ATATURK
UNIVERSITY
PUBLICATIONS

Advances *in* Women's Studies

Formerly: Atatürk University Journal of Women's Studies
Official journal of Atatürk University Women's Studies Application and Research Center

Volume 6 • Issue I • June 2024

EISSN 2822-4426
https://dergipark.org.tr/en/pub/aws

Advances in Women's Studies

Advances in Women's Studies

About the Advances in Women's Studies

Advances in Women's Studies is a peer reviewed, open access, online-only journal published by the Atatürk University.

Advances in Women's Studies is a biannual journal published in both English and Turkish. The journal has issues in June and December.

Aims, Scope, and Audience

Advances in Women's Studies aims to make a contribution to the existing literature by publishing high-quality manuscripts that focus on research and studies covering all aspects of women's studies. The journal publishes original articles, reviews, case reports, letters to the editors, and book reviews that adhere to ethical guidelines. The scope of the journal encompasses various disciplines, such as sociology, philosophy, history, language and literature, art, cultural studies, law, political science, economy, health, play, theater, film, and other related areas.

The journal's target audience includes academics, researchers, professionals, students, as well as relevant professional and academic bodies and institutions.

Journal History

As of 2022, the journal has changed its title to Advances in Women's Studies.

Current Title (2022-…)

Advances in Women's Studies
EISSN: 2822-4426

Previous Title (2019-2021)

Atatürk University Journal of Women's Research/Atatürk Üniversitesi Kadın Araştırmaları Dergisi
EISSN: 2687-5225

Abstracting and Indexing

Advances in Women's Studies is covered in the following abstracting and indexing databases;

- DOAJ
- EBSCO
- China National Knowledge Infrastructure (CNKI)

You can find the current version of the Instructions to Authors at https://dergipark.org.tr/en/pub/aws/writing-rules

Disclaimer

The statements or opinions expressed in the manuscripts published in the journal reflect the views of the author(s) and not the views of the editors, editorial board, and/or publisher. The editors, editorial board, and publisher are not responsible for the content of the manuscripts and do not necessarily endorse the views expressed in them. It is the responsibility of the authors to ensure that their work is accurate and well-researched, and the views expressed in their manuscripts are their own. The editors, editorial board, and publisher simply provide a platform for the authors to share their work with the scientific community.

Open Access Statement

Contact (Editor in Chief) / İletişim
Reva BALCI AKPINAR
Atatürk University, Faculty of Nursing, Department of Nursing Fundamentals, Erzurum, Turkiye
✉ atakad@atauni.edu.tr
https://dergipark.org.tr/en/pub/aws

Contact (Publisher) / İletişim (Yayıncı)
Atatürk University
Atatürk University, Erzurum, Turkey
Atatürk Üniversitesi Rektörlüğü 25240 Erzurum, Turkiye
✉ ataunijournals@atauni.edu.tr
https://bilimseldergiler.atauni.edu.tr
☎ +90 442 231 15 16

CONTENTS / İÇİNDEKİLER

RESEARCH ARTICLES/ ARAŞTIRMA MAKALELERİ

REVIEW/ DERLEME

ATATÜRK ÜNİVERSİTESİ YAYINLARI
ATATURK UNIVERSITY PUBLICATIONS

Research Article/Araştırma Makalesi DOI: 10.51621/aws.1429100

Complementary and Alternative Treatment Methods Used by Infertile Women in Turkiye: A Cross-Sectional Study

Türkiye'de İnfertil Kadınların Kullandıkları Tamamlayıcı ve Alternatif Tedavi Yöntemleri: Kesitsel Bir Çalışma

Aleyna BULUT[1]
Yasemin AYDIN KARTAL[1]
Leyla KAYA[2]
Sibel YILMAZ[3]
Müşerref Banu YILMAZ[2]

[1]University of Health Sciences, Faculty of Health Sciences, Department of Midwifery, İstanbul, Turkiye
[2] University of Health and Sciences, Zeynep Kamil Woman's and Children Research and Training Hospital, İstanbul, Turkiye
[3]Medicana Ataşehir Hospital, İstanbul, Turkiye

Received/Geliş Tarihi 31.01.2024
Accepted/Kabul Tarihi 21.05.2024
Publication Date/Yayın Tarihi 14.06.2024

Corresponding author/Sorumlu Yazar:
Aleyna BULUT
E-mail: aleyna.bulut@sbu.edu.tr
Cite this article: Bulut, A., Aydın Kartal, Y., Kaya, L., Yılmaz, S., & Yılmaz, M.B. (2024). Complementary and Alternative Treatment Methods Used By Infertile Women In Turkiye: A Cross-Sectional Study. *Advances* in Women's Studies, 6(1), 1-10. Doi: 10.51621/aws.1429100

ABSTRACT

Objective: This study aims to determine the complementary and alternative therapy (CAM) methods used among infertile women in Turkiye, the prevalence of their use and the factors affecting their use.
Method: The sample of the descriptive and cross-sectional study consisted of 142 women who applied to the Assisted Reproductive Treatment Centre of a public hospital and volunteered to participate in the study. The data were collected with "Personal Information Form" and "Complementary and Alternative Medicine Approaches Scale (CAMAS)". Descriptive statistics, Mann-Whitney U, Kruskal Wallis Test were used in the evaluation of the data.
Results: While the average age of the women who contributed to the study was found to be 29.77±4.83 years. When the CAM methods used by women are examined, they are mostly prayer (88.0%), prayer (namaz) (78.2%), vow (25.4%), visit to the tomb (24.6%), amulet (20.4%), black pepper (17.6%), ginseng (15.5%), astralagus (13.4%), going to a teacher and having yourself read (13.4%), shark cartilage (13.4%), turtle blood (13.4%), lead casting (4.2%), reiki (2.8%), bioenergy (2.1%) and hypnosis it was determined to be (1.4%). When the mean scores in the CAMAS subscales were examined, it was determined that the highest score was body-mind approaches (40.46±17.37).
Conclusion: In line with the research findings, it was determined that the use of CAM was common among infertile women in Turkiye and the most frequently used approaches were spiritual and herbal methods. Health professionals need to evaluate infertile women about their use of CAM methods and inform women about these methods.

Keywords: Assisted reproductive therapies, complementary and alternative treatment, infertility, women

ÖZ

Amaç: İnfertil kadınların kullandıkları tamamlayıcı ve alternatif tedavi yöntemlerinin kullanımının yaygınlığı ve kullanımı etkileyen faktörlerin belirlenmesi amacı ile yürütüldü.
Yöntem: Tanımlayıcı ve kesitsel desendeki araştırmanın örneklemini, bir kamu hastanesinin Üremeye Yardımcı Tedavi Merkezine başvuran ve araştırmaya katılmaya gönüllü olan 142 kadın oluşturdu. Veriler, "Kişisel Bilgi Formu" ve "Tamamlayıcı ve Alternatif Tıp Yaklaşımları Ölçeği (TATYÖ)" ile toplandı. Verilerin değerlendirilmesinde tanımlayıcı istatistikler, Mann-Whitney U, ANOVA, Kruskal Wallis Testi kullanıldı.
Bulgular: Araştırmaya katkı sağlayan kadınların yaş ortalamasının 29,77±4,83 olduğu tespit edilirken ortalama tedavi süresinin 12,76±16.83 ay olduğu tespit edildi. Kadınların kullandıkları TAT yöntemleri incelendiğinde çoğunlukla dua (%88,0), namaz (%78,2), adak adama (%25,4), yatır ziyareti (%24,6), muska (%20,4), karabaş otu (%17,6), ginseng (%15,5), astralagus (%13,4), hocaya gidip kendini okutturma (%13,4), köpekbalığı kıkırdağı (%13,4), kaplumbağa kanı (%13,4), kurşun döktürme (%4,2), reiki (%2,8), bioenerji (%2,1) ve hipnoz (%1,4) oluğu belirlendi. TATYÖ alt boyutlarındaki puan ortalamaları incelendiğinde en fazla beden-zihin yaklaşımları (40,46±17,37) olduğu belirlendi.
Sonuç: Araştırma bulguları doğrultusunda, Türkiye' deki infertil kadınlar arasında TAT kullanımının yaygın olduğu ve en sık kullanılan yaklaşımların spiritüel ve bitkisel yöntemler olduğu belirlendi. Sağlık profesyonellerinin infertil kadınları TAT yöntemleri kullanma durumları hakkında kadınları değerlendirmeleri ve bu yöntemler hakkında kadınları bilgilendirmeleri gerekmektedir.

Anahtar Kelimeler: İnfertilite, kadın, tamamlayıcı ve alternatif tedavi, yardımcı üreme tedavileri

Introduction

Infertility affects approximately 80-168 million people worldwide. The incidence of female infertility is 6.9-9.3% in developing countries and 3.5-16.7% in developed countries (Kaadaaga et al., 2014; Hwang et al., 2019; Sönmez et al., 2021). It is seen in various studies that infertile women frequently use complementary and alternative treatment methods not only to increase the chance of pregnancy in addition to conventional treatment, but also to alleviate psychological, clinical and physical concerns arising from being diagnosed with infertility and being exposed to various clinical treatment processes (Porat Katz et al., 2016; Hwang et al., 2019; Sönmez et al., 2021).

The World Health Organisation and other studies have reported that more than three-quarters of the world population rely on complementary and alternative medicine for health services (WHO, 2001; Kaadaaga et al., 2014; Ataman et al., 2019). The rate of CAM use among infertile couples in Turkiye is 17.9-92.9% (Özkan et al., 2018; Ataman et al., 2019; Taner & Güneri, 2023), while this rate varies between 41-91% in other countries (Bardaweel et al., 2013; Kaadaaga et al., 2014; Dehghan et al., 2018). Although the CAM methods used vary from country to country according to culture, geography and traditions, it is known that herbal methods, acupuncture, massage, nutritional supplements, mind and body practices (hypnosis, yoga, meditation), homeopathy and psychotherapy are common (Aydın Avcı et al., 2012; Bardaweel et al., 2013; Dehghan et al., 2018).

In a study conducted with infertile women in Israel, it was reported that 34.1% of 323 women used complementary and alternative treatment methods. It was determined that women using CAM improved their quality of life, benefited more from psychosocial support and changed their lifestyle habits (Porat Katz et al., 2016). In a study conducted with Turkish infertile couples, it was determined that 48% of infertile couples used at least one CAM method and the most frequently used CAM method was herbal products (84%). The frequency of CAM use tends to be higher in women than in men. It has been reported that patients who could not achieve pregnancy with previous medical treatments have a higher tendency to use CAM (Sönmez et al., 2021). In a similar study conducted in South Korea, it was determined that 63.5% of the participants used one or more CAM methods during infertility treatment and that CAM use was associated with employment status and duration of infertility treatment. Multivitamin and herbal medicine were found to be the most commonly used CAM methods (Hwang et al., 2019). It is seen that infertile women in different countries and cultures use various CAM methods for different purposes, and women seek an alternative way to avoid despair in this process (Porat-Katz et al., 2016).

This study aims to determine the CAM methods used among infertile women in Turkiye, the prevalence of their use, and the factors affecting their use. Additionally, the study was designed to shed light on the CAM treatments most frequently used by infertile patients in Turkiye and to identify the main information sources recommending the use of CAM in infertility treatment.

Method

The population of the descriptive and cross-sectional study consisted of women who applied to the Assisted Reproductive Treatment Centre of a public hospital in Istanbul between January 2021 and October 2022 and received primary or secondary infertility treatment. In order to calculate the minimum sample size. the formula for determining the sample size was used when the number of elements in the universe was unknown. The incidence of infertility in our country varies between 10% and 20% in the literature (Taşçı et al., 2008; Çetinbaş et al., 2014; Okuducu & Yorulmaz, 2020) and therefore. when the prevalence of the event was taken as 10%. the minimum sample size to be included in the study was 139 (95% confidence interval. α=0.05. d=0.05. p=0.10 and q=0.90) and 142 infertile women constituted the sample of the study.

n=(t2 x pxq)/(d2)

n: sample size

p: The probability of the event of interest occurring: 0.10

q: 1-p (or the probability of not seeing the event of interest) : 0.90

d: accepted±sampling error rate: 0.05

t_(α.sd):α critical value of t table according to degrees of freedom at significance level: 1.96

(1.962 x.0.10x0.90) / (0.05x0.05)= 139 (138.29)

The inclusion criteria were women who were over 18 years of age, diagnosed with primary or secondary infertility, literate, and volunteered to participate in the study, while women with any mental or psychological problems and chronic illnesses were exclusion criteria.

Data Collection Tools

"Personal information form" and "Complementary and Alternative Medicine Approaches Scale" were applied to the participants.

Personal Information Form: This form, designed by researchers based on the literature (Porat-Katz et al., 2016; Hwang et al., 2019; Sönmez et al., 2021), consists of 18 multiple-choice questions. Women's age, week of pregnancy, educational status, professional group, year of marriage, obstetric history and treatment method applied, etc. It consists of questions.

Complementary and Alternative Medicine Approaches Scale (CAMAS): Developed by Gülbeyaz Can et al. (2009) to evaluate the complementary and alternative approaches frequently used by cancer patients in our country. Written permission to use the scale was obtained from the author of the scale. The first version of the scale, which consisted of 55 items, was revised in 2012 and the number of items was increased and changes were made in the scale structure. The current version of the scale, which consists of 76 items, has 5 sub-dimensions: Cognitive-Behavioural Approaches (15 items), Manipulative Approaches (6 items), Alternative Medical Systems (1 item), Energy Approaches (2 items) and Biological Approaches (40 items). The use of the approaches in the sub-dimensions is questioned with 2 questions: (1) How often do you use the following interventions for relaxation? (2) What was your attitude towards the use of the following herbal/nutritional approaches after the diagnosis of the disease? The patient's answers to the first question are scored by giving "Never" - 1 point, "Sometimes" - 2 points, "Often" - 3 points and "Always" - 4 points; the answers to the second question are scored by giving "I stopped" - 0 points, "I started" - 1 point, "I was using them before" - 2 points. In addition, the change in the use of these approaches in patients who stated that they had previously used herbal/nutritional approaches: Reduced - 1 point, increased - 2 points and continued as before - 3 points. To show the distribution of the frequency of use in the distribution table, 2 group % distribution is obtained: In Group 1, there are %'s related to use ("I stopped", "I started", "I was using before"), and in Group 2, there are %'s indicating the change ("I decreased, increased and continued") related to the diagnosis in those who have been using since the past. Scale scores are "0" if the patient does not use or apply the interventions. [Never and stopped], and "1" point [Sometimes, frequently, always, started, decreased, increased, continued as it is] if they use or apply it. The total score of the sub-dimension is calculated by summing the number of items used in the sub-dimension, and the total score of the scale is calculated by summing the total scores of the sub-dimension. The sub-group and total scale scores are converted into a 100-point scale. The minimum score that can be obtained from sub-dimension scores and total score is 0 and the maximum score is 100. An increase in the score is interpreted as an increase in the use of complementary and alternative approaches. For this study, In the study, the Cronbach alpha value of the scale was determined as .87. Cronbach's alpha for this study was determined to be .95.

Ethical Principles of Research

This study was conducted in accordance with the principles of the Declaration of Helsinki. The study was initiated after Ethics Committee approval from a public hospital and permission from the relevant public institution (Zeynep Kamil Women and Children Diseases Traning and Research Hospital Clinical Research Ethics Committee, Date: 18.12.2019, Number: 118). Women who met the sample group selection criteria were informed about the purpose and content of the study, and their written and verbal voluntary consent was obtained.

Data Evaluation

The research data were evaluated using SPSS 25 (IBM SPSS Corp., Armonk, NY, USA) package programme. In the evaluation of the data, number, percentage, mean and standard deviation were used as descriptive statistical analyses. The distribution of the data was evaluated using the Kolmogorov Smirnov test. Mann Whitney U, Kruskal Wallis Test were used to evaluate the scale scores according to the variables. Spearman correlation analysis was used to analyse the relationship between the scale scores. "p" values below 0.05 were considered statistically significant.

Results

The mean age of the women who participated in the study was 29.77±4.83 years (min:21, max:45) and their educational status was mostly high school (33.8%). It was determined that 32.4% of the participants were employed, 76.8% lived in metropolitan areas and 74.6% had nuclear families.

It was determined that 63.4% of the women had an income equal to their expenditure, while 19% had no social security. It was also determined that 50.7% of the women had a marriage duration of less than 4 years (Table 1).

Table 1. Descriptive characteristics of women

Variables	Mean±SD	Min-max
Age	29.77±4.83	21-45
Year of marriage	4.73±2.71	1-16
	n	**%**
Education status		
Primary school	17	12.0
Middle school	23	16.2
High school	48	33.8
Associate degree	20	14.1
Undergraduate and postgraduate	34	23.9
Employment status		
Yes	46	32.4
No	96	67.6
Profession		
Housewife	82	57.7
Officer	6	4.2
Labourer	54	38.1
Presence of Health Insurance		
Yes	115	81.0
No	27	19.0
Place of residence		
Village	17	12.0
District	16	11.2
Metropolitan	109	76.8
Economic situation		
Income less than expenditure	33	23.2
Income equals expenditure	90	63.4
Income more than expenditure	19	13.4
Family type		
Nuclear family	108	74.6
Extended family	36	25.4
Year of marriage		
Under 4 years	72	50.7
4 years and above	70	49.3

SD= Standard deviation

When the infertility duration of the participants was analysed, it was found that the women had been diagnosed with infertility for an average of 21.05±21.78 months and 73.9% of them were primary infertile. It was also determined that they had been receiving treatment for an average of 12.76±16.83 months. When the most commonly used treatment methods were investigated, it was found that 68.3% were insemination, 38.3% were in vitro fertilization (IVF) and embryo transfer (ET) and 6.3% were intracytoplasmic sperm injection (ICSI). It was determined that 27.5% of the women consulted a health professional for these methods. When the purpose of use was analysed, it was found that 43% used it for definitive treatment, 30.3% for supportive treatment and 7% for psychological well-being (Table 2).

Table 2. Participants' infertility experiences and their knowledge and attitudes towards CAM methods

Variables	Mean±SD	Min-max
Duration of infertility (months)	21.05±21.78	1-168
Duration of infertility treatment (months)	12.76±16.83	1-120
Pregnancy	0.42±0.8	0-6
Birth	0.9±0.3	0-2
Abortus	0.2±0.5	0-5
Curettage	0.1±0.3	0-2
	n	**%**
Duration of infertility		
Diagnosis under 5 years	131	92.3
5 years and above diagnosis	11	7.7
Type of infertility		
Primary infertility	105	73.9
Secondary infertility	37	26.1
Infertility treatment duration		
Under 5 years	138	97.2
5 years and over	4	2.8
Infertility treatment method applied		
Intrauterine insemination	97	68.3
IVF-ET	55	38.7
ICSI	9	6.3
Use of CAM for infertility treatment		
Yes	141	99.3
No	1	0.7
Consultation with health personnel for CAM use		
Yes	39	27.5
No	103	72.5
Consulted health personnel		
Physician	**33**	**23.3**
Midwife	9	6.3
Nurse	6	4.2
CAM intended use		
Definitive treatment	61	43.0
Supportive treatment	43	30.3
Psychological well-being	10	7.0
Persistence of the environment	4	2.8
I didn't do it	24	16.9
Spouse's perspective on CAM use		
Supporting	101	71.2
Does not support	8	5.6
Undecided	33	23.2

SD= Standard deviation

When the CAM methods used by infertile women who participated in the study (Table 3.) were analysed, it was found that the most frequently used methods were prayer (88.0%), prayer (namaz) (78.2%) and carob (51.4%). In addition, chestnut honey (33.8%), anzer honey (31.0%), votive offerings (25.4%), visit to the mansion (24.6%), fortykilit herb (23.9%), royal jelly (21.1%), amulet (20.4%), black cohosh (17.6%), ginseng (15.5%), yoga (14.5%), juniper herb (14.1%), milk thistle (14.1%), rabbitbane (14.1%), astralagus (13.4%), I go to the religious officer and have him pray for me (13.4%), shark cartilage (13.4%), turtle blood (13.4%), cupping (12.7%), lead pouring (4.2%), acupuncture (3.5%), reiki (2.8%), bioenergy (2.1%) and hypnosis (1.4%).

When the sub-dimension scores of the CAMAS were analysed, the body-mind sub-dimension score was 40.46±17.37 (min: 0, max: 73.3), the manipulative sub-dimension score was 15.84±18.11 (min: 0, max: 66.6), alternative medicine sub-dimension score was 3.52±18.49 (min: 0, max: 100), energy sub-dimension score was 2.46±13.74 (min: 0, max: 100), herbal-biological sub-dimension score was 39.94±25.75 (min: 0, max: 100) and the total score of CAMAS was 42.93±21.75 (min: 0, max: 95.3).

In Table 4, different variables are examined according to the scale total score and subscale scores. It was determined that the presence of health insurance affected the body-mind subscale score. It was determined that the variables of increasing age, increasing education level, occupational status (being a civil servant), working status, having health insurance and living in a big city differentiated the manipulative subscale score. Additionally, it was determined that working status affected the alternative medicine subscale score. When the variables affecting the energy sub-dimension were examined, it was determined that better education status, living in a metropolitan city and increased treatment duration were effective.

Table 3. CAM methods used by the participants

*CAM methods used	n	%
Prayer	125	88.0
Prayer (Namaz)	111	78.2
Carob	73	51.4
Black Mulberry	67	47.2
Cantaron	51	35.9
Yarrow	50	35.2
Chestnut honey	48	33.8
Anzer honey	44	31.0
I make an offering	36	25.4
Yatir visit	35	24.6
Mistletoe	35	24.6
Kirkkilit grass	34	23.9
Beeswax	30	21.1
Amulet	29	20.4
Blackhead weed	25	17.6
Ginseng	22	15.5
Yoga	21	14.8
Juniper herb	20	14.1
Hibiscus	20	14.1
Thistle	20	14.1
Rabbitbane	20	14.1
Swedish syrup	20	14.1
Astralagus	19	13.4
I go to the religious officer and have him pray for me.	19	13.4
Shark cartilage	19	13.4
Turtle blood	19	13.4
Cup	18	12.7
Meditation	16	11.3
I'll have a bullet poured	6	4.2
Acupuncture	5	3.5
Reiki	4	2.8
Bioenergy	3	2.1
Hypnosis	2	1.4

CAM= Complementary and alternative methods

Table 4. Examination of different variables according to CAMAS sub-dimension scores and total score

		Body-Mind Sub-dimension	Manipulative Sub-dimension	Alternative Medicine Sub-dimension	Energy Sub-dimension	Herbal-Biological Sub-dimension	Total Points
		Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Age	[1]20-29 years old	40.84±16.52	12.20±16.17	2.81±16.66	2.11±10.12	40.65±23.95	43.22±20.33
	[2]30-35 years old	40.95±18.85	17.68±19.06	6.12±24.22	4.08±19.99	41.17±26.36	44.29±21.72
	[3]36-39 years old	38.18±17.23	23.48±19.69	.00±.00	.00±.00	34.93±30.32	38.99±26.43
		KW: .378	KW: 6.802	KW: 1.869	KW: .943	KW: 2.224	KW: 1.716
		p: .828	***p*: .033**	*p*: .402	*p*: .624	*p*: .329	*p*: .424
Post Hoc			2>1, 3>1, 3>2				
Education Status	[1]Primary School	37.25±19.58	10.78±15.52	.00±.00	.00±.00	33.91±28.72	36.76±24.52
	[2]Middle School	34.20±17.20	9.42±14.05	.00±.00	.00±.00	43.13±30.92	43.27±26.85
	[3]High School	39.58±15.33	12.84±15.46	4.16±20.19	.00±.00	40.19±24.23	42.57±19.96
	[4]Associate Degree	43.00±17.23	20.83±17.83	5.00±22.36	5.00±22.36	35.39±15.78	40.46±11.11
	[5]Undergraduate/Graduate	46.07±18.15	24.01±22.16	5.88±23.88	7.35±21.78	43.13±27.69	47.74±23.72
		KW: 7.157	KW: 11.455	KW: 2.190	KW: 9.985	KW: 1.718	KW: 2.709
		p: .128	***p*: .022**	*p*:. 701	***p*: .041**	*p*: .633	*p*: .608
Post Hoc			1>2, 3>1, 3>2, 4>1, 4>2, 4>3, 5>1, 5>2, 5>3, 5>4		4>1, 4>2, 4>3, 5>1, 5>2, 5>3, 5>4		
Profession	[1]Housewife	38.29±17.55	11.17±15.72	1.21±11.04	1.21±7.76	40.45±25.66	42.32±21.92
	[2]Officer	35.55±9.10	25.00±17.48	16.66±40.82	.00±.00	39.54±30.51	42.44±22.63
	[3]Labourer	44.32±17.28	21.91±19.64	5.55±23.12	4.62±20.06	39.21±25.86	43.92±21.78
		KW: 4.403	KW: 12.909	KW: 4.954	KW 1.203	KW: .805	KW: .114
		p: .111	***p*: .002**	*p*: .084	*p*: .548	*p*: .669	*p*: .944
Post Hoc			2>1, 2>3, 3>1				
Employment Status	Yes	42.46±15.73	21.73±19.83	8.69±28.48	4.34±20.61	40.28±27.91	44.36±22.82
	No	39.51±18.10	13.02±16.61	1.04±10.20	1.56±8.74	39.78±24.80	42.25±21.30
		U: -.665	U: -2.566	U: -2.308	U: -.410	U: -.482	U: -.109
		p:.506	***p*: .010**	***p*: .021**	*p*: .682	*p*: .630	*p*: .913
Presence of Health Insurance	Yes	41.97±17.59	17.53±18.31	4.34±20.48	3.04±15.22	40.80±26.80	44.15±22.41
	No	34.07±15.05	8.64±15.58	.00±.00	.00±.00	36.31±20.70	37.73±18.11
		U: -2.443	U: -2.563	U: -1.099	U: -1.099	U: -.367	U: -1.454
		***p*: .015**	***p*: .010**	*p*: .272	*p*: .272	*p*: .714	*p*: .146
Place of residence	[1]Metropolitan	41.03±17.73	17.27±18.55	4.58±21.01	3.21±15.62	40.63±25.19	43.79±21.33
	[2]District	34.16±17.53	8.33±16.10	.00±.00	.00±.00	39.21±19.21	40.03±16.34
	[3]Village	42.74±14.15	13.72±15.85	.00±.00	.00±.00	36.21±34.55	40.16±28.74
		KW: 5.779	KW: 11.382	KW: 2.161	KW: 8.383	KW: .256	KW: 1.510
		p: .056	***p*: .003**	*p*: .339	***p*: .015**	*p*: .880	*p*: .407
Post Hoc			1>2, 1>3, 3>2		1>2. 1>3		
Infertility diagnosis time	Under 5 years	40.10±17.34	16.03±18.42	3.81±19.23	2.29±13.67	40.44±26.40	43.26±22.19
	5 years and over	44.84±17.91	13.63±14.56	.00±.00	4.54±15.07	34.04±15.79	39.06±15.79
		U: -.922	U: -.102	U: -.657	U: -1.016	U: -.470	U: -.252
		p: .356	*p*: .919	*p*: .511	*p*: .310	*p*: .638	*p*: .801
Treatment duration	Under 5 years	40.28±17.49	15.82±18.04	3.62±18.75	2.17±13.33	39.81±25.53	42.77±21.69
	5 years and over	46.66±12.17	16.66±23.57	.00±.00	12.50±25.00	44.60±37.00	48.43±26.66
		U: -.776	U: -.020	U: -.386	U: -2.317	U: -.290	U: -.253
		p: .438	*p*: .984	*p*: .699	***p*: .021**	*p*: .772	*p*: .800
Infertility Type	Primary infertility	39.30±16.94	13.80±16.08	3.80±19.23	1.42±8.36	40.59±26.55	42.96±21.81
	Secondary infertility	43.78±18.36	21.62±22.17	2.70±16.43	5.40±22.92	38.10±23.57	42.86±21.87
		U: -1.084	U: -1.719	U: -.313	U: -.764	U: -.172	U: -.330
		p: .279	*p*: .086	*p*: .754	*p*: .445	*p*: .863	*p*: .741

Discussion

In this study, which examined the attitudes of infertile women who applied to the Assisted Reproductive Treatment Center of a public hospital in Istanbul, towards complementary and alternative medicine, it was determined that the attitudes of women towards CAM were below the average level. In the study, the total score of the CAMAS was determined as 42.93±21.75, below the average level. However, it was determined that 99.3% of the participants used at least one CAM method. It can be thought that the reason for this difference is that women do not know that it is among the CAM methods, even though it is a method that they routinely apply in their life habits, in short, they do not have enough information. In a similar study conducted by Emül et al. (2020) it was determined that 61.8% of infertile women used at least one CAM method. In another study conducted by Dehghan et al. (2018) in Iran, 49.6% of infertile couples were found to use a CAM method. In a study conducted in South Korea, it was determined that 63.5% of the participants used any CAM method (Hwang et al., 2019). In a study conducted in Sierra Leone, it was found that 36.5% of women used herbal capsules for infertility treatment (James et al., 2018). It is seen that the rate of CAM use by infertile women in different cultures varies. The reason why more CAM was used in the study compared to other studies may be population-specific, as well as the widespread use of traditional methods in Turkish culture.

When the descriptive characteristics of the women who contributed to the study were examined, it was determined that the average marriage year of the women was 4.73±2.71 (min: 1 max: 16). In a similar study conducted by Kurt and Arslan (2019), women's marriage year was found to be 7.2±5.1. In a study conducted by Fırat et al. (2021) it was determined that the majority of the participants had a marriage duration of 1-5 years. The fact that the couples applying to the infertility clinic mostly have a marriage duration between 1-10 years can be explained by the fact that they apply to treatment processes before the fertile period ends. It was determined that 7.7% of women received infertility treatment for 5 years or more. In a study conducted by Hwang and colleagues, it was found that 65.4% of women received infertility treatment for less than 2 years (Hwang et al., 2019). In a similar study conducted by Kurt and Arslan (2019), it was determined that the average duration of treatment was 2 years. Treatment durations of women are similar. This may be population-specific, or it is thought that the duration of treatment may not be prolonged due to the occurrence of pregnancy as a result of treatment or the reasons for terminating the treatment process due to hopelessness due to unsuccessful treatments.

It was found that 73.9% of the participants were diagnosed with primary infertility. In a similar qualitative study conducted by Ried and Alfred (2013) in Australia, 21 out of 25 women were diagnosed with primary infertility. In Kurt and Arslan's (2019) study, 66.7% of women were diagnosed with primary infertility. The results of the study are similar to the literature.

It was determined that 27.5% of the women consulted any healthcare personnel regarding the use of CAM and mostly received information from physicians (23.2%), midwives (6.3%) and nurses (4.2%). When the reasons for using CAM by the women who contributed to the research were examined, it was determined that they were definitive treatment (43.0%), supportive treatment (30.3%) and psychological well-being (2.8%). In a similar study conducted by Kurt and Arslan (2019), it was determined that the reason why women mostly use CAM methods is to support the treatment. According to the same study, it was determined that they learned these methods mostly from their relatives (Kurt & Arslan, 2019). It is thought that women use CAM methods in addition to medical treatment because they feel good about themselves, positive stories of other people using them, desire to use a more natural approach, stress management, feeling of control, desire to improve general health, or because they think these methods will be a cure. As a result, while infertile women often explore various treatment options to cope with infertility, there may be many reasons why they choose complementary and alternative treatment methods. These choices may vary depending on personal preferences, experiences, hopes, and health conditions.

When the CAM methods used by women receiving infertility treatment were analysed, it was found that they mostly prayed (88.0%), prayed (namaz) (78.2%), consumed carob (51.4%) and black mulberry (47.2%), and used centaury (35.9%). In addition, it was determined that they mostly practised both herbal and spiritual practices such as making offerings (25.4%), visiting tombs (24.6%), using amulets (20.4%), they go to the religious officer and have

him pray for them (13.4%) were also practised. In a study conducted by Sehgal et al. (2023) in the USA, it was found that infertile women frequently used acupuncture, yoga, massage, meditation and herbal supplements. In a similar study conducted by Dehghan and colleagues, it was determined that infertile women in Iran mostly prayed and used herbal approaches (Dehghan et al., 2018). In a study conducted by Bıçakçı and Türk (2021), it was found that women made offerings, distributed food at the mazar, used the method of sitting in the steam of stone, tea, midwife's bum, cheese syrup and molasses, and made suppositories from various herbs, spices, garlic and beeswax and applied them into the vagina. In a similar study conducted in Jordan, it was determined that women used plants that they believed to be medicinal, aromatherapy, cupping, magic and massage (Bardaweel et al., 2013). In another study conducted in Canada, it was found that infertile women frequently exercised, regulated their diets, used acupuncture and herbal treatments, and prayed as CAM methods (Read et al., 2014). Although the content of CAM methods varies according to countries, cultures and societies, according to the results of the research, it is seen that they mostly use herbal products and prefer spiritual approaches. Although the use of these methods increases due to cultural characteristics, beliefs, social structure or personal preferences, there is not enough research proving their effectiveness (Hwang et al., 2019).

When the variables affecting the total score and sub-dimension scores of the CAMAS were analysed, it was found that the presence of health insurance increased the body-mind sub-dimension score. It was determined that the variables of advancing age, increasing education level, working and working as a civil servant, having health insurance and living in a metropolitan area increased the manipulative sub-dimension score. In addition, it was determined that the alternative sub-dimension score was also high in working people. In addition, increasing education level, living in a metropolitan area, and receiving infertility treatment for 5 years or more were found to affect the energy subscale score. Due to the high costs spent on some CAM methods, socio-economic factors affect their use. In a study conducted in Turkiye, the average per capita cost spent by patients using CAM for different methods was found to be $288.26 (Aydın Avcı et al., 2012). Especially for methods such as acupuncture, cupping, reiki, bioenergy and hypnosis, it is necessary to receive services from expert professional practitioners and these services can be costly. For this reason, it is seen as an expected result that the use of some CAM methods increases with the increase in income, education level and social security. In addition, living in a metropolitan city will provide convenience in accessing these opportunities, so it is normal for individuals living in metropolitan cities to be more interested in some methods. In addition, it is thought that the decrease in the chances of fertility with advancing age leads to an increase in the tendency to resort to different methods. However, unlike the results of this study, in a study conducted in Jordan, it was found that young, low- and middle-income women used CAM methods more (Bardaweel et al., 2013). In a study conducted in Canada with different cultures, it was determined that westerners trusted modern medicine more and used CAM mostly for relaxation, while non-westerners used these methods because they were influenced by culture-specific health, illness and fertility awareness (Read et al., 2014). In a study conducted in the USA, similar to the study, an increase in the use of CAM was found in women with higher education, income level and older age (Sehgal et al., 2023). In a study conducted by Kurt and Arslan (2019), it was found that age and duration of treatment affected the use of CAM methods. The use of CAM methods is similar to the literature. Culture, spiritual characteristics and social structure also affect the use of CAM. In addition, in the infertility treatment process, it is seen that women turn to CAM methods for personal reasons such as hope, support and the need to feel psychologically well.

Conclusion and Recommendations

The findings of the study showed that CAM use is common among Turkish infertile women and the most commonly used methods are spiritual and herbal methods. Furthermore, it was observed that women used CAM methods to supplement conventional allopathic treatment or for psychological well-being. Although there is little proven benefit of spiritual approaches, they may contribute positively to infertility treatment by giving a sense of empowerment or control, or by helping to alleviate some

of the stress. On the other hand, some herbal preparations may even have adverse effects on health and well-being. Health professionals need to approach infertile women sensitively and assess their use of CAM methods and inform them about the effectiveness and side effects of these methods.

Complementary and alternative treatment methods, which are becoming widespread day by day in the treatment of infertility, should be integrated into health services as evidence-based practices with scientifically valid studies.

Limitations and Strengths of the Research

The results of this study will be an important data source to determine the level of CAM methods used by infertile women in Turkiye, the methods they use and the factors affecting their use. It will also contribute to the development of a culture-specific scale that can be used to determine the methods used by women to cope with the stress of infertility or to support infertility treatment. The results of this study are limited to the female population who applied to the Assisted Reproductive Treatment Center of a public hospital due to infertility.

Ethics Committee Approval: Ethics committee approval for this study was received from Zeynep Kamil Women and Children Diseases Traning and Research Hospital Clinical Research Ethics Committee (Date: 18.12.2019, Number: 118).

Informed Consent: Verbal consent was obtained from all the participants.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept - YAK, AB, SY; Design- YAK, SY; Supervision- YAK, MBY; Resources- MBY, LK; Data Collection and/or Processing- LK, AB, SY; Analysis and/or Interpretation- YAK, AB; Literature Search- YAK, AB, SY; Writing Manuscript- YAK, AB, MBY; Critical Review- YAK, MBY, LK.

Conflict of Interest: The authors have no conflicts of interest to declare.

Financial Disclosure: The authors declared that this study has received no financial support.

References

Ataman, H., Aba, Y. A., & Güler, Y. (2019). Complementary and alternative medicine methods used by Turkish infertile women and their effect on quality of life. *Holistic Nursing Practice*, *33*(5), 303-311. Doi:10.1097/HNP.0000000000000339

Aydın Avcı, I., Koç, Z., & Sağlam, Z. (2012). Use of complementary and alternative medicine by patients with cancer in northern Turkey: analysis of cost and satisfaction. *Journal of Clinical Nursing*, *21*(5-6), 677-688. Doi:0.1111/j.1365-2702.2011.03732.x

Bardaweel, S. K., Shehadeh, M., Suaifan, G. A., & Kilani, M. V. Z. (2013). Complementary and alternative medicine utilization by a sample of infertile couples in Jordan for infertility treatment: clinics-based survey. *BMC Complementary and Alternative Medicine*, *13*, 1-7. Doi:10.1186/1472-6882-13-35

Bıçakçı, H., & Türk, R. (2021). İnfertil Kadınların Gebe Kalmak İçin Uyguladıkları Geleneksel Uygulamaların Belirlenmesi. *Samsun Sağlık Bilimleri Dergisi*, *6(3)*, 737-749. Doi:10.47115/jshs.1021210

Can, G., Erol, Ö., Aydıner, A., & Topuz, E. (2009). Quality of life and complementary and alternative medicine use among cancer patients in Turkey. *European Journal of Oncology Nursing*, *13*, 287–294. Doi:10.1016/j.ejon.2009.03.007

Çetinbaş, A., Dağdeviren, H. N., Öztora, S., Çaylan, A., & Sezer, Ö. (2014). Doğurganlık Sorunu Yaşayan Kişiler İçin Hayat Kalitesi Ölçeği'nin Türkçe Versiyonunun İç Güvenilirlik Analizi. *Eurasian Journal of Family Medicine*, *3*, 105-110.

Dehghan, M., Mokhtarabadi, S., & Heidari, F. G. (2018). Complementary and alternative medicine usage and its determinant factors among Iranian infertile couples. *Journal of Complementary and Integrative Medicine, 15(2)*, 20170138. Doi:10.1515/jcim-2017-0138

Emül, T. G., Yılmaz, D. V., & Buldum, A. (2020). Kadınların İnfertilite Tedavisinde Kullandıkları Tamamlayıcı Alternatif Tedavi Uygulamalarının Belirlenmesi. *Journal of Education & Research in Nursing/Hemşirelikte Eğitim ve Araştırma Dergisi, 17(4).* Doi:10.5222/HEAD.2020.04379

Özkan, F. S., Karaca, A., & Sarak, K. (2018). Complementary and Alternative Medicine Used by Infertile Women in Turkey. *African Journal of Reproductive Health*, *22(2),* 40-48. Doi:10.29063/ajrh2018/v22i2.4

Fırat, Y. Y., Kaya, D., & İnanç, N. (2021). İnfertil kadınların bitkisel ürün kullanım durumları. *İzmir Kâtip Çelebi Üniversitesi Sağlık Bilimleri Fakültesi Dergisi*, 6(2), 7-13.

Hwang, J. H., Kim, Y. Y., Im, H. B., & Han, D. (2019). Complementary and alternative medicine use among infertile women attending infertility specialty clinics in South Korea: does perceived severity matter? *BMC Complementary and Alternative Medicine*, *19*, 1-9. Doi:10.1186/s12906-019-2727-x

James, P. B., Taidy-Leigh, L., Bah, A. J., Kanu, J. S., Kangbai, J. B., & Sevalie, S. (2018). Prevalence and correlates of herbal medicine use among women seeking care for infertility in Freetown, Sierra Leone. *Evidence-Based Complementary and Alternative Medicine*,2018. Doi:10.1155/2018/9493807

Kaadaaga, H. F., Ajeani, J., Ononge, S., Alele, P. E., Nakasujja, N., Manabe, Y. C., & Kakaire, O. (2014). Prevalence and factors associated with use of herbal medicine among women attending an infertility clinic in Uganda. *BMC Complementary and Alternative Medicine*, *14(1)*, 27. Doi:10.1186/1472-6882-14-27

Kurt, G., & Arslan, H. (2019). İnfertilite tedavisi alan çiftlerin kullandıkları tamamlayıcı ve alternatif tıp uygulamaları. *Cukurova Medical Journal*, *44(1)*, 329-338.

Okuducu, N. Y., & Yorulmaz, H. (2020). İnfertilite tanısı konmuş kadınlarda yaşam kalitesi. *İstanbul Kanuni Sultan Süleyman Tıp Dergisi, 12(1)*, 13-20.

Porat-Katz, A., Paltiel, O., Kahane, A., & Eldar-Geva, T. (2016). The effect of using complementary medicine on the infertility-specific quality of life of women undergoing in vitro fertilization. *International Journal of Gynecology & Obstetrics*, *135(2)*, 163-167. Doi:10.1016/j.ijgo.2016.05.011

Read, S. C., Carrier, M. E., Whitley, R., Gold, I., Tulandi, T., & Zelkowitz, P. (2014). Complementary and alternative medicine use in infertility: cultural and religious influences in a multicultural Canadian setting. *The Journal of Alternative and Complementary Medicine*, *20(9)*, 686-692. Doi:10.1089/acm.2013.0329

Ried, K., & Alfred, A. (2013). Quality of life, coping strategies and support needs of women seeking Traditional Chinese Medicine for infertility and viable pregnancy in Australia: a mixed methods approach. *BMC Women's Health, 13(1)*, 1-11. Doi:10.1186/1472-6874-13-17

Sehgal, S., Dyer, A., Warren, C., Galic, I., & Jain, T. (2023). Integrative medicine utilization among infertility patients. *Reproductive Biology and Endocrinology*, *21(1)*, 71. Doi:10.1186/s12958-023-01121-6

Sönmez, S., Öztürk, M., Sönmez, F., Eraydın, E., Özer, M. C., Ünal, M. S., & Ceyhan, S. T. (2021). Prevalence and predictors of the usage of complementary alternative medicine among infertile patients. *Journal of Gynecology Obstetrics and Human Reproduction*, *50(6)*, 102112. Doi:10.1016/j.jogoh.2021.102112

Taşçı, E., Bolsoy, N., Kavlak, O., & Yücesoy, F. (2008). İnfertil kadınlarda evlilik uyumu. *Türk Jinekoloji ve Obstetri Derneği Dergisi*, *5(2),* 105-110.

Taner, A., & Güneri, S. E. (2023). Determining the use of Traditional and Complementary Therapies Among Infertile Women. *Ege Üniversitesi Hemşirelik Fakültesi Dergisi*, *39(1)*, 1-9. Doi:10.53490/egehemsire.1035263

World Health Organization. (2001). Legal Status of Traditional Medicine and Complementary/Alternative Medicine: A Worldwide Review.

ATATÜRK ÜNİVERSİTESİ YAYINLARI
ATATURK UNIVERSITY PUBLICATIONS

Research Article/Araştırma Makalesi DOI: 10.51621/aws.1455564

Women's Empowerment Activities of Non-Governmental Organizations in Turkiye: Refugee and Local Women's Triple Role

Türkiye'deki Sivil Toplum Kuruluşlarının Kadını Güçlendirme Faaliyetleri: Mülteci ve Yerel Kadınların Üçlü Rolü

Rumeysa TERZİOĞLU

Department of Political Science and International Relations, İstanbul University, İstanbul, Turkiye

ABSTRACT

Objective: Development is an essential concept of social and economic progress. In Turkiye, non-governmental organisations contribute to development and empowerment through their activities. The aim of this research is to respond to "What are the alterations caused by NGOs empowerment activities in the field of development of refugee and local women's triple role in society after the 2011 Syrian crisis?"

Method: This research article employed qualitative methodology with semi-structured face-to-face and online interviews. The interviewer was selected from 10 NGOs officers between the ages of 24-35 who graduated from social sciences and humanities and had at least 2 years' experience working in the social cohesion, livelihoods, and protection units of NGOs.

Results: The findings reveal that NGOs empowerment activities that considered "class and gender," "community participation," and "social cohesion, as concepts have effects on refugee and local women's triple role in society after the 2011 Syrian Crisis.

Conclusion: Development policies and NGOs activities have an important role in the civil society. It enhances women status in the society. Additionally, NGOs' activities that focused on women's empowerment and women's strategic life choices (resources, agency, and success), have positive impacts women's triple roles.

Keywords: Development, empowerment, refugee women, women, women empowerment

ÖZ

Amaç: Kalkınma, sosyal ve ekonomik ilerlemenin temel bir kavramıdır. Türkiye'de sivil toplum kuruluşları faaliyetleriyle kalkınmaya ve güçlenmeye katkı sağlamaktadır. Bu araştırmanın amacı "2011 Suriye krizi sonrasında mülteci ve yerel kadının toplumdaki üçlü rolünün geliştirilmesi alanında STK'ların güçlendirme çalışmalarının yarattığı değişiklikler nelerdir?" sorusuna cevap vermektir.

Yöntem: Bu araştırma makalesinde yarı yapılandırılmış yüz yüze ve çevrimiçi görüşmelerle nitel metodoloji kullanılmıştır. Görüşmeciler, sosyal bilimler mezunu, STK'ların sosyal uyum,geçim ve koruma birimlerinde en az 2 yıl çalışmış, 24-35 yaş arası 10 farklı STK yetkilisi arasından seçilmiştir.

Bulgular: Bulgular, STK'ların "sınıf ve cinsiyet", "toplum katılım" ve "sosyal uyum" kavramlarını dikkate alarak yürüttükleri güçlendirme faaliyetlerinin, 2011 Suriye Krizi sonrasında mülteci ve yerel kadınların toplumdaki üçlü rolü üzerinde etkili olduğunu ortaya koymaktadır.

Sonuç: Kalkınma politikaları ve STK faaliyetleri sivil toplumda önemli bir role sahiptir. Kadınların toplumdaki statüsünü iyileştirir. Ek olarak, STK'ların kadınların güçlendirilmesine ve kadınların stratejik yaşam tercihlerine (kaynaklar, temsiliyet ve başarı) odaklanan faaliyetleri, kadınların üçlü rolleri üzerinde olumlu etkilere sahiptir.

Anahtar Kelimeler: Güçlendirme, kadın, kadınların güçlendirilmesi, kalkınma, mülteci kadınlar

This study was published from the Master's thesis no.738700 "Refugee and local women empowerment activities of non-governmental organisations in the field of development".

Received /Geliş Tarihi 19.03.2024
Accepted /Kabul Tarihi 08.05.2024
Publication /Yayın Tarihi 14.06.2024

Corresponding author:
Rumeysa TERZİOĞLU
E-mail: rumeysaterzioglu@gmail.com
Cite this article: Terzioğlu, R. (2024). Women's Empowerment Activities of Non-Governmental Organizations in Turkiye: Refugee and Local Women's Triple Role. *Advances in Women's Studies, 6*(1), 11-18.
Doi: 10.51621/aws.1455564

Introduction

Following the devastating ending of World War II, developing and underdeveloped countries integrated their economies with interventionist policies focused on development. These interventionist development policies are the reason for perceiving development as a tool of industrialization and modernization for developed and underdeveloped countries nowadays.

In 1960 and 1970, development was one of the most powerful tools of economic progress, export growth, and social state policy for underdeveloped and developing countries that had been trying to industrialize (Chang, 2003). Following the next decade, gender issues became more industrialization, and development policies' focus changed. Therefore, "women in development",' "women and development", and "gender and development" concepts were derived. Development and empowerment studies were shaped around these concepts in developing and underdeveloped countries. This change also affected NGOs' activities which were focused on gender and social cohesion in Turkiye aim to build social and economic independence of local and refugee women that facilitate freeing them from multiple forms of oppression such as tradition, family, and social norms.

This research emphasizes that women's triple roles with the gender and development approach: productive, reproductive, and community roles (Moser, 1989) should be considered for redefining women's status in society. In this sense this research was supported by interviews of ten different NGOs in Turkiye to answer this question; "What are the alterations caused by NGOs empowerment activities in the field of development of refugee and local women's triple role in the society after the 2011 Syrian crisis?" The remainder of this article is organized into four sections. First, I present a general literature review of development, development of civil society, and women empowerment. The second section I explain the data and methodology of the research. Third, I present the main result of the interviews. The final section contains concluding remarks.

Literature Review

Development has become a popular concept of a modern and powerful state (Ricz, 2020). It is a kind of social and economic transformation aligned with wealth (Yavilioğlu, 2002). Until today, there has not been an accepted international definition of development. Therefore, it is defined as progress, industrial development, growth, and economic and social progress that indicates the presence of men and women in the labor market. Redistribute all of these definitions into strategies that rely on mobilizing the population for development, capitalizing on local opportunities through small-scale projects, and organizing the various groups in the community around effective institutions so that they (women and men) can articulate their demands, establish priorities, and collaborate for the common good (Stromquist, 1993). Alteration of daily practices and women's integration into the market changed women's involvement in the development process and policies. In this sense, Approaches to women's status in development are listed in **Table 1.**

Table 1. Approaches women's status in development

Concepts	Explanations	Reference
Women in Development	The focus of the approach is to only accept the productive role of women, which prioritizes traditional modernization and the linear progress of different social structures in society.	Boserup, Ester, Women's Role in Economic Development, Routledge, London,2007.
Women and Development	This approach emphasizes that women's integration into the economy is not just about working a paid job. It is about having an active part in the development process. Therefore, it argues that their labor inside and outside the home is a part of the economy.	Razavi, Shahrashoub, Miller, Carol, 'From WID to GAD: Conceptual Shifts in the Women and Development Discourse,' United Nations Research Institute for Social Development United Nations Development Program, 1995.
Gender and Development	The focus on the development of gender is, pointing out the importance of gender roles in social development as well as economic development.	Rathgeber, Eva M., "WID, WAD, GAD: Trends in Research and Practice", The Journal of Developing Areas,1990.

Women in Development focuses on the existence of women in the economic area. It advocates women's productive roles. The second idea, Women and Development, approaches that men are less affected than women by changes in the social structure, economic downturns, and class dynamics. However, gender and development support the acquisition of gender identities depending on the social and cultural structure. Biological differences have always been a reliable indicator of economic participation for males compared to women. As an idea, gender and development modernize production areas and empower women in society.

Development policies and activities have a crucial role in women's improvement. These have been represented by non-governmental organizations' activities at intersection points of "participation", "empowerment", and "social cohesion" in underdeveloped and developing countries (Davenport, 2005). Therefore, within non-governmental organization activities, women's strategic life choices that relate to freedom, and the decision-making process rather than economic empowerment of women became important. As Naile Kabeer mentioned in the diagram below, strategic life choices depend on women's status in the social structure, access to economic resources, and social mobility (Figure 1).

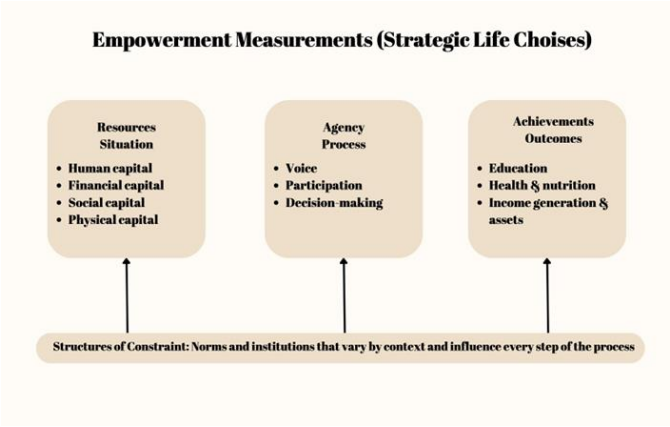


Figure 1. *The diagram of the "empowerment criteria" conceptualization of Naile Kabeer (Glennerster, 2018)*

Women's social presence has a positive impact on decision-making and provides women more freedom to choose. These strategic choices have not remained a social commitment but affected each individual in society (Sen, 1999).

Nevertheless, social norms might have caused a crash between empowerment and free choice (Moghadam, 2007). Power relations in society are expressed not only through agency and choice as seen in the table above, but also through the resources available to women (Kabeer, 2002). The resources (situation) are not seen as a feature of empowerment but as a catalyst for agency (empowerment process). For example, many of the variables traditionally used for empowerment, such as productive reproductive and community roles can be better defined as influencing factors, resources, or empowerment resources.

Productive roles: Women's productive roles are defined as labor value in the market. Within this role women contribute household livelihood activities.

Reproductive roles: Biological reproduction, childbearing, and domestic labor are stated as a woman's reproductive role. Women undertake this care work unpaid.

Community roles: Women are public-free human resources physically and emotionally, they solve problems and contribute to the community voluntarily such as elder care, childcare, and housework.

These roles are derived from gender norms, and traditions without considering class, ethnicity, citizenship or refugee while political and legal dimensions tend to be combined at a fairly high level for all women in the country's social and economic dimensions (Narayan, 2005). As a facilitator of women's empowerment and development, non-governmental organizations operate development activities and provide services for enhancing women's status in the social and economic fields.

In this research, the scope of activities of non-governmental organization's impact on social and economic development, women's triple roles, and social harmony are accepted as a women's empowerment effort. Ten non-governmental organizations that are active in Turkiye were examined in terms of class, gender, community participation, and social cohesion to understand the impact on women's empowerment.

Method

The purpose of this research is to identify the contribution of non-governmental organizations which are working in the field of development, activities that focus on class and gender, community participation, and social cohesion impact on social economic empowerment. As mentioned above, this study is guided by the following research question: "What are the alterations caused by NGOs empowerment activities in the field of development of refugee and local women's triple role in the society after the 2011 Syrian crisis?"

A qualitative method was selected because it allows us to understand which activities interact with the parameters; class and gender, community participation, and social cohesion. One of the qualitative research methodologies used in the study was content analysis along with interviews. An important reason for using the interview technique is that feminist theorists, especially post-feminists, value it in studies on women's empowerment.

This research will use three methods- documentation, content analysis, and interview- as presented in Table 2.

Table 2. Methods- documentation, content analysis and interview

Methods	Explanations
Documentation	
	- Permission from Ethic Committee
	- Information notes of research
	- Semi-structured interview questions
Content Analysis	- Gender and women development reports
	- NGOs activities reports
	- Women empowerment projects
Interview	
	- Interview with 10 NGOs
	- Foundation for the Support of Women's work (KEDV) & Oxfam,
	- International Blue Crescent Relief and Development Foundation (IBC),
	- Humanitarian Relief Foundation (IHH),
	- Red Crescent,
	- Support to Life,
	- United Nations Development Program (UNDP),
	- Association for Solidarity with Asylum Seekers and Immigrants (SGDD),
	- Refugees Association,
	- Human Resources Development Foundation (İKGV),
	- Mavi Kalem Social Assistance and Solidarity Association

For the selection of the sample, the purposeful sampling method was preferred. After the Syrian Crisis in 2011, the non-governmental organizations (NGOs) operations, activities for local and refugee women in economic and social empowerment which are common in Turkiye will be assessed in the research.

Ten NGOs were examined. Seven of the institutions were interviewed with semi-structured interview questions and three of them were sent documents after refusing interviews, and the documents were analyzed between November 2021 - February 2022. The interview transcripts are 87 pages. For this paper, all the quotations from Turkish and Arabic interviews have been translated into English. The interviews were conducted with participants between the ages of 24-35 who graduated from social sciences and humanities and had at least 2 years' experience working in the social cohesion, livelihoods, and protection units of NGOs with refugee and local women.

Results

Conceptually, women's projects in Turkey are inseparable from other projects carried out globally. The core ideas behind each of these initiatives are empowerment, efficiency, equality, welfare, and a reduction in poverty.

The international women's movement negotiates these core ideas. For example, women's empowerment emerged as the most sought-after goal of women's projects in the 1980s and 1990s, following the 1970s when these projects sought to promote equality between women and men (Baherirad, 2020).

While the number of civil society organizations in Turkiye was 88,007 in 2011, this number was 119,738 in 2020. After the mass migration most of the NGOs have begun work with refugee and local women's empowerment in the field of development regardless of class and ethnicity. The non-governmental organization employee, who has been a social worker in a non-governmental organization for 4 years after 2017, supports the differentiation:

"With the mass migration, the activities of the organizations which were cash delivery, in-kind assistance for emergency response have differentiated in 2017. The NGOs have started to provide services to refugees in health,

legal, employment, livelihood management and education"' (Social Worker, 26, Non-Governmental Organization Worker, Online, 2021).

Women's empowerment activities that support national and local development and the creation of safe spaces for women have enabled women to be active in development policies.

The purpose of this research was to identify the alterations that caused by NGOs empowerment activities in the field of development of refugee and local women's triple role in the society after the 2011 Syrian Crisis. Socialist feminism provides a theoretical basis for the gender and development approach. By considering the women's triple roles regarding the concepts of "class and gender," "community participation," and "social cohesion.", I confirmed with the answers given by the interviewees that the women's triple roles have a positive effect on women's empowerment in the NGOs' empowerment activities in the field of development in Turkiye, for example:

"Being economically independent or powerful is not enough for women as to stand on their own two feet independently. It's critical to realize oneself and form personal relationships in addition to achieving economic emancipation. At this point, women's solidarity centers become safe spaces for women" (Social Service Worker, 29, Non-Governmental Organization, Online, 2021).

Discussion

The discussion on women's empowerment in the field of development has been enhanced by feminist theories. The success of women's development and empowerment depend on recognition of women's triple roles in socioeconomic life (Moser, 1989).

Based on the literature the most relevant subject is 'women's triple roles' have been identified above as a part of women empowerment activities. Regarding the idea of gender and development, NGOs' activities on women's development has made it possible to talk about different types of socialand economic oppression based on nationality, class, or ethnicity. From this context, the empowerment activities of non-governmental organizations encompass a wider range of topics, including social cohesion, community participation, and gender and class issues.

Class and Gender

The 4th World Women Conference emphasized on the roles of women who have racial, ethnic and class inequalities in society. Through this conference, the development of a class, gender-oriented empowerment factors were brought to the agenda. Socialist feminists, who advocate a gender perspective in development, have highlighted the necessity of evaluating women's reproductive and community roles together with the division of labor in the social sphere.

As an examined NGOs KEDV& Oxfam, highlighting women's triple roles in empowerment trainings:

"KEDV & Oxfam conducts empowerment programs and trainings to make women's domestic work from all class, visible outside the home and to increase awareness that it is a labour force rather than a duty" (Business Development Expert, 27, Non-Governmental Organisation, Face to face, 2021).

It is obvious that KEDV & Oxfam carry out their activities in accordance with Rowlands' concept of empowerment: 'awareness that it is necessary not only to access decision-making processes, but also to cultivate the impression that they are competent and capable'.

The other examined NGOs, IBC:

"IBC kept incorporating gender training and consulting services into her work and business endeavors in 2019, since reducing poverty is associated with women's early child marriages and accessing to education" (Social Worker, 25, Non-Governmental Organization Worker, Online, 2021).

IBC prioritizes social development in its gender-oriented approach to women's empowerment through its work with refugee women.

"The capacity for self-sufficiency exhibited by a woman is empowering" (Social Worker, 26, Non-Governmental Organization Worker, Online, 2021).

Women's empowerment includes the processes in the community are highlighted by the perspective that defines women's empowerment as the procedures by which taken charge of women's lives in terms of personal and human development.

Human Resources Development Foundation (IKGV), UNDP, ASAM, KEDV& Oxfam, IBC, Support to Life, Refugees Association, Mavi Kalem Social Assistance and Solidarity Association aim to empower women economically and socially through class and gender-oriented empowerment activities for refugee and local women. However, the Red Crescent, which was founded to conduct humanitarian aid-related activities similar to the Humanitarian Relief Foundation (IHH)'s activities, both have not taken gender equality for account when conducting its operations as an essential factor. For these two NGOs describe their operations 'people in need or needy-indigent people.'

Community Participation

Identifying women's needs by themselves effects women empowerments steps. As Oxaal and Baden (Baden, & Oxaal, 1997) stated that empowerment is a process that involves women's capacity to freely analyze and develop their own interests and demands, it cannot be limited to any particular actions or the results that follow. At this point, community participation is important for women to discover their needs and capacity.

"In our trainings, we priorate the ideas women empowerment and equality. Our training focus on gender equality in the social realm, within a participative manner that have learned about women's own discourses" (Social Worker, 25, Non-Governmental Organisation, Online, 2021).

Providing interactive trainings that will enhance women personal empowerment has a positive impact on the calibre of their job and promote local development "from bottom to up." Contrarily, as an examined organization, the UNDP, an organization that supports local development, is shaped by the Building Resilience through Improving Employment Opportunities and Strengthening Social Cohesion for Syrian and Host Communities Project without assessing the needs of the women, community, and refugees.

The employee of the non-governmental organization stated that the work embraced by women is more permanent in the field:

"*The fact that women are involved in every stage of the project work increases the sustainability of the projects" (Field Officer, 28, Non-Governmental Organization, Online, 2021).*

As an examined NGO Support to Life gives built-in, limited space to community participation:

"Throughout 2019, we conducted all our work by adhering to humanitarian standards and encouraging community engagement. We provided protection, education, mental health, psychosocial assistance, social cohesion, and local rights activities for refugees. Members of the community helped us identify and carry out our activities." (Support to Life, Activity reports, 2019).

Community participation-oriented empowerment activities help to transform women's social position.

Social Cohesion

The Red Crescent, ASAM, Refugees Association, Humanitarian Relief Foundation, Human Resources Development Foundation (IKGV), KEDV &OXFAM, IBC, Mavi Kalem, Support to Life and UNDP focus their activities on social cohesion with refugees and local women by giving priority to local development.

IBC, ASAM and UNDP implement gender equality-oriented projects.

"Women's common challenges treated in the studies for social and economic development, promote social cohesion or women's empowerment. We have increased our efforts in this direction in the Social Cohesion Strategy Document and we learned that women face common issues but lack a safe space to discuss them"' (Social Service Worker, 32, Non-Governmental Organization, Online, 2021).

Foundation for the Support of Women's work (KEDV) & Oxfam, Support to Life both in their works by giving women's community management positions priority, have highlighted their potential without diminishing the role of women as producers and reproducers within the framework of gender and class.

Social Assistance and Solidarity Association, Refugees Association and Human Resources Development Foundation (Human Resources Development Foundation (IKGV) have been setting up safe spaces for women's empowerment as a top priority since they were founded. They used solidarity centers to conduct empowerment initiatives.

The Red Crescent and Humanitarian Relief Foundation have started to carry out activities for the social and economic empowerment of refugee women, mainly after

the mass migration from Syria. The interviews indicate that, Humanitarian Relief Foundation (IHH) does not use the concepts of gender and class in the field of women's empowerment and does not include the women's triple roles in social and economic empowerment activities in accordance with its mission.

As a result of this research, the empowerment studies carried out in the field of development are contingent upon women's roles in the public and private realms expanding and improving. The work of non-governmental organizations has an impact on and modifies women's social status, as per their implementation processes.

Conclusion and Recommendations

Following the World War II, non-governmental NGOs implemented women empowerment programs, had a strengthening effect on women's agency in the community as well as social and economic empowerment of women.

As stated above, women in development support the idea that women should engage economic life. However, women and development, gender and development contexts are interested in women status in society.

These approaches that concerned women empowerment and gender equality enhanced the development vision of developing and underdeveloped countries (Chant & Sweetman, 2012).

Women's NGOs as the most important parts of civil society that take the responsibility of challenging women's situations, use the women's empowerment projects as a tool to change women's status in a patriarchal society (Baden, & Oxaal, 1997). I observed and interviewed NGOs works in development specially women empowerment based on the fact that Naile Kaber's expression of strategic life choices- resource, agency, success- refer to the women's triple roles.

NGOs have been facilitating social cohesion between the local and refugee women via women empowerment activities. Especially, in Turkiye, gender- and class-focused NGO initiatives empower local and refugee women to work together to build their common future together regardless of class and race. However, *sometimes* activities designed to strengthen women in the social structure, despite class, ethnicity, or gender, may have unfavorable effects as a result of poor choices made by the public sector.

For instance, one interviewee stated the following during the interview:

"The public decisions made in the name of social cohesion studies that need to be put into action could have a negative impact on women's empowerment initiatives. For example, the closure of temporary education centers causes Syrian girls to marry at an early age because they cannot adapt to school." (Social Service Worker, 25, Non-Governmental Organization, Online, 2021).

It is hoped that this research inspires people to analyze NGOs' empowerment activities in the field of development in Turkiye. This relevant in that the women's triple roles have an impact on women's empowerment relation to the concepts of 'class and gender', 'community participation', and 'social cohesion'.

The non-governmental organization staff members who were interviewed said that public policy should encourage their work. There should be agreement among NGOs working in the field that women's empowerment initiatives should be organized so as to integrated into Turkey's ten-year development plan.

Future research should explore the analyzing of women's empowerment activities in the field of development that helps to reveal the importance of women's empowerment activities after mass migration by producing a new problem. This future research ought to be assist advocacy efforts on the public sector in development projects with local and refugee women. Additionally, there should also be research women who attending NGOs' women empowerment activities. How this should contribute to the social change and 'from bottom to top' development programs.

Ethics Committee Approval: Ethics committee approval was received for this study from the ethics committee of Istanbul University (Date: August 18, 2021, Decision Number: 17**7**, Protocol No: E-35980450-663.05539365).

Informed Consent: Verbal consent was obtained from all the participants.

Peer-review: Externally peer-reviewed.

Conflict of Interest: The authors have no conflicts of interest to declare.

Financial Disclosure: The author declared that this study has received no financial support.

References

Baden, S., & Oxaal, Z. (1997). Gender and development definitions, Approaches and Implications for Policy. BRIDGE (Development-Gender) Brigton, Institute of Development Studies, Report. 40, 1-32.

Baherirad, S. (2020). The Role of women's NGOs in [Master's thesis, Middle East Technical University, 28-29. https://hdl.handle.net/11511/46140.

Boserup, E. (2007). Women's Role in Economic Development, Routledge, 170-186. https://doi.org/10.4324/9781315065892.

Chang, H. (2002). Kicking away the ladder: Development strategy in historical perspective, Anthem Press,32-45.

Chant, S., & Sweetman, C. (2012). Fixing women or Fixing the World? 'Smart economics', efficiency approaches, and gender equality in development. *Gender and Development*, 20.517- 529.

Davenport, E. (2005). Organizational Knowledge and Communities of Practice, *Knowledge Discovery*,170-177.

Glennerster, R., Walsh, C., & Diaz-Martin. (2018). L. A. Practical guide to measuring women's and girls' empowerment in impact evaluations, *J-PAL*,1-5.

Kabeer, N. (2002). Resources, agency, achievements: reflections on the measurement of women's empowerment, development and change, 30-44. https://doi.org/10.1111/1467-7660.00125.

Moghadam, V. M. (2007). Globalization, states, and social rights: negotiating women's economic citizenship in the Maghreb. *International Journal of Comparative Sociology*. 33, 77-1

Moser, C. (1989). Gender planning in the third world: Meeting practical and strategic gender needs. *World Development*,17, 1801.

Narayan, D. (2005). Conceptual framework and methodological challenges, measuring empowerment, world bank. Washington DC. 75-76.

Rathgeber, E. M. (1990). "WID, WAD, GAD: *Trends in research and practice*", *The Journal of Developing Areas*,24 ,489-502.

Razavi, S., & Miller, C. (1995). From WID to GAD: Conceptual shifts in the women and development discourse, united nations research institute for social development united nations development programe,1,2-3.

Ricz, J. (2020). Developmental states in the twenty-first century: New wine into old bottles, *Istanbul University Sociology Journal*, 40(2), 649–676.

Sen, A. (1999). Development as Freedom, Oxford, 27-38.

Stromquist, N. (1993). The theoretical and practical bases for empowermentin c. medel-anonuevo (Eds. pp: 13-22), Women education and empowerment: pathways towards autonomy. Hamburg: UNESCO Institute for Education, 15.

Sweetman, C. (2012). Beyond gender mainstreaming, gender and development. Taylor and Francis LTD.20,392.

Yavilioğlu, C. (2002). Semantic history and conceptual origins of development C.U. *Journal of Economics and Administrative Sciences*, (3)1, 63.

ATATÜRK ÜNİVERSİTESİ YAYINLARI
ATATURK UNIVERSITY PUBLICATIONS

Araştırma Makalesi/Research Article DOI: 10.51621/aws.1432578

Kadınlarda Fertilite Farkındalığının ve Fertiliteyi Etkileyen Yaşam Biçimi Davranışlarının Belirlenmesi

Determining Fertility Awareness and Lifestyle Behaviours Affecting Fertility in Women

Özge KOCAARSLAN HASBEK[1]
Gülseren DAĞLAR[2]

[1]Sivas Numune Hastanesi, Sivas, Türkiye
[2]Sivas Cumhuriyet Üniversitesi, Sağlık Bilimleri Fakültesi, Ebelik Anabilim Dalı, Sivas, Türkiye

ÖZ

Amaç: Araştırmada kadınlarda fertilite farkındalığının ve fertiliteyi etkileyen yaşam biçimi davranışlarının belirlenmesi amaçlanmıştır.
Yöntem: Araştırma kesitsel tanımlayıcı tiptedir. Örneklemi, Ağustos-Ekim 2022 tarihleri arasında Sivas Akıncılar İlçe Aile Sağlığı Merkezine başvuran, 20-49 yaş aralığında ve araştırmaya katılmayı kabul eden 305 kadın oluşturmuştur. Veriler Kişisel Bilgi Formu, Fertilite Farkındalık Ölçeği (FFÖ) ve Sağlıklı Yaşam Biçimi Davranışları Ölçeği-II (SYBDÖ-II) ile toplanmıştır. Verilerin değerlendirilmesinde; tanımlayıcı istatistik analizi, tek yönlü varyans analizi, bağımsız gruplarda t testi, ki-kare testi ve pearson kolerasyon analizi kullanılmıştır.
Bulgular: Kadınların yaş ortalaması 36,41±7,85 dir. FFÖ puan ortalaması 64,17±11,63; bedensel farkındalık ortalaması 36,46±6,82; bilişsel farkındalık ortalaması 27,71±6,30'dur. Kadınların %59,6'sı orta, %36,1'i yüksek, %4,3'ü düşük düzeyde fertilite farkındalığına sahiptir. SYBDÖ-II toplam puan ortalaması 132,84±21,16, manevi gelişim 27,17±4,32, sağlık sorumluluğu 21,55±5,02, fiziksel aktivite 15,68±4,98, beslenme 21,90±3,96, stres yönetimi 20,49±3,82, kişiler arası ilişkiler 26,06±4,61'dir. FFÖ ve SYBDÖ-II toplam ve alt boyut puan ortalamaları orta düzeyde bulunmuştur. FFÖ ile SYBDÖ-II toplam ve alt boyut (manevi gelişim, sağlık sorumluluğu, beslenme, kişiler arası ilişkiler, stres yönetimi) puanları arasında orta düzeyde, pozitif yönlü, anlamlı; fiziksel aktivite arasında ise çok düşük düzeyde, pozitif yönlü, anlamlı ilişki saptanmıştır (p< ,05).
Sonuç: Kadınların fertilite farkındalık düzeyi ve sağlıklı yaşam biçim davranışları orta düzeydedir. Kadınlar en yüksek manevi gelişim en düşük fiziksel aktivite davranışına sahiptir. Fertilite farkındalık düzeyi arttıkça sağlıklı yaşam biçimi davranışları artmaktadır. Bu sonuçlar doğrultusunda kadınlara fertilite farkındalığı ve fertiliteyi etkileyen yaşam biçimi davranışları hakkında eğitim ve danışmanlık yapılması önerilmektedir.
Anahtar Kelimeler: Ebe, fertilite, fertilite farkındalığı, yaşam biçimi davranışları

ABSTRACT

Objective: The study aims to identify female fertility awareness and lifestyle behaviors that affect fertility.
Method: The research is cross-sectional type. The sample consisted of 305 women between the ages of 20-49 who applied to Sivas Akıncılar District Family Health Center between August-October 2022 and agreed to participate in the research. The data were collected using the Personal Information Form, the Fertility Awareness Scale (FAS) and the Healthy Lifestyle Behavior Scale-II (HLBS-II). The data were evaluated using defining statistical criteria, unidirectional variance analysis, t-test in independent groups, ki-core test, and pearson correlation analysis.
Results: The average age of the women was 36.41±7.85. The FAS score averages 64.17±11.63; the physical awareness averages 36.46±6.82 and the cognitive awareness average 27.71±6.30. 59.6% of women have moderate, 36.1% have high and 4.3% have low levels of fertility awareness. HLBS-II scores a total average of 132.84±21.16; spiritual development 27.17±4.32; health responsibility 21.55±5.02; physical activity 15.68±4.98; nutrition 21.90±3.96; stress management 20.49±3.82; interpersonal relationships 26.06±4.61. FAS and HLBS-II total and subscale score averages were found to be moderate. Between FAS and HLBS-II overall and lower dimensional scores (spiritual development, health responsibility, nutrition, interpersonal relationships, stress management) a medium, positive, meaningful correlation was found; between very low levels of physical activity a positive and meaningful relationship was found (p< .05).
Conclusion: Women have moderate levels of fertility awareness and healthy lifestyle behaviors. Women have the highest spiritual development and the lowest physical activity behavior. The higher the level of fertility awareness, the greater the healthy lifestyle behavior. In line with these findings, it is recommended that women be educated and advised on their lifestyle behaviors that affects fertility awareness and fertility.
Keywords: Behaviors, fertility, fertility awareness, midwife

Bu çalışma Sivas Cumhuriyet Üniversitesi Sağlık Bilimleri Enstitüsü tarafından 2023 yılında Yüksek Lisans Tezi olarak kabul edilmiş ve 10. Uluslararası 14. Ulusal Ebelik Öğrencileri Kongresi'nde (16-18 Mayıs 2024) sözel bildiri olarak sunulmuştur.

Geliş Tarihi/Received 09.02.2024
Kabul Tarihi/Accepted 25.04.2024
Yayın Tarihi/Publication Date 14.06.2024

Sorumlu Yazar/Corresponding author: Gülseren DAĞLAR
E-mail: gulserendaglar@gmail.com

Cite this article as: Kocaarslan Hasbek, Ö., & Dağlar, G. (2024). Determining Fertility Awareness and Lifestyle Behaviours Affecting Fertility in Women. *Advances in Women's Studies*, 6(1), 19-27.
Doi:10.51621/aws.1432578

Giriş

Üreme, çoğalma ve gelişmenin temeli olarak kabul edilen fertilite (doğurganlık); kadında gebeliğin oluşması ve bebek sahibi olabilme, erkekte kadını gebe bırakabilme yeteneği anlamına gelmektedir (Silva, 2020). Fertilite anatomik ve fizyolojik faktörlerden, yaşam biçimi alışkanlıklarından ve bireylerin fertilite farkındalık düzeylerinden etkilenmektedir. Fertilitenin korunması ve infertilitenin önlenmesi için bireyin olumlu yaşam biçimi davranışlarına sahip olması, fertilite farkındalığının geliştirilmesi ve genel sağlık durumunun iyileştirilmesi önemlidir (Espinos ve ark. 2020; Özşahin, 2020). Farkındalık, bir şey hakkında bilgi ve anlayışa sahip olmak anlamına gelirken fertilite farkındalığı, bireyin üreme ve doğurganlık ile ilgili bireysel (ileri yaş, yaşam tarzı ve cinsel sağlık durumu vb.) ve bireysel olmayan risk faktörlerini (çevresel faktörler vb.), korunmasız cinsel ilişki sonrası gebeliğin oluşma olasılığını bilmesini içeren bir kavramdır (Özşahin, 2020).

Bireylerin fertilite farkındalığına sahip olabilmesi için; kadın ve erkek üreme organlarının yapısını ve fonksiyonlarını (Temizkan Sekizler & Daşıkan, 2021), fertilitenin önemini, menstrual siklus sonunda korunmasız cinsel ilişkinin ardından gebeliğin oluşma ihtimalini (NFP, 2023), fertiliteyi olumsuz etkileyen yaşam biçimi davranışlarını bilmesi ve bu davranışlardan kaçınması gerekmektedir (Kaya ve ark. 2016). Fertilite farkındalığı gelişmiş olan kadın, menstrual siklusunu çok iyi takip edebilmekte böylelikle menstrual siklusunun zamanını, kaç gün sürdüğünü ve siklus süresince vücudunda oluşan fizyolojik değişiklikleri anlayabilmektedir. Bu farkındalık sayesinde kadın fertil olduğu dönemlerini belirleyerek gebelik planlayabilmekte veya erteleyebilmektedir (Temizkan Sekizler & Daşıkan, 2021). Fertilite farkındalığının temelini menstrüel siklusun fertil periyodu içinde cinsel ilişkide bulunmak oluşturmakta ve bu farkındalık infertilite problemi yaşayan çiftlerin tedavilerine yardımcı olmaktadır (Simmons & Jennings, 2020).

Yaşam biçimi davranışları fertiliteyi etkileyen faktörlerden biri olmakla birlikte genel sağlığın, üreme sağlığının ve cinsel sağlığın korunması ve devamlılığı için çok önemlidir. Yaşam biçimi davranışları "kişinin kontrol altında tutabildiği ve iyi oluşa olumlu etki gösteren düzeltilebilir faktörler" olup üreme sağlığını olumlu veya olumsuz yönde etkileyebilmektedir (Collins & Rossi, 2015). Fertiliteyi etkileyen yaşam biçimi davranışlarından bazıları; beslenme alışkanlığı, kilo kontrolü, fiziksel aktivite, stresle baş etme düzeyi, sigara kullanımı, kafein tüketimi, çevresel faktörler, riskli cinsel davranışlar, kontraseptif yöntem kullanımı, vajinal kayganlaştırıcıların kullanımıdır (Aşcı & Gökdemir, 2020; Kaya ve ark. 2016). Yaşam biçimi davranışlarının fertiliteye olan etkisinin farkında olan bireyler, sağlıklı yaşam biçimi davranışlarında (SYBD) bulunmakta ve fertilitelerini koruyabilmektedir (Arslan Özkan, 2012). Fertililitenin korunması ve fertilite farkındalığının geliştirilmesi için bireylere fertiliteyi etkileyen riskli yaşam biçimi davranışlarında sağlıklı değişiklikler yapması konusunda önerilerde (sigaranın bırakılması, beslenme alışkanlıklarının düzenlenmesi, egzersiz yapma vb.) bulunulmalıdır (Foucaut ve ark. 2019). Kadınlarda fertilite farkındalığının geliştirilmesi, infertilitenin önlenmesi ve kadınlara doğru sağlık davranışlarının kazandırılması (Altıparmak & Aksoy Derya, 2018) multidisipliner ekip çalışmasını gerektirmekte olup bu ekibin en temel üyesi olan ebenin uygulayıcı, araştırmacı, danışman, eğitici, yönetici rolleri ve sorumlulukları bulunmaktadır (Özşahin, 2020).

Literatür taramasında Türkiye'de ve dünyada fertilite farkındalığını (Chan ve ark. 2022; Perez Capotosto, 2021; Renn ve ark. 2023; Özşahin & Altıparmak, 2021; Özşahin, 2020) ve yaşam biçimi davranışlarının fertilite üzerine etkilerini inceleyen (Espinos ve ark. 2020; Ersoy ve ark. 2021; Bektaş & Süt, 2020; Özevci ve ark. 2021) çalışmalar olmasına rağmen fertilite farkındalığı ile fertiliteyi etkileyen yaşam biçimi davranışlarının birlikte incelendiği herhangi bir çalışmaya ulaşılamamıştır. Bu bilgiler doğrultusunda bu araştırmada kadınlarda fertilite farkındalığının ve fertiliteyi etkileyen yaşam biçimi davranışlarının belirlenmesi amaçlanmıştır.

Araştırma Soruları

1. Kadınların fertilite farkındalıkları ne düzeydedir?
2. Kadınlarda fertiliteyi etkileyen yaşam biçimi davranışları nelerdir?
3. Kadınların fertilite farkındalık düzeyi ile yaşam biçimi davranışları arasında ilişki var mıdır?

Yöntem

Araştırmanın Tipi

Bu araştırma, kesitsel tanımlayıcı tiptedir.

Evren ve Örneklem

Araştırmanın evrenini, Sivas ili Akıncılar ilçesinde Ağustos-Ekim 2022 tarihleri arasında Sivas Akıncılar Aile Hekimliği Sistemine kayıtlı 19-49 yaş aralığındaki 693 kadın oluşturmuştur. Örneklem büyüklüğü evrendeki eleman sayısının bilindiği durumlarda kullanılan formülle hesaplanarak (Raosoft, 23.05.2022), basit tesadüfi örneklem yöntemi ile araştırmaya en az 248 kadının alınması gerektiği

belirlenmiş ve Ağustos-Ekim 2022 tarihleri arasında araştırmanın örneklem kriterlerini karşılayan 305 kadın örneklemi oluşturmuştur. Araştırmaya; 19-49 yaş aralığında olan, Türkçe konuşup anlayabilen, cinsel yaşamı aktif olan, menopoza girmemiş, psikiyatrik hastalık tanısı almayan ve araştırmaya gönüllü katılım gösteren kadınlar dahil edilmiştir.

Verilerin Toplanması

Veriler, Ağustos-Ekim 2022 tarihleri arasında Aile Sağlığı Merkezi (ASM)'nde yüz yüze görüşme yöntemiyle toplanmıştır. Verilerin toplanmasında "Kişisel Bilgi Formu", "Fertilite Farkındalık Ölçeği (FFÖ)" ve "Sağlıklı Yaşam Biçimi Davranışları Ölçeği (SYBDÖ-II)" kullanılmıştır. Kadınlara çalışma hakkında bilgi verilip bilgilendirilmiş sözlü ve yazılı onamları alındıktan sonra veri toplama formları araştırmacı tarafından uygulanmıştır. Görüşme, araştırmaya katılan kişilerin sorulara vermiş oldukları cevapların başkası tarafından duyulma ihtimalinin olmadığı sadece araştırmacı ve araştırmaya katılan kadının olduğu uygun bir ortamda yapılmış ve yaklaşık 20 dakika sürmüştür.

Veri Toplama Araçları

Kişisel Bilgi Formu: Araştırmacılar tarafından literatür taranarak (Bektaş ve Süt, 2020; Özevci ve ark. 2021; Özşahin, 2020) oluşturulan bu form, kadınların sosyodemografik özelliklerine (yaş, eğitim düzeyi, çalışma durumu, gelir düzeyi vb.), yaşam biçimi alışkanlıklarına (kahve tüketimi, cep telefonu kullanımı, sigara kullanımı vb.) ve obstetrik özelliklerine (gebelik sayısı, doğum sayısı, yaşayan çocuk sayısı vb.) ilişkin toplam 30 sorudan oluşmuştur.

Fertilite Farkındalık Ölçeği (FFÖ): Ölçek, Özşahin (2020) tarafından geliştirilmiş, likert tipte 19 madde ve iki alt boyuttan (bedensel farkındalık ve bilişsel farkındalık) oluşmaktadır. Ölçekte maddeler 1'den 5'e kadar puanlanmakta (1-Hiçbir zaman, 2-Nadiren, 3-Ara Sıra, 4-Çoğu Zaman ve 5-Her zaman) olup ters puanlanan madde bulunmamaktadır. Ölçek toplamında alınabilecek puan 19-95, "Bedensel Farkındalık" alt boyutunda 10-50, "Bilişsel Farkındalık" alt boyutunda 9-45'tir. FFÖ'den alınan puana göre farkındalık düzeyi değerlendirilmektedir. Toplam puan 19-43 arasında ise farkındalık ''düşük'', 44-69 arasında ise farkındalık ''orta'', 70-95 arasında ise farkındalık ''yüksek düzey'' olarak yorumlanmaktadır. Cronbach Alpha değeri FFÖ toplamı için 0,88; Bedensel Farkındalık alt boyutu için 0,62; Bilişsel Farkındalık alt boyutu için 0,65 olarak belirlenmiştir (Özşahin, 2020). Bu araştırmada da Cronbach Alpha değeri toplamda 0,85; Bedensel Farkındalık alt boyutunda 0,80; Bilişsel Farkındalık alt boyutunda 0,73 bulunmuştur.

Sağlıklı Yaşam Biçimi Davranışları Ölçeği (SYBDÖ-II): Ölçek 1987 yılında Walker tarafından geliştirilmiş, 1996 yılında yenilenmiş ve SYBDÖ–II olarak adlandırılmıştır. Ölçeğin Türkçe'ye uyarlamasını Bahar ve ark. (2008) yapmıştır. Ölçek 52 madde, altı alt boyuttan (manevi gelişim, kişiler arası ilişkiler, beslenme, fiziksel aktivite, sağlık sorumluluğu ve stres yönetimi) oluşmakta, dörtlü likert olarak puanlanmaktadır. Ölçeğin toplam puanı SYBD puanını vermekte olup en düşük puan 52, en yüksek puan 208'dir (Bahar ve ark. 2008). Alınan puanların artması bireyin belirtilen sağlık davranışlarını yüksek düzeyde uyguladığını göstermektedir.

İstatistiksel Analiz

Verilerin istatistiksel analizi Statistical Package for Social Sciences (IBM SPSS Corp., Armonk, NY, ABD 25,0) programı ile yapılmıştır. Verilerin değerlendirilmesinde tanımlayıcı istatistiksel ölçütler (ortalama, standart sapma, minimum ve maksimum değerler ve yüzdelik sayılar) kullanılmıştır. İki bağımsız grubun ortalamaları arasındaki farkın belirlenmesinde Independent Sample t-testi, ikiden fazla bağımsız grup için tek yönlü varyans analizi (One Way Anova) (hangi grup ortalamasının diğerlerinden farklı olduğunu belirlemek için homojenlik sağlanıyorsa Tukey, sağlanmıyorsa Tamhane's T2 testi), kategorik veriler arasındaki farkın belirlenmesinde Ki-kare testi, değişkenler arasındaki ilişkinin yönünü ve düzeyini belirlemek için Pearson Korelasyon analizi uygulanmış, anlamlılık düzeyi olarak $p <$,05 alınmıştır.

Araştırmanın Etik Yönü

Araştırmanın her aşaması etik ilkelere uygun olarak yürütülmüş ve araştırma Helsinki Deklerasyonu Prensipleri'ne göre yapılmıştır. Uygulamaya başlamadan önce Sivas Cumhuriyet Üniversitesi Girişimsel Olmayan Klinik Araştırmalar Etik Kurulu'ndan etik kurul izni (Tarih: 22.06.2022; Karar sayısı: 2022-06/01) ve araştırmanın yapıldığı kurumdan izin alınmıştır. Örneklem kriterlerine uyan kadınlara Bilgilendirilmiş Olur Forumu'ndaki bilgiler okunarak yazılı ve sözlü onamları alınmıştır. Araştırmaya katılıp katılmama kararı kadınlara bırakılmış, gönüllülük esası göz önünde bulundurulmuştur. Araştırmada kullanılan ölçeklerin kullanım izinleri alınmıştır.

Bulgular

Kadınların %59'unun 35 yaş ve üzerinde olduğu, %83,6'sının ilçede yaşadığı, %31,1'inin eğitim durumunun ilkokul olduğu, %73,4'ünün çalışmadığı, %84,3'ünün çekirdek ailede yaşadığı belirlenmiştir. Kadınların eşlerinin %70,8'inin 35 yaş ve üzerinde, %30,8'inin eğitim durumunun üniversite ve üzeri olduğu, %92,8'inin çalıştığı saptanmıştır. Ayrıca kadınların %63,3'ü gelirinin giderine

denk olduğunu, %81,6'sı kronik hastalığının olmadığını, %61,0'i de sağlık durumunu iyi olarak ifade etmiştir. Kadınların en küçüğü 20 en büyüğü 49 yaşında olup yaş ortalaması 36,41±7,85'tir (Tablo 1).

Tablo 1. Kadınların sosyodemografik özelliklerinin dağılımı

Yaş Ortalaması (Min-Max)		36,41±7,85 (20-49)	
		n	%
Yaş	20-34 yaş	125	41,0
	35 yaş ve üstü	180	59,0
Yaşadığı Yer	İlçe	255	83,6
	Köy	50	16,4
Eğitim Durumu	İlkokul	95	31,1
	Ortaokul	63	20,7
	Lise	73	23,9
	Üniversite ve üzeri	74	24,3
Çalışma Durumu	Çalışan	81	26,6
	Çalışmayan	224	73,4
Aile Yapısı	Çekirdek	257	84,3
	Geniş	48	15,7
Eşin Yaşı	20-34 yaş	89	29,2
	35 yaş ve üzeri	216	70,8
Eş Eğitim Durumu	İlkokul	60	19,7
	Ortaokul	69	22,6
	Lise	82	26,9
	Üniversite ve üzeri	94	30,8
Eş Çalışma Durumu	Çalışan	283	92,8
	Çalışmayan	22	7,2
Ekonomik Düzey Algısı	Gelir giderden az	73	23,9
	Gelir gidere denk	193	63,3
	Gelir giderden fazla	39	12,8
Kronik Hastalık	Var*	56	18,4
	Yok	249	81,6
Sağlık Durumu Algısı	İyi	186	61,0
	Orta	119	39,0
TOPLAM		305	100,0

*Diyabet, yüksek tansiyon, astım, guatr

Kadınların %48,5'inin gebelik sayısının üç ve üzeri, %46,2'sinin doğum sayısının bir-iki olduğu saptanmıştır. Kadınların %63,0'ü ideal olarak düşündüğü çocuk sayısının üç ve üzeri olduğunu ifade etmiştir. Kadınların %59,7'sinin bireysel olarak fertil olmayı, %56,7'sinin evlilik/birliktelik devamı için çocuk sahibi olmayı ''önemli'' bulduğu belirlenmiştir. Ayrıca %94,4'ünün üreme/cinsel sağlık probleminin olmadığı, %66,6'sının üreme ve cinsel sağlıkla ilgili sağlık kuruluşuna gittiği, %73,1'inin fertilite ve fertiliteyi etkileyen riskli yaşam biçimi davranışları hakkında bilgi almadığı bulunmuştur (Tablo 2).

Tablo 2. Kadınların obstetrik özelliklerinin dağılımı

Obstetrik Özellikler		n	%
Gebelik Sayısı	Yok	32	10,5
	1-2	125	41,0
	3 ve üzeri	148	48,5
Doğum Sayısı	Yok	38	12,5
	1-2	141	46,2
	3 ve üzeri	126	41,3
İdeal Olarak Düşünülen Çocuk Sayısı	0-2	113	37,0
	3 ve üzeri	192	63,0
Fertil Olmaya Verilen Bireysel Önem	Çok önemli	98	32,1
	Önemli	182	59,7
	Önemli değil-az önemli	25	8,2
Evlilik/Birliktelik Devamı İçin Çocuk Sahibi Olmaya Verilen Önem	Çok önemli	105	34,4
	Önemli	173	56,7
	Önemli değil-az önemli	27	8,9
Üreme/Cinsel Sağlık Problemi	Var *	17	5,6
	Yok	288	94,4
Üreme ve Cinsel Sağlıkla İlgili Sağlık Kuruluşuna Gitme Durumu	Giden	203	66,6
	Gitmeyen	102	33,4
Riskli Yaşam Biçimi Davranışları Hakkında Bilgi Alma Durumu	Alan**	82	26,9
	Almayan	223	73,1
TOPLAM		305	100,0

*Kist, myom, polikistik over
** Doktor, ebe, hemşire

Kadınların %67,8'inin hiç sigara kullanmadığı, %56,8'inin günde bir-iki fincan kahve, %83,3'ünün üç bardak ve daha fazla çay içtiği, %26,2'sinin haftada dört porsiyondan fazla fast food yiyecek tükettiği saptanmıştır. Ayrıca kadınların %63,0'ünün düzenli sağlık kontrolü yaptırmadığı, %51,5'inin BKİ sınıflandırmasına göre şişman olduğu bulunmuştur. Kadınların %54,1'inin günde ortalama 51 dakika ve üzeri cep telefonu kullandığı, %83,6'sının gün içinde hiç bilgisayar kullanmadığı, %63,6'sının düzenli olarak kozmetik ürün kullanmadığı, %71,5'inin sıkı iç çamaşırı ve dar pantolon giymediği, %90,8'inin koitusta kayganlaştırıcı kullanmadığı belirlenmiştir (Tablo 3).

Tablo 3. Kadınların yaşam biçimi alışkanlıklarının dağılımı

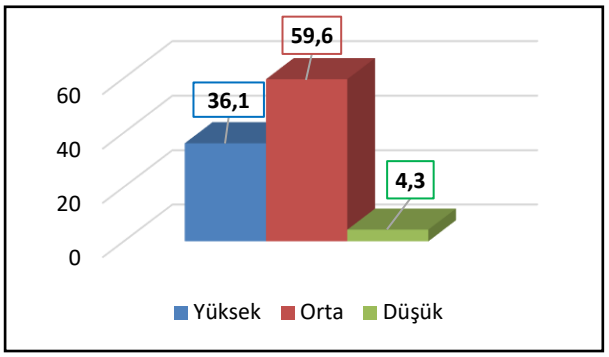
Yaşam Biçimi Alışkanlıkları		n	%
Sigara Kullanma Durumu	Evet	60	19,7
	Hayır	207	67,8
	Bırakmış	38	12,5
Günlük Tüketilen Kahve Miktarı (Fincan)	Hiç	91	29,8
	1-2	173	56,8
	3 ve üzeri	41	13,4
Günlük Tüketilen Çay Miktarı (Bardak)	Hiç	11	3,6
	1-2	40	13,1
	3 ve üzeri	254	83,3
Haftada 4 Porsiyondan Fazla Fast Food Tüketme Durumu	Evet	80	26,2
	Hayır	225	73,8
Düzenli Sağlık Kontrolleri Yaptırma Durumu	Yaptıran	113	37,0
	Yaptırmayan	192	63,0
Beden Kütle İndeksi	18,9 ve altı (zayıf)	7	2,3
	19-24,9 (normal)	83	27,2
	25-29,9 (şişman)	157	51,5
	30 ve üzeri (obez)	58	19,0
Günlük Cep Telefonu Kullanma Süresi (Dakika)	Hiç	18	5,9
	0-50	122	40,0
	51 ve üzeri	165	54,1
Günlük Bilgisayar Kullanma Süresi (Saat)	Hiç	255	83,6
	1-8	43	14,1
	9 ve üzeri	7	2,3
Kozmetik Ürünler Kullanma Durumu	Evet	111	36,4
	Hayır	194	63,6
Sıkı İç Çamaşırı ve Dar Pantolon Giyme Durumu	Evet	87	28,5
	Hayır	218	71,5
Coitusta Kayganlaştırıcı Kullanma Durumu	Evet	28	9,2
	Hayır	277	90,8
TOPLAM		305	100,0

FFÖ toplam puan ortalaması 64,17±11,63; alt boyut puan ortalamaları Bedensel Farkındalık 36,46±6,82; Bilişsel Farkındalık 27,71±6,30'dur. SYBDÖ-II toplam puan ortalaması 132,84±21,16'dır. SYBDÖ-II alt boyutları puan ortalaması Manevi Gelişim 27,17±4,32; Sağlık Sorumluluğu 21,55±5,02; Fiziksel Aktivite 15,68±4,98; Beslenme 21,90±3,96; Stres Yönetimi 20,49±3,82; Kişilerarası ilişkiler 26,06±4,61'dir (Tablo 4).

Tablo 4. FFÖ ve SYBDÖ-II toplam ve alt boyutları puan ortalamalarının dağılımı

Ölçek	Min-Max	$\bar{x}$± SS
FFÖ*		
Bedensel Farkındalık	10-50	36,46±6,82
Bilişsel Farkındalık	9-43	27,71±6,30
FFÖ Toplam	19-91	64,17±11,63
SYBDÖ-II**		
Manevi Gelişim	12-36	27,17±4,32
Sağlık Sorumluluğu	9-34	21,55±5,02
Fiziksel Aktivite	8-30	15,68±4,98
Beslenme	11-33	21,90±3,96
Stres Yönetimi	10-32	20,49±3,82
Kişiler Arası İlişkiler	14-36	26,06±4,61
SYBDÖ-II Toplam	73-192	132,84±21,16

*Fertilite Farkındalık Ölçeği
**Sağlıklı Yaşam Biçimi Davranışları Ölçeği-II



Şekil 1. Kadınların fertilite farkındalık düzeyleri

Kadınların %59,6'sının orta, %36,1'inin yüksek, %4,3'ünün düşük düzeyde fertilite farkındalığına sahip olduğu belirlenmiştir (Şekil 1).

Fertilite farkındalık toplam puanı ile SYBDÖ-II toplam ve alt boyutlardan manevi gelişim, sağlık sorumluluğu, beslenme, kişilerarası ilişkiler ve stres yönetimi puanı arasında orta düzeyde, pozitif yönlü, anlamlı (sırasıyla; r=0,612; *p*= ,000; r=0,675; *p*= ,000; r=0,538; *p*= ,000; r=0,484; *p*= ,000; r=0,615; *p*= ,000; r=0,488; *p*= ,000, Tablo 5) fiziksel aktivite ile çok düşük düzeyde, pozitif yönlü, anlamlı (r=0,130; *p*= ,023) ilişki saptanmıştır. Fertilite farkındalığı arttıkça manevi gelişim, sağlık sorumluluğu, fiziksel aktivite, beslenme, kişilerarası ilişkiler, stres yönetimi ve sağlıklı yaşam biçimi davranışları artmaktadır (Tablo 5).

Tablo 5. Kadınların fertilite farkındalıkları ile SYBDÖ-II arasındaki ilişki

SYBDÖ-II*** Alt Boyutları	FFÖ** Alt Boyutları					
	Bedensel Farkındalık		Bilişsel Farkındalık		FFÖ Toplam Puan	
	*p**	r	*p**	r	*p**	r
Manevi Gelişim	,000	0,574	,000	0,624	,000	0,675
Sağlık Sorumluluğu	,000	0,434	,000	0,524	,000	0,538
Fiziksel Aktivite	,154	0,082	,008	0,151	,023	0,130
Beslenme	,000	0,365	,000	0,498	,000	0,484
Kişiler Arası İlişkiler	,000	0,552	,000	0,538	,000	0,615
Stres Yönetimi	,000	0,409	,000	0,489	,000	0,488
Toplam Puan	,000	0,502	,000	0,586	,000	0,612

*Pearson korelasyon analizi
**Fertilite Farkındalık Ölçeği
***Sağlıklı Yaşam Biçimi Davranışları Ölçeği-II

Tartışma

Kadınlarda fertilite farkındalığının ve fertiliteyi etkileyen yaşam biçimi davranışlarının belirlenmesi amacıyla yapılan bu araştırmada ulaşılan sonuçlar literatür doğrultusunda tartışılmıştır. FFÖ, fertilite farkındalık düzeyini ölçebilen geçerli ve güvenilir bir ölçme aracıdır (Özşahin, 2020). Literatürde fertilite farkındalığı genellikle yapılandırılmış anketlerle değerlendirilmiştir (Mahey ve ark. 2018; Perez Capotosto, 2021; Sørensen ve ark. 2016). FFÖ kullanılarak yapılan çalışma (Özşahin & Altıparmak, 2021, Özşahin, 2020) sınırlıdır. FFÖ'den toplamda alınabilecek puanın 19-95 olduğu göz önüne alındığında ve ölçek yorumlanmasında alınan puan 44-69 arasında olduğunda farkındalık ''orta düzey'' olarak değerlendirildiğinden bu araştırmada FFÖ puan ortalamasının 64,17±11,63 olması kadınların orta düzeyde fertilite farkındalığına sahip olduğunu göstermektedir (Tablo 4). Ayrıca FFÖ puan ortalamasına göre kadınların yarısından fazlasının (%59,6) orta düzeyde fertilite farkındalığına sahip olduğu belirlenmiştir. Fertilite farkındalığının değerlendirildiği bazı çalışmalarda kadınların doğurganlık ve üreme ile ilgili bilgi düzeyleri düşük (Cheung ve ark. 2019; Mahey ve ark. 2018) bazı çalışmalarda fertilite bilgisi orta (Perez Capotosto, 2021; Sørensen ve ark. 2016) yalnızca birkaç çalışmada fertilite farkındalık düzeyleri yüksek bulunmuştur (Özşahin ve Altıparmak, 2021; Renn ve ark. 2023). Yapılan bir meta analiz çalışmasında üreme çağındaki kadınların fertilite farkındalık düzeylerinin düşük ile orta arasında olduğu saptanmıştır (Pedro ve ark. 2018).

Özşahin ve Altıparmak'ın (2021) çalışmasında FFÖ toplam puan ortalaması 70,89±10,50 olarak saptanmış, kadınların fertilite farkındalık düzeyi yüksek olarak belirlenmiş, kadınların %37,8'inin orta, %61,1'inin yüksek, %1,1'inin düşük düzeyde fertilite farkındalığına sahip olduğu saptanmıştır. Bu araştırma elde edilen sonucun Özşahin ve Altıparmak'ın (2021) sonucundan daha düşük olduğu görülmektedir. Bu farklılık nedeninin örneklemi oluşturan katılımcıların eğitim düzeyinin farklı olmasından kaynaklandığı söylenebilir. Özşahin ve Altıparmak'ın, (2021) çalışmasında çalışmaya katılan kadınların yarısından fazlasının (%77,5) il merkezinde yaşamasından ve %62,5'inin üniversite mezunu olmasından, bu araştırmanın ise ilçede yapılmasından ve örneklemi oluşturan kadınların eğitim düzeyinin daha düşük (%24,3'ünün üniversite mezunu) olmasından kaynaklandığı düşünülmektedir.

Fertilitenin korunması ve sürdürülmesi büyük ölçüde kişinin yaşam biçimine bağlı olduğundan, bireylerin sağlıklarını etkileyebilecek davranışlarını kontrol etmeleri ve alternatif uygun davranışları seçerek bunları düzenlemeleri gerekmektedir (Altıparmak & Aksoy Derya, 2018). Sahip olunan fertilite farkındalık düzeyi kadınların yaşam biçimi davranışlarını etkilemektedir (Altıparmak & Aksoy Derya, 2018; Demirci ve ark. 2016). Araştırmaya katılan kadınların SYBDÖ-II toplam puan ortalaması 132,84±21,16 olarak saptanmış, kadınların orta düzeyde sağlık yaşam biçimi davranışlarına sahip olduğu bulunmuştur. SYBDÖ-II alt boyut puan ortalamalarına baktığımızda en yüksek puanın manevi gelişim, en düşük puanın ise fiziksel aktivite alt boyutunda olduğu görülmüştür (Tablo 4). Kadınlarla yapılan diğer çalışmalarda da bu sonuçla uyumlu olarak SYBDÖ-II toplam puan ortalamasının 128,16±19,18 (Karataş & Gölbaşı, 2021), 142,73±26,33 (Gözüyeşil ve ark. 2019) olduğu, alt boyutlardan en yüksek puan ortalamasının manevi gelişim, en düşük puan ortalamasının da fiziksel aktivite olduğu saptanmıştır. Bu araştırmada SYBDÖ-II alt boyutlarından manevi gelişim puan ortalamasının yüksek olmasının sevindirici olmasıyla birlikte fiziksel aktivite puan ortalamasının düşük olması kadınların fiziksel aktiviteye ilişkin farkındalıklarının artırılmasının gerekli olduğunu göstermektedir.

Bu araştırmada kadınların fertilite farkındalık düzeyleri ile SYBDÖ-II puan ortalamaları arasındaki ilişki incelenmiş kadınların fertilite farkındalık düzeyi arttıkça sağlık sorumluluğu, manevi gelişim, beslenme, fiziksel aktivite, stres yönetimi, kişiler arası ilişkiler ve sağlıklı yaşam biçimi

davranışlarının arttığı görülmüştür (Tablo 5). Bu sonuca göre fertilite farkındalığı gelişmiş bireyin sağlıklı yaşam biçimi davranışlarında bulunduğunu söyleyebiliriz. Sağlıklı yaşam biçimi davranışlarının geliştirilmesi fertilite yeteneğinin istenen düzeye getirilebilmesi, fertilitenin korunması ve infertilitenin önlenebilmesi için çok önemlidir (Kaya ve ark. 2016). Demirci ve ark. (2016) yaptıkları çalışmada infertil (133,05±26,77) ve fertil (134,95±22,34) kadınların SYBDÖ-II toplam puanları arasında anlamlı fark saptamamış, ancak fertil kadınların fiziksel aktivite, sağlık sorumluluğu, beslenme, SYBDÖ-II toplam puanını infertil kadınlardan daha yüksek bulmuştur. Sağlığın devamı için sağlıklı yaşam biçimi davranışları (fiziksel aktivite, kilo kontrolü, sağlıklı beslenme, sigara içmeme vb.) önemli bir faktör olmakla birlikte sağlık sorumluluğu bireyin iyilik halini koruyabilmek için üzerine düşen görevleri yerine getirmesi ve sağlığını geliştirici davranışlarda bulunmasıdır (Avcı, 2016). Örneklemi oluşturan kadınlar içerisinde diyabet, yüksek tansiyon, astım, guatr gibi kronik hastalığı olanların varlığı bu bireylerin sağlıklı yaşam davranışlarına sahip olmadığı için bu hastalıkların oluşma olasılığını artırdığını ya da sahip olunan hastalıktan dolayı sağlıklı yaşam davranışı gösteremediğini düşündürmektedir. Fiziksel aktivite insülin duyarlılığını arttırarak over fonksiyonlarını ve menstrüel siklusu düzenleyerek gebe kalma olasılığını arttırmaktadır (Best ve ark. 2017). Düzenli egzersiz yapan kadınlarda üreme sistemi olumlu etkilenmekte, hormon seviyeleri dengelenmekte ve infertilite oluşma riski azalmaktadır (Kaya ve ark., 2016; Özşahin, 2020). Foucaut ve ark. (2019) yaptıkları çalışmada fiziksel hareketsizliğin infertilite ile ilişkili risk faktörü olabileceğini, fiziksel aktiviteyi oluşturan çeşitli unsurların (sıklık, yoğunluk, süre ve egzersiz türü) dikkate alınması ve infertilite tedavisinde yaşam tarzı faktörlerinin iyileştirilmesinin de göz önünde bulundurulması gerektiği öne sürülmektedir. Fertiliteyi korumada etkili olan sağlıklı yaşam biçimi davranışlarından biri olan dengeli ve düzenli beslenme sağlıklı bir yaşamın sürdürülmesini sağlamaktadır (Amanak ve ark. 2014). Beslenme alışkanlıklarının doğurganlık üzerindeki etkisinin araştırıldığı 116,678 kadınla yapılan çalışmada, dengeli miktarda besin alımı ve glisemik indeksi düşük diyetle beslenenlerde fertilitenin zarar görme riskinin azaldığı belirlenmiştir (Silvestris ve ark. 2019). Grieger ve ark. (2018) 5598 kadınla yaptıkları çalışmada meyve tüketiminin azalması, fastfood tüketiminin artması ile infertilite oranlarının arttığını ve gebe kalma süresinin uzadığını saptamıştır. Görüldüğü üzere bu araştırmada elde edilen sonuçların literatür tarafından desteklendiğini söyleyebiliriz. Fertiliteyi etkileyip infertiliteye sebep olan önemli etkenlerden biri de strestir ve psikolojik stres zihinsel, duygusal ve fiziksel tepkilere neden olarak (Collins & Rossi, 2015) kadınların fertilitesini olumsuz etkilemektedir (Park ve ark. 2019). Nefes ve gevşeme egzersizleri, yoga duruşları, konsantrasyon çalışmaları fertiliteyi artırmak için kullanılabilmektedir (Özşahin, 2020). Bu araştırmada örneklemi oluşturan kadınların SYBD'larının orta düzeyde olması SYBD'larının yaşam tarzı haline getirilmesi gerekliliğini göstermekte birlikte SYBD'ları arttıkça fertilite farkındalığının da artacağı düşünülmektedir. Bunun içindir ki kadınlarda fertilite farkındalığının artırılması ve fertiliteyi olumsuz etkileyen faktörlerin azaltılması için SYBD geliştirilmesi ve bu alışkanlıkların sürdürülmesi son derece önemlidir.

Araştırmanın Sınırlılığı

Bu araştırma, araştırmanın yapıldığı Sivas ili Akıncılar ilçe genelinde 2022 yılı Ağustos-Ekim ayları arasında örnekleme alınan 20-49 yaş aralığındaki kadınlara genellenebilir. Araştırma tek bir ilçe merkezi ile sınırlı olduğundan elde edilen sonuçlar tüm kadınlara genellenemez. Araştırmada elde edilen sonuçlar veri toplamada kullanılan ölçüm araçlarının ölçüm sonuçları ile sınırlıdır.

Sonuç ve Öneriler

Araştırmada kadınların fertilite farkındalıkları ve sağlıklı yaşam biçimi davranışları orta düzeydedir. Kadınların fertilite farkındalık düzeyi arttıkça sağlıklı yaşam biçimi davranışları da artmaktadır. Kadınlara fertilite, fertilite farkındalığı ve fertiliteyi etkileyen yaşam biçimi davranışları hakkında eğitim ve danışmanlık yapılması ve sağlık profesyonellerinin mesleki eğitimlerinin, yeterliklerinin, bilgi ve becerilerin artırılması için bu konuda hizmet içi eğitimlerin verilmesi önerilmektedir.

Etik Komite Onayı: Bu çalışma için etik komite onayı Sivas Cumhuriyet Üniversitesi'nden (Tarih: 22 Haziran 2022, Karar No: 2022-06/01) alınmıştır.
Hasta Onamı: Çalışmaya katılan tüm katılımcılardan sözlü ve yazılı onam alınmıştır.
Hakem Değerlendirmesi: Dış bağımsız
Yazar Katkıları: Fikir ve Tasarım- Ö.K.H;G.D.; Veri Toplanması ve/veya İşlemesi - Ö.K.H; Analiz ve/veya Yorum - Ö.K.H;G.D.; Literatür Taraması - Ö.K.H;G.D.; Yazıyı Yazan - Ö.K.H;G.D.; Eleştirel İnceleme - Ö.K.H;G.D.
Çıkar Çatışması: Yazarlar, çıkar çatışması olmadığını beyan etmiştir.
Finansal Destek: Yazarlar, bu çalışma için finansal destek almadığını beyan etmiştir.
Ethics Committee Approval: Ethics committee approval was received for this study from the ethics committee of Sivas Cumhuriyet University (Date: June 22, 2022, Decision Number: 2022-06/01).
Informed Consent: Verbal and written consent was obtained from all the participants.
Peer-review: Externally peer-reviewed.
Author Contributions: Concept and Design - Ö.K.H;G.D.; Data Collection and/or Processing-Ö.K.H; Analysis and/or Interpretation - Ö.K.H;G.D.; Literature Search - Ö.K.H;G.D.; Writing Manuscript - Ö.K.H;G.D.; Critical Review - Ö.K.H;G.D.
Conflict of Interest: The authors have no conflicts of interest to declare.
Financial Disclosure: The authors declared that this study has received no financial support.

Kaynaklar

Altıparmak, S., & Aksoy Derya, Y. (2018). The effects of fertility-supporting health training on healthy lifestyle behaviors and infertility self-efficacy in infertile women: A quasi-experimental study. *European Journal of Integrative Medicine*, *20,* 146-153. https://doi.org/10.1016/J.EUJIM.2018.05.005

Amanak, K., Karagöz, B., & Sevil, Ü. (2014). Modern yaşamın infertilite üzerine etkisi. *TAF Preventive Medicine Bulletin, 13*(4), 345-350.

Arslan Özkan, İ. (2012). Watson'ın bakım kuramına temellendirilmiş hemşirelik girişimlerinin infertil kadınların, infertiliteden etkilenme durumlarına, öz-yeterlik ve uyum düzeylerine etkisinin incelenmesi [Doktora tezi, İzmir Dokuz Eylül Üniversitesi], Ulusal Tez Merkezi. https://tez.yok.gov.tr/

Aşcı, Ö., & Gökdemir, F. (2020). Erkeklerde fertiliteyi etkileyebilecek riskli yaşam biçimi davranışlarının belirlenmesi. *Androloji Bülteni*, *22,* 219–225. https://doi.org/10.24898/tandro.2020.56833

Avcı, Y. D. (2016). Kişisel sağlık sorumluluğu. *TAF Preventive Medicine Bulletin*, *15*(3), 259-266.

Bahar, Z., Beşer, A., Gördes, N., Ersin, F., & Kıssal, A. (2008). Sağlıklı Yaşam Biçimi Davranışları Ölçeği-II'nin geçerlik ve güvenirlik çalışması. *Cumhuriyet Üniversitesi Hemşirelik Yüksekokulu Dergisi, 12*, 1-13.

Bektaş, G., & Süt, H. K. (2020). İnfertil ve fertil kadınların yaşam tarzı davranışları. *Androloji Bülteni, 23*(2), 67-76. https://doi.org/10.24898/tandro.2021.34392

Best, D., Avenell, A., & Bhattacharya, S. (2017). How effective are weight-loss interventions for improving fertility in women and men who are overweight or obese? A systematic review and meta-analysis of the evidence. *Human Reproduction Update, 23*(6), 681-705. https://doi.org/10.1093/humupd/dmx027

Chan, S. L., Thumboo, J., Boivin, J., Saffari, S. E., Yin, S., Yeo, S. R., Chan J. K. Y., Ng, K. C., Chua, K., & Yu, S. L. (2022). Effect of fertility health awareness strategies on fertility knowledge and childbearing in young married couples: Study protocol for an effectiveness-implementation hybrid type I multicenter three-arm parallel group open-label randomized clinical trial. *BMJ Open, 12*(1), e051710. https://doi.org/10.1136/bmjopen-2021-051710

Cheung, N. K., Coffey, A., Woods, C., & de Costa, C. (2019). Natural fertility, infertility and the role of medically assisted reproduction: The knowledge amongst women of reproductive age in North Queensland. *Australian and New Zealand Journal of Obstetrics and Gynaecology, 59*(1), 140-146. https://doi.org 10.1111/ajo.12806

Collins, G., & Rossi, B. V. (2015). The impact of lifestyle modifications, diet, and vitamin supplementation on natural fertility. *Fertil Res Pract, 1,* 1–9. https://doi.org/10.1186/s40738-015-0003-4

Demirci, N., Coşkuner Potur, D., Gün, Ç., & Çakır, C. (2016). İnfertil kadınlarda sağlıklı yaşam biçimi davranışlarının değerlendirilmesi. *Türkiye Klinikleri Journal of Obstetric-Women's Health and Diseases Nursing-Special Topics, 2*(3), 62-69.

Ersoy, E., Saatçı, E., & Ardıç, C. (2021). Gebelik planlayan kadınların beden kitle indeksi, obezite ve gebelik ilişkisi hakkındaki farkındalıkları. *Türk Aile Hek Derg, 25*(1), 15-20. https://doi.org/10.5222/tahd.2021.00719

Espinos, J., Sola, I., & Martinez-Zapata, M. (2020). The effect of lifestyle intervention on pregnancy and birth outcomes on obese infertile women: A systematic review and meta-analysis. *International Journal of Fertility & Sterility, 14*(1), 1-9. https://doi.org/10.22074/ijfs.2020.5921

Fertility Awareness: Natural Family Planning (NFP) (2023). http://americanpregnancy.org/ preventing-pregnancy/natural-family-planning

Foucaut, A., Faure, C., Julia, C., Czernichow. S., Levy, R., & Dupont, C. (2019). Sedentary behavior, physical inactivity and body composition in relation to idiopathic infertility among men and women. *Plos One, 14*(4), 1–15. https://doi.org/10.1371/journal.pone.0210770

Gözüyeşil, E., Taşi, F., & Arıöz Düzgün, A. (2019). 15-49 yaş kadınlarda meme kanseri endişesi ve sağlıklı yaşam biçimi davranışlarını etkileyen faktörler. *Çukurova Tıp Dergisi, 44*(4), 1215-1225. https://doi.org/10.17826/cumj.493360

Grieger, J., Grzeskowiak, L., Bianco-Miotto, T., Jankovic-Karasoulos, T., & Moran, L. (2018). Pre-pregnancy fast food and fruit intake is associated with time to pregnancy. *Human Reproduction, 33*(6), 1063-1070. https://doi.org/10.1093/humrep/dey079

Karataş, M., & Gölbaşı, Z. (2021). Kadınların prekonsepsiyonel dönemdeki sağlık riskleri ve sağlıklı yaşam biçimi davranışlarının belirlenmesi. *Düzce Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi, 11*(2), 151-158.

https://doi.org/10.33631/duzcesbed.747905

Kaya, Y., Beji, K., Aydın, Y., & Hassa, H. (2016). Kadınlarda yaşam biçimi davranışlarının fertilite üzerine etkisi. *Düzce Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi, (3),* 190- 196.

Mahey, R., Gupta, M., Kandpal, S., Malhotra, N., Vanamail, P., Singh, N., & Kriplani, A. (2018). Fertility awareness and knowledge among Indian women attending an infertility clinic: A cross-sectional study. *BMC Women's Health, 18*(1), 1-7. https://doi.org/10.1186/s12905-018-0669-y

Özevci, G., Ceyhan, B., & Atakır, K. (2021). Artan cep telefonu kullanımının insan sağlığı üzerine etkileri. *Dünya Sağlık ve Tabiat Bilimleri Dergisi, 4*(2), 80-93.

Özşahin Z., & Altıparmak S. (2021). Determining the effects of women's fertility awareness levels on obstetric history. *Middle Black Sea Journal of Health Science, 7*(1), 132-142. https://doi.org/10.19127/mbsjohs.892012

Özşahin, Z. (2020). Fertilite farkındalığını arttırmaya yönelik sağlığı geliştirme modeli doğrultusunda verilen eğitimin kadınlarda fertilite farkındalığına etkisi [Doktora tezi, Malatya İnönü Üniversitesi]. http://abakus.inonu.edu.tr/xmlui/handle/11616/18202

Park, J., Stanford, J. B., Porucznik, C. A., Christensen, K., & Schliep, K. C. (2019). Daily perceived stress and time to pregnancy: A prospective cohort study of women trying to conceive. *Psychoneuroendocrinology, 110,* 1-6. https://doi.org/10.1016/j.psyneuen.2019.104446

Pedro, J., Brandão, T., Schmidt, L., Costa, M. E., & Martins, M. V. (2018). What do people know about fertility? A systematic review on fertility awareness and its associated factors. *Upsala Journal of Medical Sciences, 123*(2), 71-81. https://doi.org/10.1080/03009734.2018.1480186

Perez Capotosto, M. (2021). An integrative review of fertility knowledge and fertility-awareness practices among women trying to conceive. *Nursing for Women's Health, 25*(3), 198–206. https://doi.org/10.1016/j.nwh.2021.04.001

Raosoft. Sample Size Calculator. (2022). http://www.raosoft.com/samplesize.html

Renn, Y., Xie, Y., Xu, Q., Long, M., Zheng, Y., Li, L., & Niu, C. (2023). University students' fertility awareness and its influencing factors: A systematic review. *Reproductive Health, 20*(1), 1-12. https://doi.org/10.1186/s12978-023-01628-6.

Silva, E., Almeida, H., & Castro, J. P. (2020). (In) Fertility and oxidative stress: New insights into novel redox mechanisms controlling fundamental reproductive processes. *Oxidative Medicine and Cellular Longevity. 2020,* 1-2. https://doi.org/10.1155/2020/4674896

Silvestris, E., Lovero, D., & Palmirotta, R. (2019). Nutrition and female fertility: An Interdependent Correlation. *Front Endocrinol (Lausanne), 10,* 1–12. https://doi.org/10.3389/fendo.2019.00346

Simmons, R. G., & Jennings, V. (2020). Fertility awareness-based methods of family planning. *Best Practice & Research Clinical Obstetrics & Gynaecology, 66,* 68-82. https://doi.org/10.1016/j.bpobgyn.2019.12.003

Sørensen, N. O., Marcussen, S., Backhausen, M. G., Juhl, M., Schmidt, L., Tydén, T., & Hegaard, H. K. (2016). Fertility awareness and attitudes towards parenthood among Danish university college students. *Reproductive Health, 13*(1), 1-10. https://doi.org/10.1186/s12978-016-0258-1

Temizkan Sekizler, E., & Daşıkan, Z. (2021). Prekonsepsiyonel sağlık bakımı ve primer bakımda danışmanlık, *Hemşirelik Bilimi Dergisi, 4*(2), 94–105.

ATATÜRK ÜNİVERSİTESİ YAYINLARI
ATATURK UNIVERSITY PUBLICATIONS

Review /Derleme DOI: 10.51621/aws.1441452

A Framework for Understanding the Alcohol and Substance Use among Girl Adolescents: Risks and Interventions

Kız Ergenlerde Alkol ve Madde Kullanımının Anlaşılmasına Yönelik Bir Çerçeve: Riskler ve Müdahaleler

Betül AKYEL GÖVEN

Ege University, Child and Adolescent Alcohol Drug Addiction and Research Application Center, İzmir, Turkiye

ABSTRACT

Understanding the specific vulnerabilities and requirements of adolescent girls is essential for creating effective strategies to address alcohol and substance use within this group. This article describes the unique challenges girls face during adolescence concerning alcohol and substance use. This article delves into the various factors contributing to alcohol and substance use among teenage girls, including societal pressures, peer influence, and family dynamics and emphasizes the importance of understanding these complexities to develop effective intervention strategies tailored to the specific needs of adolescent girls. It discusses evidence-based approaches for prevention and intervention, highlighting the significance of education and support systems in mitigating alcohol and substance use risks. Additionally, the article addresses the role of parents, schools, healthcare providers, and community in supporting girls through this critical developmental stage. Considering the complexity of their experiences, it is clear that a comprehensive and multifaceted approach is needed to address alcohol and substance use among adolescent girls. There is a need for studies that aim to define and explain alcohol and substance use problems for adolescent girls. By acknowledging the unique experiences and challenges that girls encounter both worldwide and specifically in Turkey, healthcare providers can develop inclusive and gender-responsive strategies for addiction prevention and treatment.

Keywords: Alcohol use, girl adolescents, substance use

ÖZ

Ergen kızların spesifik hassasiyetlerini ve gereksinimlerini anlamak, bu grup içinde alkol ve madde kullanımına yönelik etkili stratejiler oluşturmak için önemlidir. Bu makale, kızların ergenlik döneminde alkol ve madde kullanımıyla ilgili olarak karşılaştıkları benzersiz zorlukları anlatmaktadır.

Makale, toplumsal baskılar, akran etkisi ve aile dinamikleri de dahil olmak üzere genç kızlar arasında alkol ve madde kullanımına katkıda bulunan çeşitli faktörleri ele almakta, ergen kızların özel ihtiyaçlarına uygun etkili müdahale stratejileri geliştirmek için bu karmaşıklıkları anlamanın önemini vurgulamaktadır. Alkol ve madde kullanımı risklerini azaltmada eğitim ve destek sistemlerinin önemini vurgulayarak önleme ve müdahaleye yönelik kanıta dayalı yaklaşımları tartışmaktadır. Ayrıca makale, kızların bu kritik gelişim aşamasında desteklenmesinde ebeveynlerin, okulların, sağlık hizmeti sağlayıcılarının ve toplumun rolünü ele almaktadır. Deneyimlerinin karmaşıklığı göz önüne alındığında, ergen kızlarda alkol ve madde kullanımını ele almak için kapsamlı ve çok yönlü bir yaklaşıma ihtiyaç olduğu açıktır. Ergen kızların alkol ve madde kullanım sorunlarını tanımlamayı ve açıklamayı amaçlayan çalışmalara ihtiyaç vardır. Sağlık hizmeti sağlayıcıları, kızların hem dünya çapında hem de Türkiye'de karşılaştıkları benzersiz deneyimleri ve zorlukları kabul ederek, bağımlılığın önlenmesi ve tedavisi için kapsayıcı ve cinsiyete duyarlı stratejiler geliştirebilirler.

Anahtar kelimeler: Alkol kullanımı, kız ergenler, madde kullanımı

Received/Geliş Tarihi 22.02.2024
Accepted/Kabul Tarihi 16.05.2024
Publication Date/Yayın Tarihi 14.06.2024

Corresponding author: Betül AKYEL GÖVEN
E-mail: akyel.betul@yahoo.com
Cite this article: Akyel Göven, B. (2024). A Framework for Understanding the Alcohol and Substance Use among Girl Adolescents: Risks and Interventions *Advances in Women's Studies, 6*(1),28-37. Doi: 10.51621/aws.1441452

Introduction

Navigating the path forward for adolescent girls concerning alcohol and substance use requires a comprehensive approach that considers various factors influencing their behaviors and provides effective interventions and support systems. Recognizing the unique vulnerabilities and needs of adolescent girls is crucial in developing strategies to address alcohol and substance use among this population. This article provides an overview of the prevalence, patterns, and associated factors of substance use among girls during adolescence, with a focus on global trends and insights from Turkey.

Adolescence is a critical period of transition characterized by physical, emotional, and psychological changes. For young people, this journey can be particularly challenging as they navigate societal expectations, peer pressure, and personal identity development (Özdemir et al., 2016). Among the myriad challenges faced during this phase, alcohol and substance use disorders emerge as a significant concern, with its roots often intertwined with the complexities of adolescence (Hawkins, 2009).

Adolescent substance use is a significant public health concern worldwide, with girls increasingly engaging in various forms of substance experimentation and misuse. Alcohol use among adolescent girls is a global phenomenon, with varying prevalence rates across regions and countries, highlighting the influence of social environment, drug accessibility, and personal attributes (Stockings et al., 2016). Eastern Europe bears the greatest health burden from alcohol, while the burden from illicit drugs is higher in the USA, Canada, Australia, New Zealand, and western Europe. There are substantial gaps in global epidemiological data concerning the extent of drug use, and much of our understanding of the progression of substance use comes from cohort studies conducted in high-income countries several decades ago, impeding the development of effective global policy responses (Degenhardt et al., 2016).

Alcohol, cannabis, and tobacco products are the primary substances used by adolescents, with other illicit drugs following suit. In North America, the average age for initiating substance use has been on the rise and currently falls between 15 and 17 years old. (Boak et al., 2020). Adolescents who begin substance use during early adolescence (11-14 years) are especially susceptible to experiencing problems related to substance use later on (Jordan & Andersen, 2017).

According to the World Health Organization (WHO), alcohol is the most commonly used psychoactive substance among adolescents worldwide. Approximately, 155 million adolescents aged 10-19 years have used alcohol, and 11 million have used drugs globally. While boys traditionally exhibit higher rates of substance use, the gender gap is narrowing, with girls catching up in recent years. (World Health Organization, 2019). In Turkey, adolescent substance use is a growing concern, with prevalence rates mirroring global trends. In recent times, research has noted a swift rise in substance misuse among adolescents in Turkey (EMCDDA, 2019).

According to the Turkish Monitoring Centre for Drugs and Drug Addiction (TUBIM), alcohol and tobacco are the most commonly used substances among adolescents, followed by cannabis and synthetic drugs (TUBIM, 2021). The consequences of alcohol and substance use among girls during adolescence are significant and encompass physical major health risks, serious mental health disorders, academic difficulties, interpersonal conflicts, and increased vulnerability to other risky behaviors (Poznyak & Rekve, 2018; SAMHSA, 2021).

Research findings indicate that nearly one out of every three adolescents in certain regions of European countries are reported to be affected. In Turkey, adolescents tend to report lower rates of substance use (EMCDDA, 2016). A study conducted among college students in three major state universities in Turkey revealed that the prevalence of having tried illicit drugs at least once was 13.2%. (Ayvasik, & Sumer, 2010).

Despite the recognized significance of addressing gender differences in substance use research, only a quarter of all studies on adolescent substance use have actually included standard reporting on this aspect (Karlsson Lind et al., 2017). Recognizing the distinct impacts of alcohol and cannabis use on males and females separately among adolescent populations could provide valuable insights into understanding why adolescents of different genders vary in their susceptibility to substance use (Lees et al., 2020).

While substance use rates among female adolescents in our country are lower compared to males, there are shifts in intervention policies concerning substance use, reflecting the seriousness of the impact observed in girls (Yılmaz, 2022; Ünübol & Sayar, 2022). Specialized treatment programs tailored for women have been implemented to address challenges related to accessing and engaging in treatment, as well as to tackle the social and physical issues faced by women struggling with addiction (Elms et al., 2018). As part of these efforts, an inpatient purification center specifically for women was inaugurated in Turkey (TUBIM, 2021).

The Impact of Alcohol and Substance Use on Adolescent Girls

Alcohol and substance use among adolescent girls can have profound and lasting effects on their physical health, mental well-being, social relationships, and overall development. Understanding the specific impacts of substance use on girls is crucial for developing targeted prevention and intervention efforts to mitigate these consequences. Substance use can lead to various medical complications among adolescent girls, including liver damage, cardiovascular problems, respiratory issues, impaired immune function and addiction (Kay et al., 2014). Adolescent girls are particularly vulnerable to developing substance use disorders due to ongoing brain development and heightened susceptibility to addictive substances. Early initiation of alcohol and drug use increases the risk of developing addiction later in life (Volkow et al., 2019).

Substance use is strongly associated with the development of mental health disorders and cognitive impairment among adolescent girls. Conditions such as depression, anxiety, and eating disorders are more prevalent among girls who engage in alcohol and drug use (Hawke et al., 2020). The study that examines self-reported mental health issues among young individuals undergoing outpatient treatment for substance use disorders in Sweden and its findings indicate notable gender gaps, as girls report significantly elevated levels of mental health problems compared to boys (Richert et al., 2020). The studies show that girls exhibited notably higher rates of mental health problems and a greater occurrence of comorbidity between substance use disorder and mental health disorders (Fernandez Artamendi et al., 2021; Brewer et al., 2017).

Alcohol and substance use can impair cognitive function, memory, and decision-making abilities in adolescent girls, affecting their current and future academic performance (Lisdahl et al., 2018). A study of 3,286 high school students shows that the effect of annual fluctuations in marijuana use on working memory is more pronounced in girls than in boys. The findings of the study suggest distinct neurocognitive impairment patterns in working memory between females and males following cannabis use throughout adolescence (Noorbakhsh et al., 2020). Early onset of cannabis use may lead to greater deficits in spatial working memory among female adolescents, potentially hampering their academic performance and resulting in significant impairment in adulthood, thereby diminishing their overall quality of life (Crane et al., 2013).

Alcohol and substance use can disrupt educational attainment among adolescent girls, leading to lower grades, absenteeism, and dropout rates. These consequences can hinder their future opportunities and employment. Substance-related legal issues and reputational damage can limit their employment options and financial stability (Terry-McElrath et al., 2017).

Alcohol and substance use can strain relationships with family members, friends, and partners, leading to conflict, isolation, and estrangement. Girls who engage in alcohol and substance use are at increased risk of experiencing victimization, including sexual assault and violence. Substance use may impair their ability to recognize and respond to dangerous situations, leaving them vulnerable to harm (Devries et al., 2014).

Risk Factors Associated with Alcohol and Substance Use among Adolescent Girls

Adolescent girls undergo a multitude of transformations, both internally and externally. Hormonal fluctuations, neurobiological changes, and emerging cognitive abilities contribute to a heightened susceptibility to external influences. Additionally, societal norms and gender expectations often place unique pressures on girls, impacting their self-esteem, body image, and sense of belonging. These vulnerabilities can manifest in various forms, including alcohol use and substance abuse (Austrian

et al., 2020). Factors contributing to substance use among adolescent girls in Turkey are also complex and multifactorial. Sociocultural norms, familial dynamics, peer relationships, academic stress, and urbanization are among the factors influencing substance use behaviors among Turkish girls during adolescence (Yildiz et al., 2020).

In Turkey, gender-specific risk factors may intersect with cultural norms and societal expectations, shaping girls' experiences of addiction differently from boys. For example, cultural stigma surrounding mental health issues and addiction may disproportionately affect girls, leading to underreporting and reluctance to seek help (Ünübol et al., 2019). For girls, risk factors such as trauma, low self-esteem, peer pressure, early puberty, and exposure to familial substance use may contribute to vulnerability to addiction (Persike et al., 2020). Family dynamics, traditional gender roles, and socioeconomic disparities may also influence girls' susceptibility to substance use in the Turkish context (Levent et al., 2023).

During adolescence, girls are particularly susceptible to the influences of their family and peers, which can significantly impact their decisions regarding risky behaviors, alcohol and substance use. Both familial and peer relationships play crucial roles in shaping attitudes, behaviors, and risk perceptions related to substance use among adolescent girls. In families, high levels of parental monitoring and open and supportive communication has been shown to be protective against alcohol and substance use during adolescence (Ennett et al., 2001; Ryan et al., 2010).

The research focusing on gender disparities among 1,334 early adolescents in the United States (aged 11-14 years), revealed that indirect effects indicated declines in academic achievement mediated the connection between peer victimization and substance use for both genders. However, elevated depressive symptoms only mediated this association for just girls. Additionally, stronger support from family and friends lessened the correlation between between relational victimization and depressive symptoms for girls (Vannucci et al., 2021).

Peer groups provide opportunities for socialization, including the opportunity to engage in alcohol and substance use together. Adolescents may view alcohol and substance use as a means of bonding with peers or as a way to cope with social stressors or feel pressured to conform to using these substances. Empowering girls to resist negative peer influences could protect them from alcohol and substance use (Marschall-Lévesque et al., 2014; Van Ryzin et al., 2012).

Stigmatization of Alcohol and Substance Use Among Adolescent Girls

Stigmatization of alcohol and substance use among adolescent girls is a pervasive social phenomenon with profound implications for their well-being and access to care. Girls who engage in substance use may be subjected to negative labels, stereotypes, and social exclusion, perpetuating feelings of shame, guilt, and low self-worth (McNeil, 2021). The stigma associated with alcohol and substance use among adolescent girls has far-reaching consequences across multiple domains. Social isolation, peer rejection, and bullying are common experiences for girls facing stigma, exacerbating feelings of loneliness and depression (Cheetham et al., 2019). Stigmatization may also deter girls from seeking help or disclosing their substance use to parents, teachers, or healthcare providers, hindering access to timely intervention and support services. Moreover, internalized stigma can perpetuate cycles of self-blame, denial, and avoidance, impeding recovery and exacerbating mental health challenges (Livingston & Boyd, 2010).

Stigmatization poses significant barriers to effective treatment and recovery for adolescent girls struggling with alcohol and substance use. Fear of judgment, discrimination, and loss of social status may deter girls from seeking professional help or participating in substance abuse treatment programs (Motyka et al., 2022). Healthcare providers' attitudes and behaviors can also influence girls' willingness to engage in treatment, with stigma contributing to disparities in access to quality care and treatment outcomes. Addressing stigmatization of alcohol and substance use among adolescent girls requires multifaceted interventions at individual, interpersonal, and societal levels. Education campaigns aimed at challenging stereotypes, promoting empathy, and fostering inclusive attitudes can help reduce stigma and raise awareness about the complexities of substance use in girls. Creating safe spaces for open dialogue and peer support can empower

girls to share their experiences, seek help, and access community resources without fear of judgment or discrimination (Hughes et al., 2023). Through collective efforts to challenge stereotypes and promote empathy, we can dismantle stigma and create a more compassionate and equitable society for all adolescent girls facing challenges.

Empowering Adolescent Girls: Prevention Techniques for Substance and Alcohol Use

Recognizing the unique vulnerabilities and needs of adolescent girls is crucial in developing strategies to address alcohol and substance use among this population. Empowering adolescent girls with knowledge and skills to make informed decisions about alcohol and substance use is key to prevention efforts. Education programs should focus on building resilience, assertiveness, and coping strategies to help girls navigate peer pressure and societal influences (Tremblay et al., 2020).

Despite the need for gender-specific substance use prevention programs, few such programs exist (Chen et al., 2004). The study conducted 2017 with girl adolescents, Online Drug Abuse Prevention Program showed that, compared to girls in the control group, those who received the intervention smoked fewer cigarettes and reported higher levels of self-esteem, goal setting, media literacy, and self-efficacy. At the 1-year follow-up, girls who received the intervention reported reduced instances of binge drinking and cigarette smoking compared to those in the control group (Schwinn et al., 2018).

Positive parenting techniques, such as setting clear rules and boundaries, providing consistent discipline, and encouragement for positive behavior, help reinforce healthy decision-making skills in adolescent girls. Parental involvement and warmth have been shown to reduce the likelihood of substance use initiation among adolescents (Meisel & Colder, 2022). Modeling responsible alcohol consumption, coping strategies for stress and healthy conflict resolution techniques instill positive values and norms in adolescent girls. Strong family connections also serve as protective factors against substance use initiation and promote a sense of belonging and support for adolescent girls (Crano & Donaldson, 2018).

Creating supportive environments within families, schools, and communities can buffer adolescent girls against the risks associated with alcohol and substance use. Encouraging open communication, fostering positive peer relationships, and providing access to supportive adults can enhance protective factors and reduce the likelihood of engagement in risky behaviors. Collaborative efforts involving schools, healthcare providers, law enforcement, and community organizations are vital for implementing comprehensive prevention and intervention strategies (Hawkins et al., 2016).

Tailoring interventions to the specific needs of adolescent girls is essential for addressing alcohol and substance use effectively. Gender-specific programs can focus on issues such as body image, self-esteem, and social pressures that are particularly relevant to girls' experiences during adolescence (Meyer et al., 2019). Gender-specific prevention programs foster a sense of safety, belonging, and empowerment, enhancing engagement and retention in treatment.

Addiction Treatment Techniques for Adolescent Girls: Advancements and Perspectives

In recent years, advancements in addiction treatment have led to the development of novel techniques specifically designed to support the recovery journey of adolescent girls. Recognizing the distinct biological, psychological, and social factors influencing addiction in adolescent girls, gender-specific treatment programs have gained traction. To enhance the knowledge levels of personnel involved in the operational structuring of women's detoxification, adolescent girls' detoxification, mother and baby units, and rehabilitation centers, a "Training of Gender-Sensitive Treatment Model Development" was organized (Romo-Avilés, 2023; Jacobs, 2019).

Many adolescent girls with substance use disorders have a history of trauma, including physical, emotional, or sexual abuse. Trauma-informed care approaches prioritize safety, trust, and collaboration, recognizing the impact of trauma on substance use behaviors (Bartholow & Huffman, 2023). Therapeutic techniques such as trauma-focused cognitive-behavioral therapy (TF-CBT) help girls process traumatic experiences, build coping skills, and develop resilience. Mindfulness-based interventions have shown promise in reducing cravings, managing stress, and promoting emotional regulation among adolescents with substance

use disorders (Brewer-Smyth, 2022). Mindfulness techniques cultivate present-moment awareness, acceptance, and non-judgmental attitude, empowering girls to enhance self-awareness.

Peer support and group therapy play a vital role in adolescent addiction treatment, providing girls with a sense of belonging, validation, and social support. Peer-led support groups offer opportunities for girls to connect with peers, share experiences, and learn from each other's successes and challenges. Group therapy modalities promote interpersonal skills, emotional regulation, and accountability (Shalaby & Agyapong, 2020). Involving families in the treatment process is essential for addressing underlying family dynamics, communication patterns, and relational conflicts that may contribute to substance use among adolescent girls. Family therapy approaches focus on improving family functioning, enhancing communication, and strengthening bonds to support sustained recovery (Volkow, 2020). By integrating gender-specific approaches, trauma-informed care, mindfulness-based interventions, peer support, and family-based interventions, clinicians and treatment providers can address the multifaceted needs of adolescent girls holistically.

Advancements in technology offer new opportunities for delivering addiction treatment to adolescents. Mobile health (mHealth) interventions, smartphone applications, and online platforms provide accessible and confidential support for girls struggling with substance use (Carreiro et al., 2020). These technology-based interventions offer resources such as psychoeducation, coping skills training, and peer support, empowering girls to manage cravings, regulate emotions, and build resilience (Kazemi et al., 2021).

Conclusion and Recommendations

Understanding substance use and alcohol use among adolescent girls is vital for addressing the complex interplay of individual, social, and environmental factors that contribute to substance use behaviors and for developing comprehensive strategies to support girls' health, well-being, and future success. We need to conduct more researches to reach detailed information about adolescent girls. Conduct research that examines the impact of alcohol and substance use policies, regulations, and enforcement efforts on the behaviors and outcomes of adolescent girls. By evaluating the effectiveness of policy interventions and advocating for evidence-based policy changes, researchers can contribute to the development of a supportive policy environment that promotes the health and well-being of adolescent girls. In addition to these regulations, conduct longitudinal studies that follow adolescent girls over time to better understand the trajectories of alcohol and substance use, as well as the factors that contribute to initiation, escalation, or cessation of use. Longitudinal research can provide valuable insights into the developmental pathways of substance use among girls and help identify critical periods for intervention.

Substance use among adolescents represents a significant global health challenge, necessitating concerted efforts to address its underlying determinants and mitigate associated risks. Although there are some common characteristics between genders in substance use disorders; some basic differences between genders play a determining role in adolescents' substance use. By acknowledging the unique vulnerabilities of girl adolescence and implementing targeted prevention and intervention strategies, we can empower girls to navigate these complexities with resilience and strength. Together, we can foster a supportive environment that promotes health, well-being, and positive outcomes for adolescent girls facing addiction. Understanding the intersection of girl adolescence and addiction is crucial for effective prevention, intervention and treatment strategies. As these strategies continue to evolve and expand, they hold promise for reducing the burden of substance abuse and promoting the well-being of adolescent girls. By recognizing the distinct experiences and challenges faced by girls, both globally and within the context of Turkey, policymakers, healthcare providers, and community stakeholders can work towards creating inclusive and gender-responsive approaches to addiction prevention and treatment.

Ethics Committee Approval: There is no need to ethics committee approval.
Peer-review: Externally peer-reviewed.
Conflict of Interest: The author have no conflicts of interest to declare.
Financial Disclosure: The author declared that this study has received no financial support**.**

References

Austrian, K., Soler-Hampejsek, E., Behrman, J. R., Digitale, J., Jackson Hachonda, N., Bweupe, M., & Hewett, P. C. (2020). The impact of the Adolescent Girls Empowerment Program (AGEP) on short and long term social, economic, education and fertility outcomes: a cluster randomized controlled trial in Zambia. *BMC Public Health*, 20(1), 1-15.

Ayvasik, H. B., & Sumer, H. C. (2010). Individual differences as predictors of illicit druguse among Turkish college students. *The Journal of Psychology*,144(6), 489-505.

Bartholow, L. A. M., & Huffman, R. T. (2023). The necessity of a trauma-informed paradigm in substance use disorder services. *Journal of the American Psychiatric Nurses Association*, 29(6), 470-476.

Boak, A., Elton-Marshall, T., Mann, R. E., & Hamilton, H. A. (2020). Drug use among Ontario students, 1977–2019: detailed findings from the Ontario Student Drug Use and Health Survey (OSDUHS). Toronto, ON: Centre for Addiction and Mental Health.

Brewer, S., Godley, M. D., & Hulvershorn, L. A. (2017). Treating mental health and substance use disorders in adolescents: what is on the menu?. *Current Psychiatry Reports*, 19(1), 5.

Brewer-Smyth, K. (2022). Overview of Psychological and Psychiatric Interventions After Trauma: Counseling, Psychotherapy, and Medications. In Adverse Childhood Experiences: The Neuroscience of Trauma, Resilience and Healing throughout the Life Course (pp. 273-302). Cham: Springer International Publishing.

Carreiro, S., Newcomb, M., Leach, R., Ostrowski, S., Boudreaux, E. D., & Amante, D. (2020). Current reporting of usability and impact of mHealth interventions for substance use disorder: A systematic review. *Drug and Alcohol Dependence*, 215, 108201.

Cheetham, A., Jorm, A. F., Wilson, C., Berridge, B. J., Blee, F., & Lubman, D. I. (2019). Stigmatising attitudes towards depression and alcohol misuse in young people: relationships with help-seeking intentions and behavior. *Adolescent Psychiatry*, 9(1), 24-32.

Chen, X., Burgdorf, K., Dowell, K., Roberts, T., Porowski, A., & Herrell, J. M. (2004). Factors associated with retention of drug abusing women in long-term residential treatment. *Evaluation and Program Planning*, 27, 205–212.

Crane, N. A., Schuster, R. M., and Gonzalez, R. (2013). Preliminary evidence for a sex-specific relationship between amount of cannabis use and neurocognitive performance in young adult cannabis users. *J. Int. Neuropsychol. Soc.*, 19, 1009–1015.

Crano, W. D., & Donaldson, C. D. (2018). Positive parenting, adolescent substance use prevention, and the good life. *The Social Psychology of Living Well*, 277-297.

Degenhardt, L., Stockings, E., Patton, G., Hall, W. D., & Lynskey, M. (2016). The increasing global health priority of substance use in young people. *The Lancet Psychiatry*, 3(3), 251-264.

Devries, K. M., Child, J. C., Bacchus, L. J., Mak, J., Falder, G., Graham, K., ... & Heise, L. (2014). Intimate partner violence victimization and alcohol consumption in women: A systematic review and meta-analysis. *Addiction*, 109(3), 379-391.

Elms, N., Link, K., Newman, A., Brogly, S. B., & Kingston House of Recovery for Women and Children. (2018). Need for women-centered treatment for substance use disorders: results from focus group discussions. *Harm Reduction Journal*, 15, 1-8.

EMCDDA. (2016). The European School Survey Project on Alcohol and Other Drugs[ESPAD] report,2015.Retrievedfromhttp://www.espad.org/sites/espad.org/files/ESPAD_report_2015.pdfEMCDDA.

Ennett, S. T., Bauman, K. E., Foshee, V. A., Pemberton, M., & Hicks, K. A. (2001). Parent-child communication about adolescent tobacco and alcohol use: What do parents say and does it affect youth behavior? *Journal of Marriage and Family*, 63(1), 48–62.

European Monitoring Center for Drugs and Drug Addiction (EMCDDA). (2019). Turkey country drug report 2019.

Fernández Artamendi, S., Martínez Loredo, V., & López Núñez, C. (2021). Sex differences in comorbidity between substance use and mental health in adolescents: Two sides of the same coin. Psicothema.

Hawke, L. D., Wilkins, L., & Henderson, J. (2020). Early cannabis initiation: Substance use and mental health profiles of service-seeking youth. *Journal of Adolescence*, 83, 112-121.

Hawkins, E. H. (2009). A tale of two systems: Co-occurring mental health and substance abuse disorders treatment for adolescents. *Annual Review of Psychology*, 60, 197-227.

Hawkins, J. D., Jenson, J. M., Catalano, R., Fraser, M. W., Botvin, G. J., Shapiro, V., ... & Stone, S. (2016). Unleashing the power of prevention. *American Journal of Medical Research*, 3(1), 39.

Hughes, T. L., Bochicchio, L., Drabble, L., Muntinga, M., Jukema, J. S., Veldhuis, C. B., ... & Bos, H. (2023). Health disparities in one of the world's most progressive countries: a scoping review of mental health and substance use among sexual and gender minority people in the Netherlands. *BMC Public Health*, 23(1), 2533.

Jacobs, L. (2019). Gender-sensitive training for substance use disorder treatment: Results and implications of a pilot health professionals needs assessment. *Journal of Psychology in Africa*, 29(2), 187-190.

Jordan, C. J., & Andersen, S. L. (2017). Sensitive periods of substance abuse: Early risk for the transition to dependence. *Developmental Cognitive Neuroscience*, 25, 29-44.

Karlsson Lind, L., von Euler, M., Korkmaz, S., and Schenck-Gustafsson, K. (2017). Sex differences in drugs: the development of a comprehensive knowledge base to improve gender awareness prescribing. *Biol. Sex Differ*., 8:32.

Kay, A., Taylor, T. E., Barthwell, A. G., Wichelecki, J., & Leopold, V. (2014). Substance use and women's health. In Women, Children, and Addiction (pp. 27-51). Routledge.

Kazemi, D. M., Li, S., Levine, M. J., Auten, B., & Granson, M. (2021). Systematic review of smartphone apps as a mHealth intervention to address substance abuse in adolescents and adults. *Journal of Addictions Nursing*, 32(3), 180-187.

Lees, B., Meredith, L. R., Kirkland, A. E., Bryant, B. E., & Squeglia, L. M. (2020). Effect of alcohol use on the adolescent brain and behavior. *Pharmacology Biochemistry and Behavior*, 192, 172906.

Levent, Y., Gökçe, A., & Özer A. (2023). Prevalence of Smoking, Alcohol and Substance Use Between High School Students in Yeşilyurt and Battalgazi District of Malatya Province and Influencing Factors. *Online Türk Sağlık Bilimleri Dergisi*, 8(2), 220-227.

Lisdahl, K. M., Sher, K. J., Conway, K. P., Gonzalez, R., Ewing, S. W. F., Nixon, S. J., Tapert, S., Bartsch, H., Goldstein, R.Z., & Heitzeg, M. (2018). Adolescent brain cognitive development (ABCD) study: Overview of substance use assessment methods. *Developmental Cognitive Neuroscience*, 32, 80-96.

Livingston, J. D., & Boyd, J. E. (2010). Correlates and consequences of internalized stigma for people living with mental illness: A systematic review and meta-analysis. *Social Science & Medicine*, 71(12), 2150-2161.

Marschall-Lévesque, S., Castellanos-Ryan, N., Vitaro, F., & Séguin, J. R. (2014). Moderators of the association between peer and target adolescent substance use. *Addictive Behaviors*, 39(1), 48–70.

McNeil, S. R. (2021). Understanding substance use stigma. *Journal of Social Work Practice in the Addictions*, 21(1), 83-96.

Meisel, S. N., & Colder, C. R. (2022). An examination of the joint effects of adolescent interpersonal styles and parenting styles on substance use. Development and Psychopathology, 34(3), 1125-1143.

Meyer, J. P., Isaacs, K., El-Shahawy, O., Burlew, A. K., & Wechsberg, W. (2019). Research on women with substance use disorders: Reviewing progress and developing a research and implementation roadmap. *Drug and Alcohol Dependence*, 197, 158-163.

Motyka, M. A., Al-Imam, A., Haligowska, A., & Michalak, M. (2022). Helping women suffering from drug addiction: Needs, barriers, and challenges. *International Journal of Environmental Research and Public Health*, 19(21), 14039.

Noorbakhsh, S., Afzali, M. H., Boers, E., & Conrod, P. J. (2020). Cognitive function impairments linked to alcohol and cannabis use during adolescence: a study

of gender differences. *Frontiers in Human Neuroscience*, 14, 95.

Özdemir, A., Utkualp, N., & Palloş, A. (2016). Physical and psychosocial effects of the changes in adolescence period. *International Journal of Caring Sciences*, 9(2), 717-723.

Persike, M., Seiffge-Krenke, I., Cok, F., Głogowska, K., Pavlopoulos, V., Tantaros, S., ... & Saravia, J. C. (2020). Emerging adults' psychopathology in seven countries: The impact of identity-related risk factors. *Emerging Adulthood*, 8(3), 179-194.

Poznyak, V., & Rekve, D. (2018). Global status report on alcohol and health 2018. World Health Organization, 450.

Richert, T., Anderberg, M., & Dahlberg, M. (2020). Mental health problems among young people in substance abuse treatment in Sweden. *Substance Abuse Treatment, Prevention, and Policy*, 15, 1-10.

Romo-Avilés, N., Tarriño-Concejero, L., Pavón-Benítez, L., & Marín-Torres, J. (2023). Addressing gender-based violence in drug addiction treatment: a systematic mapping review. *International Journal of Mental Health and Addiction*, 1-27.

Ryan, S. M., Jorm, A. F., & Lubman, D. I. (2010). Parenting factors associated with reduced adolescent alcohol use: A systematic review of longitudinal studies. *Australian and New Zealand Journal of Psychiatry*, 44(9), 774–783.

Schwinn, T. M., Schinke, S. P., Hopkins, J., Keller, B., & Liu, X. (2018). An online drug abuse prevention program for adolescent girls: posttest and 1-year outcomes. *Journal of Youth and Adolescence*, 47, 490-500.

Shalaby, R. A. H., & Agyapong, V. I. (2020). Peer support in mental health: literature review. *JMIR Mental Health*, 7(6), e15572.

Stockings, E., Hall, W.D., Lynskey, M., Morley, K.I., Reavley, N., Strang, J., Patton, G. and Degenhardt, L., (2016). Prevention, early intervention, harm reduction, and treatment of substance use in young people. *The Lancet Psychiatry*, 3(3), pp.280-296.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2021). Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health.

Terry-McElrath, Y. M., O'Malley, P. M., Johnston, L. D., Bray, B. C., Patrick, M. E., & Schulenberg, J. E. (2017). Longitudinal patterns of marijuana use across ages 18–50 in a US national sample: A descriptive examination of predictors and health correlates of repeated measures latent class membership. *Drug and Alcohol Dependence*, 171, 70-83.

Tremblay, M., Baydala, L., Khan, M., Currie, C., Morley, K., Burkholder, C., Davidson, R., & Stillar, A. (2020). Primary substance use prevention programs for children and youth: a systematic review. *Pediatrics*, 146(3).

TUBIM, 2021. Turkey drug report, 2021. Retrieved from https://www.narkotik.pol.tr/kurumlar/narkotik.pol.tr/TUB%C4%B0M/2021-TURKISH-DRUG-REPORT.pdf

Ünübol, B., Ünübol, H., & Bilici, R. (2019). Investigation of the effect of internalized stigmatization on addiction characteristics and perceived social support in women addicts. *Anadolu Psikiyatri Dergisi*, 20(4), 377-385.

Ünübol, H., & Sayar, G. H. (2022). Substance use and its risk factors in Turkey: A nationally representative sample study. *Journal of Ethnicity in Substance Abuse*, 21(2), 476-498.

Van Ryzin, M. J., Fosco, G. M., & Dishion, T. J. (2012). Family and peer predictors of substance use from early adolescence to early adulthood: An 11-year prospective analysis. *Addictive Behaviors*, 37(12), 1314–1324.

Vannucci, A., Fagle, T. R., Simpson, E. G., & Ohannessian, C. M. (2021). Perceived family and friend support moderate pathways from peer victimization to substance use in early-adolescent girls and boys: A moderated-mediation analysis. *The Journal of Early Adolescence*, 41(1), 128-166.

Volkow, N. D. (2020). Personalizing the treatment of substance use disorders. *American Journal of Psychiatry*, 177(2), 113-116.

Volkow, N. D., Michaelides, M., & Baler, R. (2019). The neuroscience of drug reward and addiction. *Physiological Reviews*, 99(4), 2115-2140.

World Health Organization, (2019). Global status report on alcohol and health 2018. World Health Organization.

Yildiz, D., Ciftci, A., & Yalçın, Ö. (2020). Substance Use Patterns, Psychosocial Traumas, Psychiatric Comorbidities, And Gender Differences Among Adolescent İnpatients At An Addiction Treatment Center. *Journal of Psychıatry and Neurologıcal Scıences*, 33(2),190-202.

Yılmaz, S. (2022). Changing Health Policy in Turkey: Public-Health Oriented Policy of Turkey Around 5C. *Industrial Policy*, 2(1), 48-52.