

ORIGINAL RESEARCH ARTICLE

Health literacy as a predictor of family planning attitudes in young men in Ankara, Türkiye

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Abstract

Family planning is a key component of reproductive health; however, young men's attitudes and knowledge remain understudied. This study aimed to examine the relationship between sexual health literacy and family planning attitudes among young men. This cross-sectional, descriptive, and correlational study was conducted with 370 young men aged 18–25 in Ankara using a snowball sampling method. Data were collected using the Family Planning Attitude Scale (FPAS) and Sexual Health Literacy Scale (SHLS). Descriptive statistics, independent samples t-test, one-way ANOVA, Pearson correlation, and multiple linear regression analyses were performed. The mean FPAS score was $M=116.26$, $SD=26.20$. A weak positive relationship was found between sexual health literacy and family planning attitudes ($p<0.05$). Regression analysis indicated that the variables explained 20% of the variance in family planning attitudes. The findings suggest that improving sexual health literacy may positively influence young men's attitudes toward family planning. (*Afr J Reprod Health* 2026; 30 [19]: 118-126).

Keywords: attitude, family planning, sexual health literacy, young men

Résumé

La planification familiale constitue un élément essentiel de la santé reproductive; toutefois, les attitudes et les connaissances des jeunes hommes à ce sujet demeurent encore insuffisamment étudiées. Cette étude visait à examiner la relation entre la littératie en santé sexuelle et les attitudes envers la planification familiale chez les jeunes hommes. Cette étude transversale, descriptive et corrélationnelle a été menée auprès de 370 jeunes hommes âgés de 18 à 25 ans à Ankara, en utilisant la méthode d'échantillonnage en boule de neige. Les données ont été recueillies à l'aide de l'Échelle des attitudes envers la planification familiale (Family Planning Attitude Scale, FPAS) et de l'Échelle de littératie en santé sexuelle (Sexual Health Literacy Scale, SHLS). Des statistiques descriptives, le test t pour échantillons indépendants, l'analyse de variance à un facteur (ANOVA), la corrélation de Pearson ainsi que des analyses de régression linéaire multiple ont été réalisés. Le score moyen à la FPAS était de $M=116,26$, $ET=26,20$. Une faible corrélation positive a été observée entre la littératie en santé sexuelle et les attitudes envers la planification familiale ($p<0,05$). L'analyse de régression a montré que les variables expliquaient 20% de la variance des attitudes envers la planification familiale. Les résultats suggèrent que l'amélioration de la littératie en santé sexuelle pourrait influencer positivement les attitudes des jeunes hommes à l'égard de la planification familiale. (*Afr J Reprod Health* 2026; 30 [19]: 118-126).

Mots-clés: attitude, planification familiale, littératie en santé sexuelle, jeunes hommes

Introduction

Health literacy is defined as the ability to understand, interpret, and act upon medical information. Sexual health literacy, a key component of health literacy, is crucial for making informed decisions about sexual health and for applying this knowledge effectively in practice.¹ Sexual health literacy encompasses a range of topics related to sexual and reproductive health,

including sexual development, puberty, family planning (FP), pregnancy, and the skills necessary to navigate and manage sexual relationships.² Sexual health literacy has a significant impact on the formation of behavioral patterns in sexual and reproductive health.

Globally, young people are particularly vulnerable to sexual and reproductive health issues, including unintended pregnancies following unprotected sexual intercourse, sexually

transmitted infections from unsafe practices, and instances of sexual violence and abuse.³ Research on men of reproductive age indicates that men are often more neglected than women in accessing healthcare services, with healthcare institutions typically offering less information about men's reproductive health needs.⁴ In many countries, including ours, the majority of research on sexual and reproductive health tends to focus on women.⁵ However, both men and women are impacted by the challenges faced by youth. Studies suggest that men generally exhibit lower awareness regarding sexual health issues compared to women and are more hesitant to seek reliable information on these matters.^{6, 7}

Sexual health literacy is a critical factor for young people in seeking, understanding, and evaluating sexual health information, as well as comprehending issues such as gender, sexual identity, and social support.⁷ Literature indicates that misinformation regarding sexual health negatively impacts young people's health literacy levels.⁸ Research has shown that young people with low sexual health literacy are more likely to engage in risky sexual behaviors.⁹ International evidence indicates that risky sexual behaviors among young people are associated with adverse outcomes, including unintended pregnancies, sexually transmitted infections, unsafe abortions, and disrupted educational and social trajectories. Recent World Health Organization (WHO) reports have also highlighted a decline in condom use among adolescents, increasing their vulnerability to these preventable health consequences and emphasizing the need to strengthen sexual health literacy and informed decision-making¹⁰. A study conducted in Türkiye revealed that sexually active young men often avoid using contraception due to prevalent sexual myths.¹¹ Furthermore, men's role in the occurrence of unintended pregnancies following unprotected sexual intercourse is of significant concern. Notably, no research has been conducted in Türkiye examining the sexual health literacy of young men and their attitudes toward FP. This study aims to explore the impact of young men's sexual health literacy on their attitudes toward FP. Accordingly, the research seeks to address the following questions:

1. Are there significant differences in FP attitudes and levels of sexual health literacy among young men?

2. What factors influence young men's attitudes toward FP?

Method

Design

This study was conducted using a survey-based cross-sectional and descriptive study of young men in Ankara. The dependent variable of the study was the FP Attitude Scale (FPAS) score. The independent variables included sociodemographic characteristics (age, education level, grade), FP knowledge and practices, and Sexual Health Literacy Scale (SHLS) scores.

Participants and sampling

The minimum sample size was calculated using G*Power (version 3.1.9.2). Assuming an effect size of (e.g., 0.30), a significance level of $\alpha=0.05$, and a statistical power of 0.80¹², the required sample size was determined to be (382). The study included 382 young men aged 18–25 years, who were recruited using a snowball sampling technique via an online platform between July 3, 2024 and September 9, 2024. Initially, one participant known to the researchers was contacted and asked to share the survey link with eligible peers. Each participant was encouraged to forward the link to other individuals who met the inclusion criteria, allowing the sample to expand progressively. Participants were required to be literate in Turkish, own a mobile phone, use social media platforms (such as WhatsApp and Instagram), and provide informed consent. Twelve individuals who provided incomplete responses were excluded from the study, resulting in a final sample of 370 young men. The final sample size exceeded the minimum required sample, increasing the statistical power of the study.

Inclusion and exclusion criteria

Inclusion criteria were: being male, aged 18–25, literate in Turkish, using a smartphone and social

media, and voluntarily agreeing to participate. Individuals who did not meet these criteria or provided incomplete responses were excluded.

Data collection tools

Sociodemographic form consists of 18 items designed to assess the sociodemographic characteristics, FP knowledge, and sexual health literacy of the young men participating in the study.¹³⁻¹⁵ FPAS was developed by Örsal and Kubilay in 2007.¹³ The FPAS is a 34-item Likert-type instrument comprising three subdimensions: "Attitudes of Society Toward FP," "Attitudes Toward FP Methods," and "Attitudes Toward Childbearing." The "Attitudes of Society Toward FP" subdimension consists of 15 items, with possible scores ranging from 15 to 75. The "Attitudes Toward FP Methods" subdimension includes 11 items, with scores ranging from 11 to 55. The "Attitudes Toward Childbearing" subdimension comprises 8 items, with possible scores between 8 and 40. The total score of the scale ranges from 34 to 170, with higher scores indicating a more positive attitude toward FP. The cut-off score is 119. The scale demonstrated effectiveness in measuring attitudes toward family planning and is recommended for application in field research. The reliability coefficient of the scale was reported as $\alpha=0.90$ in the original study¹³ and $\alpha=0.85$ in this study. SHLS was developed by Üstgörlü in 2022.¹⁵ The SHLS is a Likert-type scale consisting of 17 items across two sub-dimensions: "Sexual Knowledge" and "Sexual Attitude." A high score on the "Sexual Attitude" sub-dimension reflects a negative attitude towards sexual health knowledge, while higher scores on both sub-dimensions and the overall scale indicate greater sexual health literacy. The reliability coefficient of the original scale was $\alpha = 0.88^{(15)}$ whereas in this study, it was found to be $\alpha = 0.62$.

Data collection

Following the receipt of ethical approval, data collection forms prepared using the GoogleSurvey® platform were distributed to young men online, in accordance with the principle of voluntary participation. The survey link was distributed only once to each participant, and

duplicate entries were prevented by restricting multiple submissions. Communication with the participants was established via smartphone applications and social media platforms such as WhatsApp® and Instagram®. Completion of the data collection forms required approximately five minutes.

Outcomes

The primary outcomes of the study were the levels of FP attitudes and sexual health literacy among young men. The secondary outcome was to identify the factors associated with FP attitudes.

Data analysis and treatment

Data were analyzed using SPSS 25.0 software. Descriptive statistics (mean, standard deviation, frequency, percentage) were calculated. Normality was assessed using the Kolmogorov-Smirnov test. Since the data were normally distributed, parametric tests were used. The independent samples t-test was used to compare FPAS scores between two groups, and one-way ANOVA was used for comparisons involving more than two groups. Pearson correlation analysis was conducted to examine the relationship between FPAS and SHLS scores. Multiple linear regression analysis was performed to identify factors associated with FP attitudes. Variables that were statistically significant in univariate analyses were included in the regression model. Assumptions of linearity, normality, and multicollinearity were checked prior to analysis. Statistical significance was accepted as $p<0.05$.

Ethical aspects

Ethical approval was obtained from the Başkent University Social And Humanities Scientific Research and Publication Ethics Committee (Date: June 3, 2024; Number: 17162298.600-152). A written statement describing the study was included in the introduction to the data collection form, and young men who agreed to participate in the study after reading it were included in the study. All participants gave written informed consent prior to their participation in the study. In addition, the data set containing the answers filled in by the young

men was saved in an encrypted file on the computer, and after the analysis of the data was completed, the data was deleted to ensure the confidentiality of personal data. The study was performed according to the "Declaration of Helsinki".

Results

The mean age of the young men was 20.43 years (SD=1.69). Among the young men included in the study, 36.2% were first-year students, 33.5% were studying in the sciences, 97.0% were single, 76.2% lived in dormitories, and 52.2% resided in the provincial center. Regarding FP methods, 53% of the young men had heard of them, 54.9% were unaware of FP methods, 48.1% had not received information about them, 54.3% had partial information of FP methods, and 42.2% did not wish to receive training on the subject. Additionally, It was found that 44.9% of young men sought sexual health counseling at a health center, 46.8% expressed interest in receiving information about SH, 38.6% received information about sexual health. The most commonly known modern FP method was the condom (46.8%), while the most widely recognized traditional method was withdrawal (26.2%). The majority of young men reported receiving information about FP methods (32.2%) and sexual health (45.7%) from their friends.

The mean total score of the young men on the FPAS was 116.26 ± 26.20 . The mean total FPAS score and sub-dimension scores were higher among young men who had heard of and were knowledgeable about FP methods compared to those who had not, with a statistically significant difference found between the two groups ($p < 0.05$). Young men who had received information about FP methods, had sufficient knowledge, and expressed interest in receiving further training had higher mean scores on the total FPAS and its sub-dimensions compared to those who had only partial

or no information, had insufficient or partially sufficient knowledge, were not interested in receiving training, or were undecided. A statistically significant difference was found between these groups ($p < 0.05$). Additionally, young men who were undecided about seeking sexual health counseling at a health center and who wanted to receive information about sexual health had higher mean scores on the FPAS total score and its sub-dimensions than those who wanted to apply for sexual health counseling or those who did not wish to receive sexual health information, with a statistically significant difference between the groups ($p < 0.05$) (Table 1).

A weak positive correlation was found between the mean score of "Sexual Knowledge" and the FPAS total score and its sub-dimensions ($p < 0.05$). Moreover, a low positive correlation was observed between the SHLS total mean score and the FPAS total mean score, as well as between the "Society's Attitude Towards FP" and "Attitude Towards Childbirth" sub-dimensions ($p < 0.05$) (Table 2).

A multiple linear regression analysis was conducted to identify factors influencing young men's attitudes toward FP. The variables included were age, class, being aware of FP methods, getting information about FP methods, adequacy of information about FP methods, sexual health knowledge level, receipt of information about sexual health, consultation with health personnel regarding sexual health, sexual health literacy, receiving information from family about sexual health and applying to a health center for sexual health counseling. The analysis revealed that age and the status of receiving information about FP methods negatively affected FP attitudes, while education level, receipt of information about sexual health, and sexual health literacy positively influenced FP attitudes ($p < 0.05$). These variables accounted for 20% of the variance in attitudes toward FP (Table 3).

Table 1: Distribution of mean FPAS scores among young men based on their knowledge of FP methods and sexual health- Ankara, Türkiye, 2024

Characteristics (n:370)	N	%	Subgroups of FPAS Society's attitude towards FP Mean±SS	Attitude towards FP methods Mean±SS	Attitude towards birth Mean±SS	FPAS Mean±SS
Hearing FP methods						
Yes	196	53.0	52.9±13.2	38.4±8.9	28.1±7.1	119.44±26.5
No	174	47.0	49.6±13.2	36.9±8.7	26.1±6.7	112.67±25.5
Statistical analysis/p			t:2.501/p=0.013			
Being aware of FP methods						
Yes	167	45.1	52.65±13.4	38.29±9.1	28.01±7.2	118.98±25.5
No	203	54.9	49.80±13.1	36.9±8.5	26.25±6.6	112.98±24.9
Statistical analysis/p			t:-2.191/p=0.028			
Getting information about FP methods						
Yes	88	23.8	57.77±12.2	42.32±9.26	30.98±6.9	131.08±26.3
No	178	48.1	49.70±13.2	36.87±8.5	26.23±6.5	112.80±24.8
Partly	104	28.1	48.78±12.6	36.87±8.5		109.63±23.6
Statistical analysis/p			F:20.996/p=0.001			
Adequacy of your information about FP methods						
Yes	85	23.0	57.26±12.8	41.91±9.7	30.35±7.5	129.53±27.5
No	84	22.7	50.71±12.0	36.15±8.05	26.96±6.2	113.83±23.4
Partly	201	54.3	49.14±13.3	36.51±8.27	26.00±6.7	111.67±24.9
Statistical analysis/p			F:15.474/p=0.001			
Willingness to receive training on FP methods						
Yes	144	38.9	56.01±13.1	41.42±8.5	30.06±6.8	127.50±25.6
No	156	42.2	51.37±12.1	35.8±7.2	26.2±5.9	113.41±21.4
Partly	70	18.9	47.07±12.6	35.03±8.6	25.06±6.8	107.17±24.8
Statistical analysis/p			F:26.206/p=0.001			
Applying to the health center for sexual health counseling						
Yes	166	44.9	51.75±13.2	37.10±9.1	27.09±7.2	115.95±26.8
No	118	31.9	49.10±14.0	36.50±8.6	26.18±7.1	111.81±26.0
Partly	86	23.2	53.67±12.1	40.40±8.1	28.90±6.3	122.98±23.9
Statistical analysis/p			F:4.626/p=0.010			
Request for information about sexual health						
Yes	173	46.8	52.80±13.5	38.75±8.8	28.54±6.7	120.10±26.4
No	197	53.2	50.10±13.0	36.73±8.8	26.06±7.1	112.89±25.6
Statistical analysis/p			t:2.661/p=0.008			

Note: *p<0.05 F=one-way analysis of variance, t=independent sample t test, FPAS= Family Planning Attitude Scale

Table 2: The relationship between the mean scores of FPAS and SHLS- Ankara, Türkiye, 2024

Variable	Sexual Knowledge	Sexual Attitude	SHLS Total
FPAS Total	r=0.162** (p=0.002)	r=-0.007 (p=0.898)	r=0.164** (p=0.002)
Society's Attitude Towards FP	r=0.166** (p=0.001)	r=-0.026 (p=0.624)	r=0.158** (p=0.002)
Attitude Towards FP Methods	r=0.131** (p=0.012)	r=0.010 (p=0.849)	r=0.007 (p=0.370)
Attitude Towards Childbirth	r=0.126* (p=0.016)	r=0.01 (p=0.832)	r=0.136** (p=0.009)

e: Pearson Correlation, **Correlation is significant at the 0.01 level (2-tailed), *Correlation is significant at the 0.05 level (2-tailed), FPAS= Family Planning Attitude Scale, SHLS=Sexual Health Literacy Scale

Table 3: Multiple linear regression model for identifying predictors of variables affecting FP attitudes-Ankara, Türkiye, 2024

Prediction variables ^a	Model B	SE	β	t(p)
Age	-2.582	0.900	-0.167	2.87(0.004)
Class	4.230	1.583	0.166	2.672(0.008)
Being aware of FP methods	1.426	3.340	0.027	0.427(0.670)
Getting information about FP methods	-7.446	2.070	-0.205	-3.597(0.001)
Adequacy of your knowledge about FP methods	-3.864	2.220	-0.121	-1.741(0.083)
Sexual health knowledge level	1.137	2.022	0.031	0.562(0.574)
Receipt of information about sexual health	5.878	1.771	0.191	3.320(0.001)
Consultation with health personnel regarding sexual health	0.819	3.570	0.012	0.229(0.819)
Sexual health literacy	0.438	0.151	0.141	2.902(0.004)
Receiving information from family about sexual health	-6.899	3.188	-0.107	-2.164(0.31)
Applying to a health center for sexual health counseling	-0.647	1.691	-0.020	-0.383(0.702)
F(p)	8.139(0.001)			
R ²	0.200			
Adj R ²	0.175			
R ² change	0.200			

Note: ^aPredictor(s) had a statistically significant association with the outcome variable in bivariate analysis ($p < 0.05$). p, level of significance; ΔR^2 , the change in R^2 ; β , standardized coefficient; B, unstandardized coefficients; R^2 , coefficient of Determination.

Discussion

In recent years, there has been an increase in research on women's FP, with studies highlighting its significant impact on reproductive health.¹⁶⁻¹⁸ However, research focusing on men's sexual health literacy and FP remains limited. One study found that economic factors prevented men from accessing information on sexual health, leading to inadequacies in their knowledge of FP methods.¹⁹ Another study reported that sexual health training for men positively impacted their participation in FP services.²⁰ In this study, it was found that as sexual health literacy increased, attitudes toward FP also improved. However, contrary to our findings, a study conducted in Pakistan reported that the perception of FP methods as a women's issue discouraged men from sufficiently engaging with sexual health topics.²¹

Assessing sexual health literacy is crucial for better understanding men's reproductive health, ensuring access to accurate information to meet their FP needs, and effectively utilizing technology.²² Men's knowledge of FP methods is linked to more positive attitudes toward their use.

For instance, a study conducted with men in Niger highlighted that about half of them were knowledgeable about modern FP methods.²³ Similarly, another study found that the majority of men were aware of modern FP methods.²⁴ However, increased knowledge does not always lead to more positive attitudes. In some contexts, men with higher levels of knowledge may feel threatened by shifts in traditional gender roles, resulting in resistance despite their understanding of available methods. In this study, it was found that men who received information about FP methods had more positive attitudes toward FP than those who did not, but the effect was negative ($\beta = -0.205$). Therefore, it is essential to foster positive attitudes toward FP by addressing cultural norms and promoting gender equality.

Sexual health education is effective in fostering positive attitudes toward FP by enhancing individuals' knowledge and decision-making skills.²⁵ Several studies have highlighted the relationship between receiving sexual health education and FP, demonstrating that individuals who receive such education tend to have more positive attitudes toward FP.^{5, 25, 26} In this study, it

was found that men who expressed interest in receiving sexual health education had positive attitudes toward FP, while those who were undecided about seeking sexual health counseling at a health center exhibited even more positive attitudes toward FP. In contrast to our findings, Beyhan and Ergün reported that students preferred to receive health education from specialized health personnel.⁵ Our study's results may reflect that male students who are undecided about seeking sexual health counseling develop more positive attitudes toward FP as their awareness grows and discussions around reproductive health become more normalized in their environment. In summary, this study showed that socio-demographic factors had no significant effect on FP attitudes, but men's knowledge of FP methods was significantly associated with their knowledge of sexual health.

Strengths and limitations of the study

Reaching young men and collecting data on topics involving privacy concerns presents significant challenges. One of the primary difficulties encountered in this study was the reluctance of young men to complete the questionnaire, often due to embarrassment, hesitation, or the perception that FP is an insignificant issue. In addition, restricting the sample to young men who owned a smartphone and used social media may have limited the generalizability of the findings to the broader young male population. In addition, because the questionnaire was administered through the Google Forms® platform, the identity of the respondents could not be independently verified, and it could not be confirmed that the questionnaire was completed exclusively by the intended participants. Despite these limitations, a sufficient sample was successfully obtained. A major strength of this study is its focus on young men, an understudied population in FP research. Furthermore, by evaluating sexual health literacy alongside sociodemographic characteristics and FP knowledge, the study provides a comprehensive assessment of factors associated with FP attitudes. The data collected from young men in Ankara-a city that hosts students from across Türkiye-provide a valuable resource for future research and may contribute to increasing awareness of this underexplored topic.

Nursing implications

This study provides evidence that enhancing sexual health literacy may strengthen young men's attitudes toward FP, emphasizing the critical role of nurses in reproductive health promotion. Nurses should incorporate sexual health literacy into education, counseling, and health promotion initiatives targeting young men. These findings may guide the development of nursing interventions and public health strategies aimed at increasing male participation in family planning and supporting equitable reproductive health care.

Conclusion

This study highlights a positive relationship between young men's sexual health literacy and their attitudes toward FP. Higher sexual health literacy levels are associated with more positive attitudes toward FP and sexual health practices. Nurses are key in providing sexual health education to young men, starting in adolescence, and fostering open communication about contraception. Educational programs that improve sexual health literacy can empower young men to make informed decisions. Future research should include more men in family planning and sexual health studies, with larger, multicenter samples to improve generalizability.

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Conflict of interests

The author declares that there is no conflict of interest.

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Consent for publication

Manuscript is approved by all authors for publication.

Data availability

The data supporting the findings of this study are available from the corresponding author upon reasonable request, subject to ethical and confidentiality considerations.

Authors' contributions

RG and RA contributed to the conception and design of the study, acquisition of data, drafting and revision of the manuscript. RG contributed to data analysis and interpretation of the findings. Both authors critically reviewed the manuscript, approved the final version, and agreed to be accountable for all aspects of the work.

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