi, Kadın, Tutum.

ABSTRACT

Objective: This study aims to determine women's level of knowledge and attitudes towards HIV/AIDS.
Method: Cross-sectional design was used for this study. It included women who were aged 18 to 65 years and registered in FHCs (Family Health Centers) a city in eastern Turkey between May and August 2021. Women registered in these centers meeting the research criteria consisted of the target population, and the sample was 384 women selected using the sampling method with an unknown target population. Data collection was performed using the Personal Information Form, the AIDS Knowledge Scale, and the AIDS Attitude Scale.
Results: Participating women's average age was 26.91±9.20, and 74.7% reportedly heard about HIV/AIDS before; 62.5% knew about HIV/AIDS; and 75.8% of these women obtained information from friends, social circle, or media. The HIV/AIDS Knowledge Scale mean score of the group was 7.81±4.92, and the HIV/AIDS Attitude Scale mean score was 53.38±10.23. The HIV/AIDS Knowledge Scale mean was significantly higher in university graduates, in those worked and reportedly knew about HIV/AIDS ($p<0.05$). University graduates' HIV/AIDS Attitude Scale mean was significantly higher ($p<0.05$).
Conclusion: In this study, it was determined that higher education level had a positive effect on knowledge and attitude toward HIV/AIDS. Public health nurses could organize education programs about the issue by using appropriate materials and methods for women with low education levels.

Key words: HIV/AIDS, Attitude, Knowledge, Women.

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1. INTRODUCTION

Acquired Immune Deficiency Syndrome (AIDS) is an important public health issue worldwide. AIDS is a contagious immune system disease caused by Human Immunodeficiency Virus (HIV) and results in the damage of the defense power of the body as it progresses (1).

The Joint United Nations Programme on HIV/AIDS (UNAIDS) reported that in 2018 around 1,7 million people worldwide were infected with diseases related to HIV/AIDS and approximately 770 thousand HIV/AIDS -related deaths occurred. Global trends in the fight against HIV/AIDS, particularly the increase in access to antiretrovirals, have reduced deaths by causing a decrease in the HIV/AIDS incidence in many regions of the world (2,3). When compared to the year 2010, the incidence of HIV/AIDS was found to decrease by 16% and HIV/AIDS-related deaths were reported to decrease by 33%. Despite all these attainments in terms of understanding HIV/AIDS scientifically and preventing it, people in many parts of the world are still infected with the virus, and there is an important continuing HIV/AIDS load globally (3, 4). The official records of the Ministry of Health in Turkey indicate the HIV/AIDS diagnosis as 83.9% in men and 16.1% in women as of the end of 2022 (5). An analysis of regional data show that most individuals living with HIV/AIDS are in countries with low or medium income, and more than half of them are women (6).

Limited education, employment, and social and political participation provided to women in countries with low and medium income levels cause women to be disproportionately exposed to HIV/AIDS risk. Similarly, lack of access to health information, financial dependence on male partners, traditional patriarchy, sexual relationships and these inequalities in marriages make women more vulnerable to HIV/AIDS (7). Studies in the literature indicate that particularly women who have low education and low economic status and who live in rural areas have lower knowledge levels about HIV/AIDS (6,8).

HIV/AIDS is considered not only a medical but also a social problem. Individuals living with HIV/AIDS are stigmatized. Stigmatization, by causing negative effects on the individual and thus some barriers to the treatment and diagnosis of the disease, causes the disease to spread. Therefore, understanding attitudes towards individuals who have HIV/AIDS is of vital importance for the public health measures for taking the virus under control (9). In a similar vein, knowing HIV/AIDS better, taking protective measures (accepting the use of condom, reducing the number of sexual partners, testing, and agreeing to receive treatment and support), and generating health-promoting behaviors are of importance (10). Inadequate and inaccurate access to information about HIV/AIDS in sexually active women could cause difficulties in the fight against this disease. Knowledge, behavior and attitude characteristics are also known to vary according to socioeconomic and cultural factors. Taking preventive measures and developing education programs and interventions require knowing HIV/AIDS better in developing countries including ours. Hence, there is a need to define the regional characteristics such as women's knowledge, attitudes and behaviors about HIV/AIDS. For this reason, the purpose in this study is to determine women's knowledge levels and attitudes about HIV/AIDS.

For this purpose, local characteristics such as women's knowledge, attitudes and behaviors about HIV/AIDS should be defined first.

2. METHOD

The present study, which used a cross-sectional design, was conducted with women aged 18 and 65 registered in Family Health Centers in one of the cities in eastern Turkey (May-August, 2021). Women registered in these units who met the research criteria consisted of the target population. The sampling method with an unknown population was used to calculate the sample size (margin of error %5, confidence interval %95), which was composed of 384 individuals (11). The individuals were selected haphazardly.

Inclusion Criteria

Volunteer women between the ages of 18-65, who were able to understand and answer the research questions and did not have a psychiatric illness, were included in the study.

Ethical Considerations

Before starting the study, ethics committee approval (no: E.6160) was obtained from the Scientific Research Ethics Committee of the university. Written consent was obtained for the scales used in the study, and verbal consent was obtained from the volunteers.

Measurements

Data collection was performed using the Socio-demographic Form, the AIDS Knowledge Scale, and the AIDS Attitude Scale.

The Socio-Demographic Form: The form prepared by the researchers was a questionnaire form that is composed of 13 questions about age, education, working and income level, family planning method, sexually transmitted diseases, and HIV/AIDS (1,6,12).

The AIDS Knowledge Scale: The scale was developed by Aydemir et al. to determine individuals' knowledge level about HIV/AIDS (12). Each item of the scale, which was composed of 21 items and three factors, is responded based on "Right", "I am not sure" and "Wrong" options. The scale has no cut-off points. A high score on the scale indicates high knowledge. The reliability of the scale was calculated using Kuder-Richardson-20 coefficient, and the general reliability of the knowledge scale was found .76. Kuder-Richardson-20 coefficients were .85 for the ways of transmission, the first factor in the knowledge scale; .62 for the general knowledge and protection, the second factor; and .63 for the treatment, the third factor. High scores show high knowledge levels (12). This study found the Kuder-Richardson-20 coefficient of the scale as .84.

The AIDS Attitude Scale: The scale was developed by Aydemir et al. to determine individuals' attitudes about HIV/AIDS. The scale, which had a total of 17 items and two sub-scales, is responded on a 5-point Likert scale. The scale has no cut-off points. A high score on the scale represents a positive attitude. Cronbach's alpha value was reported 0.90. Cronbach's alpha values were 0.91 for the "Negative Attitude toward People with HIV/AIDS" factor and 0.75 for the "Stigma" factor (12). This study found the Cronbach's alpha value of the scale as 0.85.

Data Collection/Procedure

Data collection was performed face-to-face; verbal consent was received from women who agreed to participate in the study. Filling in each questionnaire took about 10-15 minutes.

Statistical Analysis

Data were analyzed in SPSS statistical program using descriptive statistical analyses (numbers, percentages, means). Whether the data were distributed normally was determined using histogram, skewness and kurtosis values, and Kolmogorov Smirnov analysis. Since the data set was not distributed normally, while the comparison of the mean scores in the independent two groups was done using the Mann Whitney U test, the comparison of the mean scores in more than two independent groups was done using Kruskal Wallis. Spearman correlation analysis was performed to determine the relationship between the scale mean scores. Statistical significance was taken $p<0.05$.

3. RESULTS

Table 1. Women's Socio-demographic Characteristics (n=384).

Socio-demographic Characteristics		**n**	**%**
Marital Status	Married	148	38.5
	Single	236	61.5
Education Level	Primary School	66	17.2
	High School	110	28.6
	University and above	208	54.2
Working or not	Working	96	25.0
	Not working	288	75.0
Income level	Income more than expenses	41	10.7
	Income equal to expenses	171	44.5
	Income less than expenses	172	44.8
Family planning method used	Condom	43	11.2
	Contraceptive Pills, shots, IUD	98	25.5
	Traditional methods	33	8.6
	No methods used	210	54.7
Level of knowledge about sexually transmitted diseases	Has no knowledge	49	12.8
	Has little knowledge	232	60.4
	Has adequate knowledge	103	26.8
Needing health education about sexually transmitted diseases	Yes	260	67.7
	No	124	32.3
Having tested for any sexually transmitted diseases	Yes	33	8.6
	No	351	91.4
Having tested for HIV/AIDS	Yes	33	8.6
	No	351	91.4
Having heard about HIV/AIDS before	Yes	287	74.7
	No	97	25.3
Knowing about HIV/AIDS	Yes	240	62.5
	No	144	37.5
Source of knowledge about HIV/AIDS (n=240)	Friends/Social circle/Media	182	75.8
	Doctor/Health Personnel	58	24.2
	$\overline{X}$ **±SD**	**Min.**	**Max.**
Age	26.91±9.20	18	65
AIDS Knowledge Scale	7.81±4.92	0	20
AIDS Attitude Scale	53.38±10.23	17	83

The average age of participating women was 26.91±9.20. Of all the participants, 61.5% were single, 54.2% were university graduates, 75% did not work, 44.8% had income less than expenses, and 54.7% did not use family planning methods. In addition, 60.4% knew very little about sexually transmitted diseases, 67.7% needed health education about this issue, 91.4% did not have test for HIV/AIDS, 91.4% did not have any tests for sexually transmitted diseases, 74.7% heard about HIV/AIDS before, 62.5% knew about HIV/AIDS, and 75.8% of this group obtained information through friends, social circle or media. The HIV/AIDS Knowledge Scale mean score of the group was 7.81±4.92, and the HIV/AIDS Attitude Scale mean score was 53.38±10.23 (Table 1).

The HIV/AIDS Knowledge Scale mean score was significantly higher in those who graduated from university, who worked, and who reportedly knew about HIV/AIDS ($p<0.05$). The HIV/AIDS Attitude Scale mean score was significantly higher in those who were university graduates ($p<0.05$) (Table 2).

Table 2. Women's HIV/AIDS Knowledge and Attitude Scale Mean Scores according to Some Characteristics (n=384).

			Knowledge Scale		**Attitude Scale**	
		n	$\overline{X}$ **±SD**	**Test value and significance**	$\overline{X}$ **±SD**	**Test value and significance**
Marital Status	Married	148	7.28±5.06	U=15632.0	52.43±9.70	U=15626.0
	Single	236	8.14±4.81	p=.083	53.97±10.52	p=.082
Education Level	Primary school	66	6.30±3.10	KW=13.283	51.65±8.80	KW=7.824
	High school	110	7.27±4.63	**p=.001**	52.02±9.54	**p=.020**
	University and above	208	8.57±5.39		54.64±10.85	
Working or not	Working	96	8.95±4.96	U=11469.5	53.31±10.77	U=13371.5
	Not working	288	7.43±4.86	**p=.012**	53.40±10.06	p=.630
Income level	Income more than expenses	41	8.68±5.66	KW=1.036 p=.596	53.85±11.03	KW=.207 p=.902
	Income equal to expenses	171	7.86±4.60		53.30±8.12	
	Income less than expenses	172	7.55±5.04		53.34±11.84	
Family planning method used	Using a family planning method	43	8.23±4.70	U=6966.0 p=.593	54.42±9.30	U=6941.0 p=.568
	Not using a family planning method	341	7.76±4.95		53.24±10.34	
Having tested for HIV/AIDS	Yes	33	7.27±3.24	U=5357.5	54.21±7.35	U=5280.0
	No	351	7.86±5.05	p=.475	53.30±10.46	p=.401
Knowing about sexually transmitted diseases	Yes	240	8.97±5.10	U=11143.0	53.34±11.29	U=16843.0
	No	144	5.88±3.92	**p=.001**	53.44±8.18	p=.678
Source of knowledge about HIV/AIDS (n=240)	Friends/Social circle /Media	182	8.60±5.05	U=4465.5 p=.077	53.48±11.45	U=4962.5 p=.493
	Doctor/Health personnel	58	10.14±5.12		52.90±10.87	

The HIV/AIDS Knowledge Scale mean score and the HIV/AIDS Attitude Scale mean score indicated no significant relationship (Table 3).

Table 3. Relationship Between Knowledge and Attitude.

		AIDS Knowledge Scale
AIDS Attitude Scale	r	.057
	p	.265

4. DISCUSSION

This study aimed to determine women's knowledge level and attitudes about HIV/AIDS. Women's HIV/AIDS Knowledge Scale mean score was 7.81±4.92, and the HIV/AIDS Attitude Scale mean score was 53.38±10.23. The HIV/AIDS Knowledge Scale mean score was high in those who graduated from university, who worked, and who reportedly knew about HIV/AIDS. The HIV/AIDS Attitude Scale mean score was significantly higher in university graduates. More than half of the women in this study did not use family planning methods, and when those who used traditional methods were added, this ratio was found almost 63%. Besides, three out of every four women had insufficient or no knowledge about Sexually Transmitted Diseases (STDs), and more than half of the women wanted to receive training on STDs. Besides, the social environment and the media were considered sources of information about HIV/AIDS by almost half of the women in this study. An analysis of the studies conducted in our country similarly reported that women's use of family planning was not at the desired level, and the rate of use of traditional methods was high (13). In addition, women's level of knowledge about STDs was found to be inadequate and they wanted to receive health education about STDs (14).

When the studies conducted in different countries were analyzed (Bangladashi women in the study conducted by Yaya et al. (13), Iranian women in the study conducted by Zarai et al. (15), and Pakistani women in the study conducted by Iqbal et al. (16) also showed that women's education level affected HIV/AIDS knowledge levels and attitudes. Studies reported that as the education level increased, HIV/AIDS knowledge level increased and more positive attitudes about HIV/AIDS were demonstrated (15-17). Knowledge increases as the education level increases. Therefore, a higher level of knowledge about HIV/AIDS is somewhat expected in women with high education levels.

Studies in the literature show that women who work and who have a high welfare level also have higher HIV/AIDS knowledge levels due to factors such as their higher awareness about protecting their health and taking measures and having easier access to information (18,19). The HIV/AIDS knowledge level of working women was found to be higher in this study, which was parallel with the cited sources.

This study found that the HIV/AIDS Knowledge Scale mean score was significantly higher in women who reportedly knew about HIV/AIDS. The study conducted by Alemu et al. (20) also reported that the HIV/AIDS Knowledge Scale mean scores were significantly higher in women who reported to have education before and knew about HIV/AIDS (20).

Limitation of the Study

The study results can be generalized only to this group.

5. CONCLUSION

In this study, it was determined that higher education level had a positive effect on knowledge and attitude toward HIV/AIDS. Level of knowledge was found to be higher in those who reported to have knowledge about HIV/AIDS. The results of this study indicate the need for educating women with low education levels about HIV/AIDS and providing them with appropriate education programs. HIV/AIDS. awareness training programs can be organized by

public health nurses for women with low education levels. An analysis of the sources of participating women's knowledge about HIV/AIDS showed that the proportion was high in women who obtained information from the media. For this reason, media could be utilized as a tool to raise women's awareness. It may also be recommended to include information about HIV/AIDS and sexually transmitted diseases within the scope of premarital counseling services.

Ethical Consideration of the Study

Prior to the study, Ethics Committee approval was obtained from the Scientific Research Ethics Committee of the University (dated 25.04.2021 no: E.6160), and verbal consent was received from the individuals who participated in the study after they were informed about the purpose of the study online.

Conflict of Interest Statement

The authors report no actual or potential conflicts of interest.

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