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Attitudes of puerperal women toward health literacy and family planning: A cross-sectional study

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Abstract

The research was conducted to evaluate the correlation between health literacy and family planning attitude of puerperal women. In this cross-sectional study, was carried out with 258 puerperal women in a public hospital in the Mediterranean region of Turkey. The data were collected using the Mother Introductory Information Form, Postpartum Family Planning Attitude Scale, and Health Literacy Scale. The data were evaluated using Independent Groups t-test, ANOVA and Sperman's correlation analysis. In the study, the puerperal women who had high level of educational status, worked in an income-generating job, had used contraceptives before pregnancy were found to obtained high average scores from the Family Planning Scale. The health literacy levels of those who were employed, had social security and had cesarean delivery were also high. The research shows that there is a positive correlation between health literacy and family planning attitudes of puerperal women. *(Afr J Reprod Health 2024; 28 [10]: 121-130).*

Keywords: Health literacy; family planning; puerperal women; cross-sectional study

Résumé

La recherche a été menée pour évaluer la corrélation entre la littératie en santé et l'attitude envers la planification familiale chez les femmes puerpérales. L'étude, utilisant un design transversal et axé sur les relations, a été réalisée avec 258 femmes puerpérales dans un hôpital public de la région méditerranéenne de Turquie. Les données ont été collectées à l'aide du Formulaire d'Informations Introductives sur les Mères, de l'Échelle d'Attitude envers la Planification Familiale Postpartum et de l'Échelle de Littératie en Santé. Les données ont été évaluées à l'aide du test t pour groupes indépendants, de l'ANOVA et de l'analyse de la corrélation de Spearman. Dans l'étude, les femmes en puerpéralité ayant un niveau d'éducation élevé, exerçant un emploi rémunérateur et ayant utilisé des contraceptifs avant la grossesse ont obtenu des scores moyens élevés à l'échelle de la planification familiale. Les niveaux de littératie en santé de ceux qui étaient employés, avaient une sécurité sociale et avaient subi une césarienne étaient également élevés. La recherche montre qu'il existe une corrélation positive entre la littératie en santé et les attitudes en matière de planification familiale des femmes en puerpéralité. *(Afr J Reprod Health 2024; 28 [10]: 121-130).*

Mots-clés: Littératie en santé; planification familiale; femmes puerpérales; étude transversale

Introduction

Family planning, a critical determinant of women's, family, and community well-being, is influenced by a variety of factors. These include national health policies, the accessibility and affordability of high-quality healthcare services, gender disparities, sociocultural influences, and health literacy. Health literacy refers to an individual's capacity and motivation to access health-related information sources, accurately comprehend health-related information and messages, and thereby enhance awareness and decision-making skills regarding healthcare services. This empowers individuals to protect and improve their health throughout their lives. Health literacy encompasses several stages, including reading, listening, analyzing, decision-making, and adapting health-related resources to one's own life.[1] The World Health Organization (WHO) highlights health literacy as a vital tool for achieving many of the Sustainable Development Goals, emphasizing its potential to reduce health disparities.[2] Both healthcare professionals and individuals share the responsibility for health literacy. For healthcare professionals, it entails the

necessary awareness to apply their expertise effectively. For those receiving health services, it is seen as the ability to take responsibility for their health and the skill to protect their health.[3] Low levels of health literacy correlate with inappropriate healthcare service utilization, lower rates of immunization, poorer health outcomes, compromised rational medication use, and higher healthcare costs.[4,5] Moreover, health literacy is known to have significant effect on women's reproductive health knowledge and behaviors. Research has shown that women with low health literacy tend to exhibit negative health behaviors related to prenatal care, breastfeeding, and contraceptive pill usage.[6-8]

Liddelow, Mullan &Boyes highlight a direct relationship between oral contraceptive use continuity and health literacy levels. They also emphasize that health literacy can foster adherence to the contraceptive method and non-contraceptive benefits.[9] The use of contraceptive methods varies among developed, developing, and underdeveloped countries. These differences can arise from the social, cultural, religious, economic, and political diversity of each region. Estimates indicate that approximately 218 million women of reproductive age (ages 15 to 49) in low- and middle-income countries have an unmet need for FP. Globally, the percentage of individuals using modern contraceptive methods is 77%.[10,11] Countries where the demand for contraceptives is largely met include East and Southeast Asia, New Zealand, Latin America, Europe, and North America. Conversely, the lowest usage rates of contraceptives are found in Sub-Saharan Africa, Central Africa, and Western Africa. In many of the world's poorest and most populous regions, there remains a significant need for birth control. In developing and underdeveloped countries, FP is included in minimal care or safe motherhood packages within primary healthcare services.

Major public health facilities that offer FP include community health centers, dispensaries, and maternity clinics. Nurses, midwives and community health workers serve as the primary providers of FP services at these facilities.[2,11,12]

Numerous studies are currently being conducted in Turkey, a country that transitioned from a pronatalist population policy prior to 1965 to an antinatalist policy thereafter, aimed protect and improve reproductive health. The 1983 Population Planning Law introduced several measures, including voluntary surgical sterilization for women and men, pregnancy termination within the first 10 weeks with consent, authorization for nurses to perform intrauterine device (IUD) insertions, authorization for certified physicians to manage menstrual regulation (MR), and pregnancy terminations.[13]Additionally, Turkish nurse and midwives are actively engaged in reproductive health services across all healthcare institutions (Family Health Centers, Community Health Centers, and Hospitals), providing prenatal and postpartum care, as well as family planning services.[14] Despite these advancements, Turkey still faces challenges in achieving desired levels of family planning practices. Notably, the unmet need for family planning has increased from 6% to 12% over the past five years.[15] In sub-Saharan Africa, where the unmet need for family planning is approximately 21%, efforts are being made to improve reproductive health services by expanding the roles and responsibilities of midwives and nurses in FP services.[16]

There is a clear need for further research to comprehend the strategies required for advancing reproductive health, particularly in the field of family planning. Furthermore, the potential connection between health literacy and women's attitudes toward family planning remains unexplored in Turkey. In light of this, our current study examines the relationship between health literacy levels and attitudes toward family planning among puerperal women receiving postpartum care at a state hospital. Our objective is not only to discern this correlation but also to raise awareness about the considerable impact of women's health literacy on family planning.

Methods

Study design

This study employed a cross-sectional and correlation-seeking design to assess the potential relationship between health literacy and family planning attitudes among puerperal women.

Research questions

1. What are the health literacy levels among puerperal women?
2. Is there a significant difference in health literacy levels of puerperal women based on their sociodemographic characteristics
3. What are the attitudes of postpartum women towards family planning?
4.Are there substantial variations in puerperal women's attitudes toward family planning based on their sociodemographic characteristics?
5.Is there a relationship between health literacy and attitudes towards family planning?

Participants and sample calculation

The study population consisted of puerperal women admitted to the postpartum clinic of Osmaniye State Hospital Postpartum Clinic between March 1, 2022, and June 30, 2022. The inclusion criteria were; women who sought hospital care for delivery within the specified study timeframe, absence of personal health issues and health concerns regarding their infants, literacy, no communication obstacles, and a willingness to participate. The sample size was determined using the G*Power 3.1.9.4 software.[17] Pearson's correlation coefficient for the H1 hypothesis, examining the potential correlation between health literacy and family planning attitudes of postpartum mothers, was estimated at 0.20 ($r = 0.20$). With a 5% margin of error ($\alpha = 0.05$) and statistical power of 90% ($1-\beta = 0.90$), the sample size was calculated as 258.[3,18,19] Employing an unlikely random sampling approach, 258 puerperal women who met the inclusion criteria were successfully included in the study.

Data collection

Before starting data collection, official permission was obtained from the institution where the study would be conducted. Data were collected from postpartum women on the second day after delivery, at which point the decision was made to discharge both them and their babies from the hospital. The postpartum women were informed about the study with an informative explanation text on the introductory page of the survey. Written consent was obtained from the participants before continuing the study. For data collection, face-to-face interviews were conducted within the confines of the participants' clinic rooms. The interviews took place at convenient times, considering the well-being of both the participants and the babies themselves. The administration of the data collection tools took approximately 10 to 15 minutes per participant.

Data collection instruments

The Mother Information Form, Postpartum Family Planning Attitude Scale and Health Literacy Scale were used in the data collection process. The Mother Information Form (MIIF),[5,6,8,20], developed by the researchers with references to the relevant literature, was designed to capture sociodemographic and obstetric details regarding the participants' last birth. Comprising 17 questions, the MIIF facilitates the understanding of maternal characteristics and reproductive context.

The Health Literacy Scale (HLS), initially designed by Sorensen *et al.*, encompasses 47 items organized into two dimensions.[21] Subsequently, Toçi *et al.* simplified the scale and established its validity and reliability.[22] The Turkish version, composed of 25 items, was validated and assessed for reliability by Aras and Temel in 2015. This version consists of four subscales: Access to Information, Understanding Information, Appraisal/Assessment, and Application/Use. Respondents rate items on a 5-point scale as follows: "5: No difficulty, 4: A little bit of difficulty, 3: Moderate difficulty, 2: Quite a bit of difficulty,1: Extreme difficulty or unable to perform activity".[23]

Notably, all items feature positive statements. Scores on the scale range from 25 to 125, with higher scores indicating greater health literacy levels and lower scores indicating inadequate or problematic health literacy. The original scale demonstrates a Cronbach's alpha value of 0.92, while subscale values range between 0.62 and 0.79.[23] In the present study, the calculated Cronbach's alpha coefficient is 0.920, indicating the scale's consistent internal reliability.

The Postpartum Family Planning Attitude Scale (PFPAS) developed by Varol in 2019, contains 27 items rated on a 5-point Likert scale.[24] Of these, 16 items are affirmative statements, and 11 are negative statements. Negative statements are reverse- scored for uniform evaluation. The scoring ranges from 1 to 5,with positive statements scored as 1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly agree. Conversely, negative statements are scored as 5=Strongly disagree, 4=Disagree, 3=Neutral, 2=Agree, and 1=Strongly agree. The scale comprises six subscales: "Perceived Risk" (Items 1, 2, 3), "Perceived Seriousness" (Items 4, 5, 6), "Perceived Benefits" (Items 7, 8, 9, 10), "Perceived Obstacles" (Items 11 to 18), "Taking Action" (Items 19 to 23), and "Self-Efficacy" (Items 24 to 27). The total possible score ranges from 27 to 135, with higher scores indicating stronger health beliefs, including perceived risk, perceived seriousness, perceived obstacles, perceived benefits, taking action, self-efficacy, and ultimately, a favorable family planning attitude. The original scale demonstrates a Cronbach's alpha coefficient of 0.878.[24] In the present study, the calculated Cronbach's alpha coefficient is 0.932.

Data analysis

Data analysis was conducted employing the SPSS 25 software package. The normality of numerical variables was assessed using the Skewness and Kurtosis (±1) distribution test, revealing that the data adhered to a normal distribution. Descriptive statistics including numbers, percentages, means, standard deviations, medians, minimums, and maximums were employed for data evaluation. In addition, Independent Groups t-test, ANOVA, and Pearson's Correlation Analysis were performed to extract meaningful insights from the data. All results were evaluated at a 95% confidence interval, with a level of statistical significance set at $p<0.05$.

Ethical approval

Ethical approval was obtained from the Osmaniye Korkut Ata University Scientific Research and Publication Ethics Committee (Date:25.02.2022, Decision No:2022/2/20). Additionally, written permission was acquired from the Republic of Turkish Ministry of Health Osmaniye Provincial Directorate of Health. Participants were thoroughly informed of the voluntary nature of their participation, maintaining the option to withdraw at any time. The study's purpose was also clarified, emphasizing its use for scientific research, and confidentiality was assured in accordance with the principles of the Helsinki Declaration.

Results

This section presents the results related to the average scores of the PFPAS and HLS according to various sociodemographic and reproductive characteristics of puerperal women.

The demographic analysis revealed that 16.6% of puerperal women were aged 35 or older, 51.2% had completed primary school, 67.7% were not engaged in income-generating employment, 82.2% had social security, and 70.1% had an income sufficient to cover their expenses. The analysis revealed statistically significant differences in the average PFPAS scores related to educational attainment, income-generating employment status, and possession of social security ($p<0.05$). Women with higher education, those employed in income-generating roles, and those with social security tended to have higher average PFPAS scored. Moreover, a statistically significant increase in overall PFPAS scores was observed among mothers engaged in income-generating employment and holding social security ($p<0.05$) (Table 1).

Further, Table 1 presents a comparison of the overall PFPAS and HLS scores based on reproductive

Table 1: The overall PFPAS and HLS score averages of puerperal women according to their sociodemographic characteristics (n=258)

Sociodemographic characteristics	n (%)	Overall PFPAS $\bar{X}$±SS	Test and Significance t-F/p	Overall HLS $\bar{X}$±SS	Test and Significance t-F/p
Age					
19 and below	11 (4.3)	100.18±16.14	*F=2.789	105.72±16.05	F=0.028
20-34	204 (79.1)	112.79±19.75	p=0.063	106.57±13.66	p=0.972
35 and over	43 (16.6)	108.62±18.55		106.83±14.56	
Educational status					
Literate	9 (3.5)	98.44±15.91	F=4.237	104.11±14.69	F=1.751
Primary School	132(51.2)	108.72±19.17	**p=0.006**	106.43±13.87	p=0.157
High School	85(32.9)	115.69±19.83		105.21±14.42	
University and higher	32(12.4)	116.0±18.39		111.53±11.32	
Marital status					
Married	244(94.6)	111.56±19.46	F=2.367	106.57±13.98	F=0.134
Single	6(2.3)	98.50±19.35	p=0.096	104.50±13.18	p=0.875
Divorced	8(3.1)	121.37±19.75		108.37±11.68	
Employment status					
Employed	60(23.3)	124.78±13.21	**t=6.422	110.96±8.97	t=2.832
Unemployed	198(67.7)	107.56±19.44	**p=0.000**	105.25±14.80	**p=0.000**
Social security					
Yes	212(82.2)	115.15±18.32	t=6.870	107.53±13.29	t=2.378
No	46(17.8)	95.02±16.47	**p=0.000**	102.21±15.66	**p=0.018**
Income level					
Low	25(9.7)	103.92±20.42	F=7.347	103.92±15.59	F=1.949
Middle	181(70.1)	110.23±19.56	p=0.001	106.04±14.72	p=0.145
Good	52(20.2)	119.86±16.63		109.73±8.62	
Family type					
Nuclear family	206(79.8)	111.72±19.49	t=0.265	106.52±14.17	t=-.129
Extended family	52(20.2)	110.92±20.06	p=0.792	106.80±12.68	p=0.897
Number of pregnancies					
First pregnancy	58(22.5)	92.56±8.87	**t=.0081	107.89±13.58	t=0.817
2 and above	200(77.5)	92.45±9.63	p=0.794	106.20±13.95	p=0.593
Number of living children					
1	74 (28.7)	91.51±10.17	t=-1.042	108.27±13.57	t=1.239
2 and above	184 (71.3)	92.86±9.15	p=0.256	105.90±13.95	p=0.893
History of miscarriage					
Yes					
No	188(72.9)	110.67±20.02	t=-1.206	107.38±13.53	t=-1.528
	70(27.1)	113.97±18.22	p=0.229	104.42±14.60	p=0.128
History of abortion					
Yes	26(10.1)	112.08±19.50	t=-1.267	107.24±12.94	t=2.289
No	232(89.9)	106.96±19.89	p=0.222	100.73±19.68	**p=0.023**
Delivery type					
Normal delivery	96(37.2)	103.53±18.58	t=-5.341	102.79±16.73	t=-3.454
Cesarean	162(62.8)	116.32±18.60	**p=0.000**	108.83±11.31	**p=0.001**
Pre-pregnancy constaceptive use					

Yes	85(32.9)	121.50±15.42	t=6.109	108.47±10.05	t=1.535
No	173(67.1)	106.68±19.57	**p=0.000**	106.27±14.45	p=0.126
History of stillbirth					
Yes	42(16.3)	120.23±16.87	t=3.194	108.16±10.29	t=0.807
No	216(83.7)	109.87±19.64	**p=0.002**	106.27±14.45	p=0.420
Status of planning the last pregnancy					
Yes	212(82.2)	112.51±19.50	t=1.685	106.69±13.67	t=0.268
No	46(17.8)	107.17±19.48	p=0.093	106.08±14.87	p=0.789
Planning having another child					
Yes	69(26.7)	112.57±18.44		107.56±14.53	
No	124(48.1)	112.34±20.14	*F=0.749	106.29±13.80	F=0.239
Not decided	65(25.2)	109.00±19.68	p=0.474	106.09±13.42	p=0.788

HLS:Health Literacy Scale, PFPAS: Postpartum Family Planning Attitude Scale , **t= Independent groups t-test, *F= ANOVA test, p<0.05

Table 2: Distribution of the overall PFPAS and HLS scores and subscale score averages and Minimum and Maximum values

Scales	$\bar{X}$	**SD**	**Minimum scores**	**Maximum**
HLS				
Overall Score	106	13.86	25-125	
Access to Information	21.72	3.42	5-25	
Understanding Information	28.88	4.34	7-35	
Appraisal / Assessment	33.82	5.66	8-40	
Application / Use	22.13	3.24	5-25	
PFPAS				
Overall Score	111.56	19.57	27-135	
Perceived Risk	11.46	2.96	3-15	
Perceived Seriousness	12.69	2.67	3-15	
Perceived Obstacles	16.87	3.39	4-20	
Perceived Benefits	31.51	6.93	8-40	
Taking Action	21.65	4.03	5-25	
Self-Efficacy	17.36	3.61	4-20	

HLS:Health Literacy Scale, PFPAS: Postpartum Family Planning Attitude Scale SD: Standart Deviation

Table 3: Correlation distribution of the overall PFPAS and HLS score averages

	Health Literacy Scale
Postpartum Family Planning Attitude Scale	r= 0,525 p= **0.000*** n=258

HLS :Health Literacy Scale, PFPAS: Postpartum Family Planning Scale, r= Pearson's Correlation Analysis.
* p< 0.001.

characteristics. The analysis revealed that 77.5 % of women had experienced two or more pregnancies, 71.3% had given birth to two or more living children, 27.1% had a history of miscarriage, 10.1% had undergone an abortion, 62.8% had opted for cesarean delivery, 32.9% had used modern contraceptives prior to pregnancy, and 16.3% had experienced stillbirth. Among the participants, 82.2% had planned pregnancies, and 26.7% expressed intentions of having another child.

Although it is not shown in the table, all of the participants included in the study had received prenatal care at least four times.

The results showed statistically significant differences in the average PFPAS scores among puerperal women who had experienced cesarean delivery, undergone stillbirth, and used contraceptives prior to pregnancy ($p<0.05$). Additionally, a significant difference in overall HLS scores was noted between women with a history of abortion and those who had undergone cesarean delivery ($p<0.05$) (Table 1).

Table 2 provides the results pertaining to the average PFPAS scores, overall HLS scores, subscale scores, and the range of minimum and maximum values. The study revealed an average overall PFPAS score of 111.56±19.57 (range: 27-135) and an average overall HLS score of 106±13.86 (range: 25-125) (Table 2).

The correlation analysis between overall PFPAS and HLS scores revealed a strong positive relationship ($p=0.000$), indicating that as health literacy levels among postpartum women increase, their attitudes toward family planning also improve (Table 3).

Discussion

Nowadays, there is an increasing expectation that individuals to take more responsibility for protecting and improving their health. Individual health literacy plays a critical role in fulfilling this responsibility. Strengthening health literacy requires collaborative efforts from multiple sectors, involving both healthcare recipients and providers. The cultivation of robust health literacy involves a collaborative effort across various sectors, encompassing both healthcare recipients and providers. These stakeholders must take collective action to raise awareness of the health-promoting effects of health literacy and disseminate this knowledge throughout society.

In this study, the mean HLS score among puerperal women was determined to be 106±13.86. Notably, the highest possible score achievable on the HLS is 125. This result indicates that the participating puerperal women possess a high level of health literacy. In contrast, previous research has shown that nearly seven out of every ten individuals in Turkey struggle with inadequate or problematic, limited health literacy. Furthermore, the prevalence of insufficient health literacy is notably higher among women (35.3%) compared to men (26.4%).[25] The increased health literacy level observed in the current study could be attributed to the demographic characteristics of the participants, who were predominantly young women with moderate educational and income levels. This aligns with existing literature, which suggests that puerperal women engaged in income-generating employment and possessing social security tend to exhibit higher average scores on the overall HLS.[1,25]

Women's health literacy positively influences various health aspects, including cancer prevention, the receipt of preconception care, obtaining adequate pre-and postpartum care, promoting breastfeeding, maintaining regular health check-ups, and engaging in physical activity.[26] Studies show that the incidence of unplanned pregnancy is higher in women with low health literacy and /or low educational attainment.[27-30] However, this current study show that diverge from some established literature. Contrary to the literature, there was no difference between the average health literacy scores of those with planned and unplanned pregnancies in the current study. Also contrary to studies indicating that there was no statistically significant difference between the mode of delivery and health literacy,[31] this study found that the overall HLS score average of women having a cesarean delivery was high, and that there was a statistically significant difference between the groups. This divergence might be attributed to the likelihood that cesarean deliveries are more prevalent among women with higher socioeconomic statuses. Alternatively, the participants in our study may have been influenced by their prior childbirth experiences, leading to their distinctive health literacy scores.

Attaining a high level of health literacy is a pivotal factor in enabling women to effectively manage and enhance their well-being across their lifespans. Adequate health literacy equips women

with the competence to take charge of their personal health and that of their families, thereby influencing their ability to address pertinent challenges.[32,33]

It is iessential to recognize health literacy as a key component of women's reproductive health. To ensure that women derive maximum benefit from reproductive health services, tailored educational resources aligning with their health literacy skills must be provided.

Family planning services constitute an integral facet of maternal, infant, and community health, serving as a cornerstone in postpartum care. Although family planning attitudes are not directly observable, they significantly impact individuals' contraceptive method utilization behaviors. In this study, the average PFPAS score for puerperal women was 111.56 ± 19.57. Given that the scale's maximum achievable score is 135, it can be inferred that the puerperal women within our study cohort exhibit favorable attitudes toward family planning.

Educational attainment, often regarded as a vital social determinant, profoundly influences attitudes and behavioral patterns surrounding birth control. In the current research, higher educational levels among puerperal women correlated with higher PFPAS scores. A similar relationship was identified among those engaged in income-generating employment and possessing social security. Working and possessing social security are conducive to accessing accurate information concerning health services and family planning. These results are consistent with the existing literature.[11,24,34]

The obstetric characteristics of women can potentially affect their family planning attitudes and behaviors. In the current research reveals that while the total number of pregnancies and living children did not correlate with overall PFPAS scores, women with a history of stillbirth exhibited higher average scores. This suggests that negative birthing experiences and infant loss might influence a woman's inclination to plan future pregnancies.

It is known that the family planning attitudes of puerperal women are influenced by the previous experience of using contraceptive methods, and ensure the continuity of contraceptive using behavior after childbirth.[35,36] Corresponding with existing literature, our study demonstrates that puerperal women who have previously employed modern family planning methods possess higher overall PFPAS scores in comparison to others.

This difference between the groups is statistically significant ($p<0.05$). Similarly, our results indicate that women who underwent cesarean delivery exhibited higher average PFPAS scores compared to those who had a vaginal delivery. Preventive health services play a crucial role in safeguarding and enhancing women's well-being. Women who adopt modern family planning methods to prevent unwanted and potentially risky pregnancies can experience improved health and greater satisfaction. Our study supports the idea that individuals who are aware of health-preserving measures are more likely to have a positive attitude towards avoiding pregnancies after cesarean sections. The notion that individuals who possess an awareness of health-preserving measures tend to foster a positive attitude towards averting post-cesarean pregnancies aligns with the results of our study. This highlights the significance of fostering health-conscious attitudes among women following cesarean deliveries.

Conclusion

This study, designed to uncover the relationship between health literacy and family planning attitudes, highlights a strong and positive correlation between participants' health literacy levels and their family planning attitudes.

In light of these results, it is essential to efforts are essential to collectively strive to raise awareness and increase health literacy among women. Collaboration should extend beyond the healthcare sector to include educational institutions, non-governmental organizations, and the media, all of which play important roles in enhancing health literacy. Regarding the health literacy of puerperal women in postpartum care, it's imperative to tailor family planning education and counseling using audio-visual materials that match their specific health literacy levels. Encouraging the education of women and girls is crucial, considering its far-reaching effects on societal status, employment

opportunities, and reproductive aspects. While not the primary focus of this study, the observed high cesarean delivery rate is noteworthy. Accordingly, it is recommended that an investigation be undertaken to comprehend the underlying reasons for the elevated cesarean delivery rates within the specific region where the study was conducted.

Conflict of interest

The authors report there are no competing interests to declare.

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Contribution of authors

MY: Conceptualization,formal analysis,and writing review and editing
DKŞ: Conceptualization,formal analysis,and writing original draft
CA: Conceptualization, data collection,writing original draft writing
The authors read and approved the final manuscript.

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