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ORYGINALNY ARTYKUŁ NAUKOWY

RELATIONSHIP BETWEEN INDIVIDUALS' STIGMATIZING ATTITUDES TOWARDS ABORTION, FAMILY PLANNING ATTITUDES, AND FATALISM IN HEALTH: A CROSS-SECTIONAL STUDY

ZWIĄZEK MIĘDZY POSTAWAMI STYGMATYZUJĄCYMI WOBEC ABORCJI, POSTAWAMI WOBEC PLANOWANIA RODZINY I FATALIZMEM W ZAKRESIE ZDROWIA: BADANIE PRZEKROJOWE

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Summary

Background. Abortion regulations and associated social stigma in Türkiye significantly influence access to reproductive health services and decision-making. Societal beliefs in fatalism and religious influences further shape healthcare utilization, contributing to increased risky behaviors and reluctance to seek treatment.

Material and methods. This study investigates the relationship between stigmatizing attitudes towards abortion, attitudes towards family planning, and religious health fatalism. Designed as a descriptive and correlational study, it included 1,495 participants aged 18 and older. Data were analyzed using SPSS 27-V.

Results. Participants exhibited moderate levels of stigmatizing attitudes towards abortion and health-related fatalism and high levels of positive attitudes towards family planning. Pearson

correlation analysis revealed a moderate negative relationship between stigmatizing attitudes towards abortion and attitudes towards family planning, alongside a moderate positive relationship between stigmatizing attitudes towards abortion and health-related fatalism.

Conclusions. The findings highlight that opposition to abortion negatively impacts attitudes towards family planning, with religious beliefs and fatalistic views significantly shaping these attitudes. Community awareness programs addressing stigma around abortion and family planning can enhance service accessibility. Moreover, culturally sensitive counseling and educational initiatives addressing the influence of religious and fatalistic beliefs could foster a better understanding of reproductive health, improving health outcomes within society.

Keywords: religious health, fatalism, stigmatization, abortion, family planning

Streszczenie

Wprowadzenie. Przepisy dotyczące aborcji w Turcji i piętno społeczne związane z zabiegiem aborcji mają bezpośredni wpływ na dostęp jednostek do zdrowia reprodukcyjnego i podejmowanie decyzji w tej sprawie. Ponadto społeczne przekonania o fatalizmie i wpływy religijne kształtują zachowania jednostek w zakresie korzystania z opieki zdrowotnej, co prowadzi do wzrostu pewnych zachowań ryzykownych lub niechęci do szukania leczenia.

Materiał i metody. Celem niniejszego badania jest określenie związku między postawami stygmatyzującymi wobec aborcji, postawami wobec planowania rodziny i religijnym fatalizmem dotyczącym zdrowia. Badanie zostało zaprojektowane w sposób opisowy i korelacyjny, z próbą składającą się z 1495 uczestników w wieku 18 lat i starszych. Dane przeanalizowano przy użyciu SPSS 27-V.

Wyniki. Uczestnicy wykazali się umiarkowanym poziomem stygmatyzacji w stosunku do aborcji i fatalizmu dotyczącego zdrowia oraz wysokim poziomem stygmatyzujących postaw w stosunku do planowania rodziny. Zgodnie z wynikami analizy korelacji Pearsona, stwierdzono

umiarkowaną negatywną zależność między postawami stygmatyzującymi wobec aborcji a postawami wobec planowania rodziny, natomiast umiarkowaną pozytywną zależność stwierdzono między postawami stygmatyzującymi wobec aborcji a fatalizmem w kontekście zdrowia.

Wnioski. Wyniki wskazują, że sprzeciw wobec aborcji negatywnie wpływa na postawy wobec planowania rodziny, a przekonania religijne i podejście fatalistyczne odgrywają decydującą rolę w kształtowaniu tych postaw. Programy społeczne dotyczące stygmatyzacji związanej z aborcją i planowaniem rodziny mogą zwiększyć dostępność tych usług. Ponadto, programy doradztwa i edukacji dostosowane do wrażliwości kulturowej i biorące pod uwagę wpływ przekonań religijnych i myślenia fatalistycznego, mogłyby wpłynąć na bardziej racjonalne zrozumienie kwestii zdrowia reprodukcyjnego w społeczeństwie.

Słowa kluczowe: zdrowie w kontekście religii, fatalism, stygmatyzacja, aborcja, planowanie rodziny

Introduction

Abortion is a topic of special concern among experts in Türkiye, including healthcare professionals, social scientists, policymakers, and non-governmental organizations active in reproductive health. The legal regulations regarding abortion in Türkiye were established by the 1983 Law No. 2827 on Population Planning. According to this law, abortion can be performed with the woman's consent during the first 10 weeks of pregnancy. However, for pregnancies beyond 10 weeks, abortion is only permitted if the mother's health is at risk or if serious fetal anomalies that would negatively affect the newborn's life are detected [1]. For married women, the consent of the spouse is also required, which may imply that abortion is not an individual right but rather a joint decision to be made within the marriage. The abortion

process and access to health care may be limited in some public and private hospitals [2]. These legal restrictions, in addition to limiting access to abortion, should also be considered in the context of potential social stigma. Negative attitudes towards abortion stem from debates about when human life begins, women's sexual behavior, and their roles in society, often associated with traditional beliefs and the perception that abortion is a marginal and unnecessary health service [3].

Therefore, in countries where anti-abortion thoughts prevail, social norms declaring abortion as "morally wrong or socially unacceptable" and the existence of stigma associated with abortion can lead to negative outcomes for women's abortion experiences and restricted access to safe abortion. Stigmatization involves devaluing an individual by violating societal expectations through a specific characteristic. Studies suggest that stigmatized individuals are perceived as having a distinctive quality that sets them apart from others, leading to their devaluation or humiliation in society [4].

Social stigma towards abortion can be addressed in three areas: perceived stigma (fear or expectations of stigma), experienced stigma (negative treatment due to having had an abortion), and internalized stigma (self-judgment or negative feelings about abortion) [4]. Understanding and defining abortion stigma within this framework is crucial for a comprehensive examination.

Concerns about keeping abortions secret have been linked to increased pressure on abortion-related thoughts, potentially hindering post-abortion psychological adjustment [3]. Consequently, stigma can also influence women's decisions to disclose their abortion experiences or intentions to friends, parents, spouses, or healthcare providers, potentially impacting future fertility and health negatively [5]. Negative attitudes from healthcare providers stigmatizing women have been reported to be influential in Ghana, where the rejection of abortion practices is affected by socio-cultural and religious norms [6].

Family planning (FP) methods significantly impact decisions about using pregnancy prevention methods and which method to choose, depending on individuals' knowledge and accessibility to these methods. Particularly in developing countries, high birth rates rank among the leading causes of maternal deaths [7]. Therefore, effective FP services are crucial for preserving and improving the health of women, children, and the community [7]. However, unreliable traditional FP methods are still widely used in Türkiye. The high prevalence of women resorting to ineffective or inaccessible pregnancy prevention methods has been documented [7].

Fatalism in health refers to the belief that an individual's health is not under their control but predetermined by a higher power. A high inclination towards fatalism is associated with increased risk-taking behavior and is linked to various behaviors such as passivity, failure to take preventive measures, and risk-taking [8]. Lange and Piette's study reported that diabetic patients attributed low glycemic control to fate rather than managing it themselves [9]. Fatalistic tendencies have been shown to increase risk-taking behavior in adolescents [10].

Researchers have suggested that certain religious beliefs may limit the use of healthcare services and hinder health behaviors, leading to negative health outcomes. Such beliefs may assist patients in achieving emotional relief, facilitating recovery, and coping effectively [11]. Upon reviewing literature, no study was found on examining the relationship between individuals' stigmatizing attitudes towards abortion, FP attitudes, and fatalism in health.

Aim of the work

The aim of this study was to determine the relationship between stigmatizing attitudes towards abortion, attitudes towards FP, and health-related fatalism among individuals living in Türkiye.

Material and methods

Study design

This is a descriptive and correlational study.

Location and characteristics of the study

The research was conducted through social media (Google Forms) in any environment with Internet access.

Population and sample selection

According to the data from the Turkish Statistical Institute Address-Based Population Registration System (2022), the total population of Türkiye is 85,279,553 individuals [12], of whom 22,578,378 are under the age of 18 [13]. The study population consists of 62,701,175 individuals aged 18 and over living in Türkiye. Using the known population sample calculation with a margin of error of 5% and a confidence level of 95%, the sample size was determined as 384 [14]. The study, conducted with 1,459 male and female participants aged 18 to 73 years (mean age 27.9±10.6), used the convenience sampling method for its advantages in quickly, easily, and economically reaching a large audience [15].

Inclusion criteria

- Individuals living in Türkiye,

- Individuals who are literate,
- Individuals who are 18 years and older, and willing to participate in the research.

Exclusion criteria

- Individuals not living in Türkiye,
- Individuals who are illiterate,
- Individuals who are under 17 years old, and those who refuse to participate in the research.
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Data collection tools

- Socio-demographic Information Questionnaire: This questionnaire, consisting of 12 questions, was created by researchers based on a literature review [8,16,17]. The questions cover an individual's gender, age, marital status, family structure, income status, presence of children, education level, and factors influencing stigmatizing attitudes, beliefs, and behaviors related to abortion.
- Abortion Stigmatizing Attitudes, Beliefs, and Behaviors Scale (SABAS): This was developed by Shellenberg et al. [18] and was validated in Turkish by Güner and Öztürk [16]. Factor analysis revealed a three-factor model for the SABAS: negative stereotypes (Cronbach's alpha: 0.85), discrimination and exclusion (Cronbach's alpha: 0.80), and fear of contamination (Cronbach's alpha: 0.80). The scale, consisting of 18 items, has a Cronbach's alpha value of 0.90. It is scored on a 5-point Likert scale, ranging from 1

(strongly agree) to 5 (strongly disagree). The scale has no cutoff point, and higher scores indicate higher stigmatizing attitudes, behaviors, and beliefs related to abortion.

- Family Planning Attitude Scale (FPAS): This was developed by Örsal and Kubilay [17] to measure women's and their partners' attitudes toward FP. FPAS is a 34-item, 5-point Likert scale measuring society's attitude toward FP, attitudes toward FP methods, and attitudes toward pregnancy. The scale has a total score range of 34 to 170, with higher scores indicating a more positive attitude toward FP. Cronbach's alpha values for internal consistency reliability were found to be 0.93, 0.95, 0.91, and 0.97 for society-related, method-related, pregnancy-related, and the total scale, respectively.
- Health Fatalism Scale (HFS): This was developed by Franklin et al. [19] to determine if health fatalism is related to health behaviors. Validity and reliability in Turkish were established by Bobov and Çapık [8]. The scale consists of 17 items and 1 subscale. It is scored on a 5-point Likert scale, with total scores ranging from 17 to 85. The higher the score, the higher the level of fatalistic tendencies. The Cronbach's alpha reliability coefficient for the scale was 0.95 in this study.

Data collection process

The data for the study was collected between June 24, 2023, and August 24, 2023. Each survey was completed within a time frame of 15 minutes.

Data analysis

The data was analyzed using the SPSS for Windows 25 software package. Descriptive statistics, including frequency, percentage, mean, and standard deviation analyses, were

employed. Skewness and kurtosis values were accepted within ±1.5 as indicators of normality. The relationship between scales was evaluated using Pearson correlation analysis. The interpretation of correlation coefficients was as follows: 0.00-0.25 very weak, 0.26-0.49 weak, 0.50-0.69 moderate, 0.70-0.89 high, and 0.90-1.00 very high correlation [20]. Two-factor data was analyzed using the independent samples t-test, while three-factor data was analyzed using the ANOVA test (Posthoc; LSD, Tukey, and Bonferroni tests). Multiple linear regression analysis was performed for predictions related to scales. A significance level of $p<0.005$ was used for the statistical data analysis [20].

Results

A total of 1,459 individuals participated in this study. The mean age of the participants was 27.90±10.60 (min-max: 18-73). Of the participants, 71.6% were female, 73.6% had a nuclear family, 67.2% were single, 84.8% had education at the high school level or above, 78.5% had a moderate income, 69.4% had no children, 13.6% had two children, 16.1% had a chronic illness, 7.3% had undergone an abortion, 41.5% knew someone in their surroundings who had an abortion, 55.5% used a FP method, and 27.6% used condoms as a FP method (Table 1).

Table 1. Descriptive findings of participants' characteristics (N=1,459)

Characteristics	Min-Max	Mean	Standard deviation
Age	18-73	27.90	10.60
Socio-demographic characteristics		**Number (n)**	**Percentage (%)**
Gender	**Female**	1071	71.6
	Male	424	28.4
Family structure	**Nuclear family**	1101	73.6
	Extended family	341	22.8
	Divorced family	53	3.5
Marital status	**Married**	491	32.8

	Single	1004	67.2
Education level	**Illiterate**	20	1.3
	Literate	83	5.6
	Primary school	124	8.3
	High school and above	1268	84.8
Income level	**Low**	128	8.6
	Medium	1173	78.5
	High	194	13.0
Parental status	**Yes**	457	30.6
	No	1038	69.4
Number of children (n=457)	**1 child**	145	9.7
	2 children	203	13.6
	3 or more children	109	7.3
Abortion history	**Yes**	109	7.3
	No	1386	92.7
Abortion around them	**Yes**	621	41.5
	No	874	58.5
FP Status	**Yes**	830	55.5
	No	665	44.5
FP method used	**Condom**	413	27.6
	Birth control pill	135	9.0
	Intrauterine device (IUD)	70	4.7
	Withdrawal/rhythm method	140	9.4
	Subcutaneous implant	17	1.1
	Surgical birth control method	54	3.6

In the study, it was found that the participants scored 33.72±18.19 on SABAS, 128.73±35.39 on FPAS, and 45.55±20.04 on HFS (Table 2).

Table 2. Findings on participants' scores on SABAS, FPAS and HFS

Scales and sub-dimensions	Number of items	Min-Max	Mean±SD
SABAS	18	18.00-88.00	33.72±18.19
FPAS	34	34.00-170.00	128.73±35.39
Attitude towards society	15	15.00-75.00	57.94±16.14
Attitude towards method	9	9.00-45.00	33.79±10.63
Attitude towards pregnancy	10	10.00-50.00	37.00±11.06
HFS	17	17.00-85.00	45.55±20.04

A negative moderate-level relationship was identified between participants' stigmatizing attitudes towards abortion and FP attitudes, and a positive moderate-level relationship was found between health fatalism (Table 3).

Table 3. Relationships between participants' scores on SABAS, FPAS and HFS

Scales		SABAS	FPAS	HFS
SABAS	**r**	1	-0.494**	0.497**
	p	-	0.000	0.000
FPAS	**r**	-0.494**	1	-0.314**
	p	0.000	-	0.000
HFS	**r**	0.497**	-0.314**	1
	p	0.000	0.000	-

Notes: ** Significant at a level of $p<0.01$.

Statistically significant results were found between participants' gender, family structure, marital status, education level, income level, childbearing status, abortion experience, abortion in their surroundings, FP method usage, and stigmatizing attitudes towards abortion ($p<0.05$). The stigmatizing attitude scores were higher for men than women; for those with an extended family compared to nuclear and fragmented families; for singles compared to married individuals; for those with other educational levels compared to literate individuals; for those with higher income levels compared to low and moderate income individuals; for those without children compared to those with children; for those who did not undergo an abortion compared to those who did; for those with individuals in their surroundings who did not undergo an abortion compared to those who did; for those who did not use a FP method compared to those who did (Table 4; $p<0.05$).

Table 4. Comparison of participants' scores on SABAS, FPAS and HFS by socio-demographic characteristics

Socio-demographic characteristics	SABAS Mean±SD	FPAS Mean±SD	HFS Mean±SD
Gender			
Female	30.31±13.84	136.63±30.25	43.67±19.11
Male	46.89±22.71	109.16±39.56	50.32±21.51
Test ve *p*	t=-17.157, *p*=0.000	t=14.387, *p*=0.000	t=-5.847, *p*=0.000
Family structure			
Nuclear family (a)	33.33±17.13	130.35±34.99	44.38±19.73
Extended family (b)	40.86±21.64	123.89±36.71	49.58±20.63
Divorced family (c)	32.33±13.34	129.20±32.51	44.01±19.52
Test ve *p*	F=23.004, *p*=0.000* b> a,c	F=4.322, *p*=0.013** a>b	F=9.011, *p*=0.000*** b>a
Marital status			
Married	32.07±16.83	134.59±33.43	45.13±19.80
Single	36.45±18.98	126.02±35.98	45.76±20.16
Test ve *p*	t=-4.341, *p*=0.000	t=4.409, *p*=0.000	t=3.048, *p*=0.569
Education level			
Illiterate (a)	37.40±17.08	115.90±39.78	46.75±16.99
Literate (b)	55.93±29.85	93.98±48.18	59.75±24.25
Primary school (c)	33.42±17.18	132.39±30.29	51.01±18.58
High school and above (d)	33.76±16.69	130.97±33.55	44.07±19.47
Test ve *p*	F=41.147, *p*=0.000* c>a,b,d a>c,d	F=31.138, *p*=0.000** b<a,c,d a<c,d	F=20.025, *p*=0.000*** b>a,c,d b,c>d
Income level			
Low (a)	35.07±18.61	131.78±35.08	44.28±21.43
Medium (b)	34.03±17.10	130.31±33.70	44.49±19.16
High (c)	40.94±24.08	118.05±42.98	52.80±22.69
Test ve *p*	F=11.987, *p*=0.000* c>a,b	F=10.556, *p*=0.000* a,b>c	F=14.864, *p*=0.000* c>a,b
Childbearing status			
Yes	33,29±17.50	133,75±33,33	45.75±19.48
No	35.77±18.76	126,68±36, 05	45.47±20.29
Test ve *p*	t=-2.405, *p*=0.016	t=3.563, *p*=0.000	t=0. 250, *p*=0.802
Number of children (n=457)			
1 child (a)	33.07±17.54	132.49±36.01	43.53±20.70
2 children (b)	33.36±17.38	135.16±30.85	43.88±18.44
3 or more children (c)	33.44±17.84	132.82±34.25	52.18±18.44 F=8.047,
Test ve *p*	F=0.017, *p*=0.983	F=0.324, *p*=0.723	*p*=0.000*** >a,b
Abortion history			
Yes	30.41±14.84	138.22±28.66	42.38±19.97

No	35.37±18.62	128.10±35.76	45.80±20.03
Test ve *p*	t =-2.716, *p*=0.007	t =2.867, *p*=0.004	t=-1.718, *p*=0.086
Abortion around them			
Yes	29.94±13.64	136.14±32.25	43.17±19.65
No	38.61±20.41	123.63±36.59	47.25±20.15
Test ve *p*	t =-9.221, *p*=0.000	t =6.819, *p*=0.000	t=-3.895, *p*=0.000
FP status			
Yes	34.05±17.27	130.98±33.05	44.48±19.48
No	36.21±19.70	126.17±37.95	46.89±20,64
Test ve *p*	t=-2.249, *p*=0.025	t=2.606, *p*=0.009	t=-2.310, *p*=0.021
FP method used			
Condom (a)	35.06±17.94	128.61±34.15	43.64±20.12
Birth control pill (b)	31.00±13.35	133.71±27.10	45.45±19.60
Intrauterine device (IUD) (c)	32.14±15.37	134.81±34.54	45.25±18.05
Withdrawal/rhythm method (d)	34.24±17.79	129.57±35.45	45.47±18.12
Subcutaneous implant (e)	40.82±20.084	125.41±27.71	49.29±17.00
Surgical birth control method (f)	32.50±16.26	140.62±31.07	42.51±20.08
Test ve *p*	F=1.973, *p*=0.080	F=1.841, *p*=0.103	F=0.628, *p*=0.679

Notes: * Bonferroni test has been applied; ** Tukey test has been applied; *** LSD test has been applied.

Statistically significant results were found between participants' gender, family structure, marital status, education level, income level, presence of children, history of abortion, experience of abortion in the surrounding community, use of FP methods, and attitudes towards FP ($p<0.05$). Women scored higher in FP attitudes than men; participants with a nuclear family scored higher than those with an extended family; married participants scored higher than singles; those with a higher education level scored higher than those who were only literate; participants with low or middle income scored higher than those with high income; participants with children scored higher than those without; those who had undergone an abortion scored higher than those who had not; participants with experience of abortion in the surrounding community scored higher than those who had not; and those who used FP methods scored higher than those who did not (Table 4; $p<0.05$).

Similarly, statistically significant results were found between participants' gender, family structure, education level, income level, number of children, experience of abortion in

the surrounding community, use of FP methods, and fatalistic attitudes toward health and religion (p<0.05). Men scored higher in fatalistic health-religion attitudes than women; participants with an extended family scored higher than those with a nuclear family; those who were only literate scored higher than those with other education levels; participants with a high income scored higher than those with low or middle income; those with three or more children scored higher than those with one or two; participants with no experience of abortion in the surrounding community scored higher than those who had; and those who did not use FP methods scored higher than those who did (Table 4; p<0.05).

The multiple linear regression model examining the factors influencing SABAS in the context of FPAS and HFS indicates that the model is significant and usable (F(2, 1,481)=408.381, p<0.001). SABAS, FPAS, and HFS explain 35.5% of the total variance (Table 5).

Table 5. Multiple linear regression analysis of factors influencing SABAS and FPAS scores

Dependent variable		Regression Model for SABAS						95% confidence interval	
	SABAS	Independent variable	*B*	*SD*	*β*	*t*	*p**	Lower limit	Upper limit
		(Constant)	35.307	4.736	-	7.455	0.000	26.005	44.609
		FPAS	1.746	0.234	0.292	7.473	0.000	1.287	2.204
		HFS	0.399	0.064	0.244	6.250	0.000	0.273	0.524
		***R**=0.596 **R2**=0.355 **Adjusted R2**=0.355 **F**=408.381 **p**<0.001 **Durbin-Watson**=1.921*							
	FPAS	Regression Model for FPAS						95% confidence interval	
		Independent variable	*B*	*SD*	*β*	*t*	*p**	Lower limit	Upper limit
		(Constant)	165.917	2.125	-	78.090	0.000	161.750	170.085
		SABAS	-0.814	0.050	-0.423	16.213	0.000	-0.912	-0.715
		HFS	-0.189	0.046	-0.107	-4.100	0.000	-0.280	-0.099
		***R**=0.485 **R2**=0.235 **Adjusted R2**=0.234 **F**=227.250 **p**<0.001 **Durbin-Watson**=1.828*							

In terms of factors influencing FPAS, the multiple linear regression model examining SABAS and HFS indicates that the model is significant and usable ($F(2, 1,481)=227.250$, $p<0.001$). FPAS explains 23.4% of the total variance using SABAS and HFS (Table 5).

Discussion

In our study, the relationship between individuals' stigmatizing attitudes towards abortion, attitudes towards FP, and fatalistic health beliefs have been examined. The findings are discussed in the context of literature on the topic.

FP, despite being a shared responsibility of both genders, has often been predominantly focused on women's attitudes towards FP in studies conducted in literature [21]. However, it is known that both women and men play roles in FP, and both genders are influential in matters related to the number of children and family size [21]. Therefore, this study focused on both men (28.4%) and women (71.6%).

Our study found that the abortion rate (7.3%) among participants exceeded the national average in Türkiye (4.7%) [22]. When looking at abortion rates by country, Switzerland has the lowest rate, with 5 abortions per 1,000 women. The rate is 13 per 1,000 women in the United States and the United Kingdom. Colombia and Mexico have abortion rates of 34 per 1,000 women, while Pakistan has the highest estimated abortion rate at 50 per 1,000 women (NBSNEWS, 2024) [23]. In Sub-Saharan Africa, about a quarter of recent births result from unwanted pregnancies, and the abortion rate is around 18% [24]. Country variations may arise from cultural, religious, social, sample group, and other differences. These results underscore the importance of access to FP and sexual health services nationwide. Our study's findings can be used to increase awareness of FP among both men and women and promote better access to sexual health services.

In our study, it was determined that 55.5% of participants used a FP method, with 27.6% using condoms, 9.4% using withdrawal/rhythm method, and 9% using birth control pills. These results indicate the widespread use of various preferences and methods in FP. Similar variations in FP method usage have been reported in other studies. For example, Sokmen et al. [25] found a usage rate of 71%, with the most common methods being intrauterine devices (17%) and condoms/oral contraceptives (6%). Another study by Demirtas and Tugut [26] reported that 58.9% of participants used a FP method, with condoms (27.1%), oral contraceptives (23%), and intrauterine devices (17.3%) being the preferred methods. Additionally, our study found that 41.5% of participants had someone in their surroundings who had undergone an abortion. These results demonstrate that abortion is a prevalent issue within society, affecting many individuals. Similar findings have been reported in other studies. For instance, Cresswell et al. [27] reported that 21% of respondents knew at least one person who had undergone an abortion in the last five years. Budak et al. [28] indicated that 94% of pregnancies ending in abortion were unplanned. These results highlight the importance of further research and awareness in society regarding FP and abortion.

Stigmatization entails assigning derogatory labels to individuals who deviate from socially accepted norms, often stemming from negative beliefs and prejudices. Our study revealed that men demonstrated a higher degree of stigmatizing attitudes towards abortion in comparison to women, and individuals from extended families exhibited more stigmatizing attitudes than those from nuclear families. These findings align with prior research [29], shedding light on the societal perceptions of sensitive issues such as abortion and their potential to induce stigmatization. Furthermore, these results may contribute to initiatives aimed at addressing and mitigating stigmatization in society, fostering a more equitable attitude.

In this study, the impact of various socio-demographic factors on attitudes towards FP was determined. Specifically, individuals from nuclear families, those with other educational

levels compared to literate individuals, and those with higher income levels were found to have higher FP attitudes. Another study indicated a positive relationship between education level and FP method usage. These results suggest that education has a positive effect on favorable attitudes towards FP and can contribute to raising awareness [30]. Understanding how socio-demographic factors such as gender, family structure, education level, and income level can influence attitudes towards FP is important for developing more effective and targeted health policies and educational programs.

Our study identified statistically significant relationships between individuals' gender, family structure, education level, income level, the number of children, FP method usage, and fatalistic health beliefs. These results indicate that various socio-demographic factors can influence fatalistic health beliefs. Particularly, the finding that men have higher fatalistic health belief scores than women suggests that gender-based differences may be associated with religious and belief systems. These results align with previous studies [31] and contribute to a better understanding of the relationship between religion and socio-demographic factors. These findings provide an essential foundation for combating fatalistic beliefs and developing a more just attitude.

Stigmatization related to abortion has been associated with demographic, health, and situational factors, attitudes, and knowledge [32]. Demographic factors include religious affiliation and religiosity, race/ethnicity, age, gender, education, marital status, and employment status [33]. Health factors include psychological well-being, psychological distress, depressive symptomatology, burnout, intrusive thoughts, self-esteem, reproductive history, number of children, maternal status, and contraceptive use [31,34]. Situational factors include perceived partner support, perceived fetal survival after abnormal diagnosis, confidentiality and disclosure, and the outcome of seeking an abortion [33]. Attitudes and knowledge encompass attitudes towards abortion laws, women, and responsibility [35].

According to the study results, a negative relationship was found between participants' stigmatizing attitudes towards abortion and their attitudes towards FP. As stigmatization against abortion increased, positive attitudes towards FP decreased. This suggests that individuals tend to balance their views on abortion and FP, with a more negative stance on abortion corresponding to a less favorable attitude towards FP. Additionally, a positive relationship was observed between fatalistic health beliefs and stigmatizing attitudes towards abortion, indicating that individuals with more fatalistic health beliefs tended to exhibit more stigmatizing attitudes towards abortion. In the study conducted by Rheinstrom et al. [36] with healthcare professionals, religion was identified as the most significant determinant of attitudes toward abortion. The study focused on the perspectives and practices regarding abortion in various religious beliefs [36]. In the research by Perkovic et al. [37], practices related to abortion across multiple religions were examined, revealing that some religions strictly prohibit abortion, while others permit it under certain conditions [37]. These studies highlight that religious individuals often base their decisions about abortion on guidance from their religious authorities. The study's regression analysis further revealed that FP attitudes and fatalistic health beliefs significantly predicted stigmatizing attitudes towards abortion, explaining 35.5% of the variance. The negative influence of FP attitudes and the positive influence of fatalistic health beliefs on stigmatizing attitudes towards abortion suggest that addressing these factors is crucial in shaping more positive attitudes towards abortion.

Similarly, our study found a statistically significant relationship between FP attitudes and fatalistic health beliefs. The regression analysis showed that stigmatizing attitudes towards abortion and fatalistic health beliefs significantly predicted FP attitudes, explaining 23.4% of the variance. The negative influence of stigmatizing attitudes towards abortion and the positive influence of fatalistic health beliefs on FP attitudes indicate the interconnectedness of these

factors. Understanding and addressing these influences can contribute to developing more informed and supportive attitudes towards FP.

In conclusion, this study has provided valuable insights into the relationships between stigmatizing attitudes towards abortion, attitudes towards FP, and fatalistic health beliefs. The findings highlight the importance of considering both men and women in FP discussions, addressing socio-demographic factors in understanding attitudes, and recognizing the interconnectedness of stigmatization, FP, and health beliefs. The results can inform public health initiatives, educational programs, and policies aimed at promoting positive attitudes towards FP and reducing stigmatization related to abortion.

Conclusions

Participants were found to have a moderate level of stigmatizing attitudes towards abortion, a high level of FP attitudes, and a moderate level of fatalistic health beliefs. A negatively moderate relationship was observed between stigmatizing attitudes towards abortion and FP attitudes, and a positively moderate relationship was identified between fatalistic health beliefs and stigmatizing attitudes towards abortion.

Drawing upon the findings of this study, a more in-depth exploration of the correlation between stigmatizing attitudes towards abortion and attitudes towards FP could prove advantageous. Educational programs and awareness campaigns may be organized to increase awareness in this regard. Similarly, conducting more in-depth research on stigmatizing attitudes towards abortion, fatalistic health beliefs, and FP attitudes, and providing counseling services on these topics, would be essential. Considering the study results in the formulation and implementation of public health policies is also recommended.

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