







The evaluation of emotional violence and sleep quality in Turkish pregnant women: A cross-sectional study

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Abstract

Background: Emotional violence during pregnancy may negatively affect maternal and fetal health and impair sleep quality. The study aimed to evaluate pregnant women's exposure to emotional violence and their sleep quality.

Methods: A cross-sectional study was conducted with 262 pregnant women at Samsun Education and Research Hospital in the city of Samsun, Turkey, between February and May 2024. The sample was obtained using simple random sampling. Data were collected using the Sociodemographic and Obstetric Checklist, the Pittsburgh Sleep Quality Index (PSQI), and the exposure to Emotional Violence Scale (EVS). Data were analyzed using independent samples t-test, one-way analysis of variance (ANOVA) with Tukey's post hoc comparisons, and all data were analyzed using SPSS v.25. Statistical significance was set at $p < 0.05$.

Results: Spousal violence during pregnancy was reported by 16.0% (CI 95%: 11.5 – 20.5) of participants. The mean (standard deviation) total PSQI score was 5.77 (3.49), and 54.2% (CI 95%, 48.2-60.2) of the pregnant women had poor sleep quality. The mean (SD) total EVS score was 38.80 (13.25), indicating a low level of emotional violence exposure. Pregnant women with poor sleep quality had significantly higher EVS total scores ($p = 0.020$), as well as higher scores in the subdomains of obstruction ($p = 0.044$), humiliation ($p = 0.046$), harm ($p = 0.021$), and verbal abuse ($p = 0.022$).

Conclusion: It was demonstrated that half of the pregnant women had poor sleep quality and were exposed to low levels of emotional violence. Pregnant women with poor sleep quality were found to be more exposed to emotional violence.

Article Type: Research Article

Article History

Received: 18 July 2025

Received in revised form: 26 August 2025

Accepted: 2 September 2025

Available online: 30 September 2025

DOI: [10.29252/jgbfm.22.3.34](https://doi.org/10.29252/jgbfm.22.3.34)

Keywords

Emotional abuse
Pregnancy
Sleep quality



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Highlights

What is current knowledge?

The prevalence of emotional violence during pregnancy ranges from 0.4% to 79.8%. Sleep problems are common in pregnancy and worsen maternal and fetal health.

What is new here?

Findings show that emotional violence significantly worsens sleep quality. Subtypes of emotional violence-obstruction, humiliation, harm, and verbal abuse-were more frequent in women with poor sleep quality.

Introduction

Pregnancy is a unique and critical period in a woman's life, characterized by profound physiological, psychological, and social changes that increase sensitivity and vulnerability. During this period, women may be more susceptible to various risk factors that can adversely affect both their own health and that of their unborn children (1). One such risk factor is intimate partner violence (IPV), which may increase in prevalence during pregnancy (2).

IPV is generally classified into four main forms. Emotional/psychological violence: the most prevalent type, including threats, humiliating behaviors, and controlling actions. Economic violence: restriction and control over financial resources and employment opportunities. Sexual violence: coercion into sexual intercourse or the application of sexual pressure. Social violence: isolation from supportive social networks and relationships (3,4).

Emotional/psychological violence encompasses behaviors intended to control, intimidate, manipulate, or isolate victims through non-

physical means. Such behaviors may include verbal abuse, threats, and intimidation; humiliation and degrading treatment; controlling actions and surveillance; isolation from family and friends; and threats directed toward family members. This violence constitutes the most common form of IPV (2,4). The prevalence of psychological violence during pregnancy is difficult to pinpoint precisely, as it varies widely across different studies. According to the findings of a systematic review encompassing 113 studies and 189,630 women, the prevalence of psychological violence during pregnancy ranges from 0.4% to 79.8%. Despite this wide variation, the global prevalence of psychological violence in pregnancy has been estimated at 18.7%. At the regional level, the highest prevalence rates were observed in North America (28.6%), Africa (25.2%), South America (23.4%), and Asia (19.3%), while the lowest rate was reported in Europe (4.2%) (2).

Violence during pregnancy, a period marked by substantial physical and psychological changes, has a detrimental impact on women's reproductive health. Emotional violence experienced during pregnancy is of particular concern, as it can adversely affect both maternal and fetal health. Such violence has been associated with elevated maternal blood pressure, increased levels of anxiety and depression, miscarriage, preterm birth, and other complications related to prematurity (5).

Pregnant women exposed to emotional abuse frequently exhibit heightened psychological responses such as elevated stress, anxiety, and depression (6). Chronic stress resulting from emotional abuse can lead to hyperactivation of the hypothalamic-pituitary-adrenal (HPA) axis, disruption of cortisol regulation, and persistent activation of the sympathetic nervous system-all of which can impair sleep (7). Sleep deprivation, in turn, disrupts circadian rhythms, affects central nervous system and metabolic functioning, and activates inflammatory pathways involving C-reactive protein (CRP) and interleukin-6 (IL-6), thereby increasing the risk of adverse maternal and fetal outcomes (8,9).

Adequate sleep and rest during pregnancy are essential for a healthy gestational period. Poor sleep quality is a common complaint during pregnancy due to physiological, hormonal, and psychosocial changes (10). Data from the international literature on the subject provide important information about the prevalence of sleep quality. Based on a systematic review of studies from 15 different low- and middle-income countries, which included a total of 31,946 pregnant women, the prevalence of poor sleep quality was found to range widely from 17.0% to 96.4% (11). Furthermore, a meta-analysis that evaluated data from a total of 11,002 pregnant women demonstrated that 45.7% of the participants experienced poor sleep quality (12). This situation is observed similarly in Turkey. In recent studies conducted in the country, poor sleep quality was found in 44% to 56.5% of pregnant women (13-15).

Poor sleep quality during pregnancy has been shown to adversely affect both maternal and fetal health. It has been reported that inadequate sleep increases the likelihood of pregnancy complications such as gestational diabetes and preeclampsia, while also exacerbating pain and physical discomfort experienced during the gestational period. This issue extends beyond pregnancy itself; indeed, both exposure to emotional abuse and sleep deprivation significantly elevate the risk of postpartum depression, increase maternal anxiety levels, and diminish the mother's capacity to cope with stress. Furthermore, existing evidence indicates that stress and sleep disturbances during pregnancy are associated with adverse obstetric outcomes, including preterm birth and low birth weight. Moreover, elevated maternal stress levels may predispose the child to behavioral and developmental problems later in life, whereas disruptions in sleep patterns may indirectly impair the rest and repair mechanisms essential for optimal fetal development (8,16).

Although there is growing evidence linking emotional violence to poor mental health and poor sleep quality to adverse pregnancy outcomes, there is limited research examining the direct relationship between emotional violence and sleep quality during the perinatal period (9,17). To date, no study has specifically investigated this association among pregnant women in Türkiye.

This study aimed to assess the level of emotional violence experienced by pregnant women in Türkiye and to evaluate their sleep quality. Additionally, it seeks to explore whether there is a relationship between exposure to emotional violence and sleep quality among this population. By addressing these questions, the study provides context-specific evidence that can guide the development of screening, prevention, and intervention strategies to improve maternal and fetal health outcomes and contribute to the broader literature on intimate partner violence and perinatal health.

Methods

Study design and Participants

This cross-sectional study was conducted on 262 pregnant women who attended the Obstetrics and Gynecology Outpatient Clinic at Samsun Education and Research Hospital from February to May 2024. The hospital, located in the city of Samsun, Türkiye, serves as a major health center in the region.

The sample was selected using the simple random sampling method, and the sample size was calculated using the known population formula. Based on a 95% confidence level (CI) and a 5% margin of error, the required sample size from a population of 822 was determined to be 262. However, considering potential response omissions and participant attrition during the data collection process, a 10% increase was applied, and the final target sample size was set at 289 participants.

Inclusion criteria: (i) Pregnant women at any trimester of pregnancy, (ii) Aged between 19 and 35 years old (i.e., >18 and ≤ 35 years), (iii) Literate, (iv) Not having a high-risk pregnancy (as defined in the exclusion criteria), (v) Voluntarily agreeing to participate in the study. Exclusion criteria: (i) Aged 18 years or younger, or older than 35 years, (ii) Illiterate, (iii) Diagnosed with a high-risk pregnancy, including chronic conditions (e.g., hypertension, diabetes, asthma, or heart disease) or pregnancy-related complications (e.g., threatened abortion, placental anomalies such as placenta previa or abruption, or multiple pregnancy).

Data measurement

The study data were collected using the Pregnancy Diagnosis Form, Pittsburgh Sleep Quality Index (PSQI), and exposure to Emotional

Violence Scale (EVS). Sociodemographic and Obstetric Checklist: This form consists of 15 questions designed to gather information on the sociodemographic characteristics of the women and their partners (e.g., age, education level, employment status, income, and family type), as well as their obstetric characteristics (e.g., gravidity, parity, gestational week, planned pregnancy status, and current pregnancy health issues).

Pittsburgh Sleep Quality Index (PSQI): This self-report, Likert-type questionnaire assesses subjective sleep quality and disturbances over the past month. It was developed by Buysse et al. (1989) (18). The validity and reliability of the Turkish study were determined by Agargun et al. (1996) (19). The PSQI consists of 19 individual items that yield seven component scores: subjective sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbances, use of sleeping medication, and daytime dysfunction. The sum of these seven component scores provides a global PSQI score ranging from 0 to 21. Higher scores indicate poorer sleep quality. A global score of ≥ 5 is considered poor sleep quality.

Exposure to Emotional Violence Scale (EVS): This scale was developed by Eskici and Tinkir (2019) (20) to measure the level of exposure to emotional violence from the environment. The EVS is a 5-point Likert scale with 29 items across 5 subscales, which include obstruction, threat, humiliation, harm, and verbal abuse. The total score that can be obtained from the scale ranges from 29 to 145. The scale has no cut-off point; higher scores on the EVS indicate a greater level of exposure to emotional violence. The Cronbach's alpha coefficient of the original scale was 0.92 (20), and the coefficient was found to be 0.94 in the present study.

Data collection

Data collection was conducted from February to May 2024 at the Obstetrics and Gynecology Outpatient Clinic of Samsun Educational and Research Hospital. The researcher approached eligible pregnant women who were waiting for their routine appointments in a private, quiet area of the clinic to ensure confidentiality and minimize distractions. The study's purpose, objectives, and procedures were clearly and understandably explained to each potential participant. Following the informed consent process, data were collected face-to-face by the primary researcher. The researcher was available throughout the data collection process to clarify any questions participants might have about the items. The completion of all scale forms typically took approximately 15 to 20 minutes per participant, varying slightly based on individual pace. Data were immediately checked for completeness by the researcher after collection to minimize missing responses.

Data analysis

The collected data were analyzed using the Statistical Package for Social Sciences (SPSS) software, Version 25.0. The normality of data distribution was assessed using the Kolmogorov-Smirnov test, along with skewness and kurtosis values. Data were considered to have a normal distribution if skewness and kurtosis values fell between -1.5 and +1.5. Descriptive statistics for the pregnant women's characteristics were presented as numbers (n), percentages (%), and means (\pm standard deviations). For inferential analyses, the independent sample t-test was used for the analysis of normally distributed data when comparing two independent groups. One-way analysis of variance (ANOVA) was employed for the comparison of more than two groups. When a significant F-statistic was obtained from ANOVA, Tukey's post hoc test was then used to determine specific pairwise differences between group means. To determine the relationships between variables, Pearson correlation analysis was performed. Statistical significance was accepted at a p-value of less than 0.05.

Results

A total of 289 pregnant women were invited to participate in the study, and 262 completed the survey, yielding a response rate of 90.7%. The mean age of the pregnant women was 28.43 (SD=5.21; Min:19-Max:34) years, and the mean age of their spouses was 31.81 (SD= 6.04) years. It was found that 37.4% of the pregnant women and 41.6% of their spouses were high school graduates. Additionally, 82.4% of the women were housewives, 15.6% lived in extended family structures, and 61.8% reported household incomes equal to their expenses. Regarding obstetric characteristics, 16% of the participants reported experiencing some form of spousal violence during pregnancy. The mean gestational age

was 32.11 (SD=8.30) weeks, and 61.1% of the pregnancies were planned (Table 1). The mean total PSQI score of the pregnant women was 5.77 ± 3.49 . It was determined that 54.2% (CI 95%: 48.2-60.2) (n=142) of the women had a total PSQI score greater than 5, indicating poor sleep quality. The mean total EVS score for the women was 38.80 ± 13.25 , indicating a low level of emotional violence (Table 2).

No significant differences were found between some sociodemographic and obstetric characteristics of the women and their mean PSQI scores. However, higher mean EVS scores were found among women living in extended families ($t=-2.378$, $p=0.018$), those

with neutral relationships with their spouses ($t=4.239$, $p=0.0001$), those who had experienced violence during pregnancy ($t=6.490$, $p=0.0001$), and those with unplanned pregnancies ($t=3.910$, $p=0.0001$). Additionally, a significant increase in EVS scores was observed with advancing gestational age ($r=-0.131$, $p=0.034$) (Table 3). Among the women with poor sleep quality, the mean total EVS score ($t=-2.350$, $p=0.020$), as well as the mean scores for the subscales of obstruction ($t=-2.028$, $p=0.044$), humiliation ($t=-2.006$, $p=0.046$), harm ($t=-2.328$, $p=0.021$), and verbal abuse ($t=-2.305$, $p=0.022$) were significantly higher (Table 4).

Table 1. Distribution of some sociodemographic and obstetric characteristics of pregnant women (n=262)

Characteristics		Frequency	Percentage
Pregnant woman's education level	Primary education	94	35.9
	High school	98	37.4
	University and above	70	26.7
Spouse's education level	Primary education	89	34.0
	High school	109	41.6
	University and above	64	24.4
Place of residence	Urban center	212	80.9
	Rural	50	19.1
Pregnant woman's employment status	Employed	46	17.6
	Unemployed	216	82.4
Spouse's employment status	Employed	255	97.3
	Unemployed	7	2.7
Family income status	Less than expenses	68	26.0
	Equal to expenses	162	61.8
	More than expenses	32	12.2
Family type	Nuclear	221	84.4
	Extended	41	15.6
Smoking	Yes	36	13.7
	No	226	86.3
Inter-spousal relationship	Positive	243	92.7
	Neutral	19	7.3
Exposure to intimate partner violence during pregnancy	Yes	42	16.0
	No	220	84.0
Planned pregnancy status	Yes	160	61.1
	No	102	38.9
Gravidity	First pregnancy	85	32.4
	Second pregnancy	87	33.2
	Third or more pregnancy	90	35.4
Regular check-ups during pregnancy	Yes	248	94.7
	No	14	5.3

Table 2. Distribution of women's Pittsburgh Sleep Quality Index (PSQI) and exposure to Emotional Violence Scale (EVS) scores

Scales	Subscales	Mean \pm SD	Acceptable score range (Min-Max)	Obtained score range (Min-Max)
PSQI	Subjective sleep quality	0.97 ± 0.74	0-3	0-3
	Sleep latency (Delay)	1.37 ± 1.00	0-3	0-3
	Sleep duration	0.40 ± 0.86	0-3	0-3
	Habitual sleep activity	0.82 ± 1.15	0-3	0-3
	Sleep disturbance	1.47 ± 0.68	0-3	0-3
	Use of sleeping pills	0.06 ± 0.33	0-3	0-3
	Daytime dysfunction	0.75 ± 0.91	0-3	0-3
	Scale total	5.77 ± 3.49	0-21	0-19
EVS	Obstruction	13.56 ± 5.79	5-25	9-32
	Threat	5.62 ± 1.44	5-25	5-16
	Humiliation	7.53 ± 2.86	6-30	6-18
	Harm	7.94 ± 3.25	6-30	6-22
	Verbal abuse	4.13 ± 1.90	3-15	3-13
	Scale total	38.80 ± 13.25	29-145	29-88

Table 3. Distribution of some demographic and obstetric characteristics and PSQI and EVS scores of pregnant women

Characteristics		PSQI Mean \pm SD	EVS Mean \pm SD
Pregnant woman's education level	Primary education (n = 94)	5.86 \pm 3.53	39.98 \pm 14.26
	High school (n = 98)	5.68 \pm 3.14	40.00 \pm 13.70
	University and above (n = 70)	5.78 \pm 3.91	35.55 \pm 10.57
	F (P-value)	0.062 (0.940)	2.915 (0.056)
Spouse's education status	Primary education (n = 89)	6.05 \pm 3.51	38.66 \pm 13.21
	High school (n = 109)	5.73 \pm 3.47	40.66 \pm 14.69
	University and above (n = 64)	5.45 \pm 3.52	35.84 \pm 9.97
	F (P-value)	0.566 (0.568)	2.714 (0.68)
Place of residence	Urban center (n = 212)	5.67 \pm 3.48	38.31 \pm 12.93
	Rural (n = 50)	6.20 \pm 3.53	40.90 \pm 14.52
	t (P-value)	0.957 (0.339)	1.241 (0.216)
Pregnant woman's employment status	Employed (n = 46)	5.23 \pm 3.09	36.43 \pm 9.27
	Unemployed (n = 216)	5.88 \pm 3.56	39.31 \pm 13.92
	t (P-value)	- 1.147 (0.253)	- 1.340 (0.182)
Spouse's employment status	Employed (n = 255)	5.79 \pm 3.51	38.93 \pm 13.35
	Unemployed (n = 7)	5.14 \pm 2.47	34.14 \pm 8.61
	t (P-value)	0.485 (0.628)	0.944 (0.346)
Family income status	Less than expenses (n = 68)	6.23 \pm 3.52	41.50 \pm 15.30
	Equal to expenses (n = 162)	5.54 \pm 3.28	38.25 \pm 12.58
	More than expenses (n = 32)	5.96 \pm 4.33	35.90 \pm 11.90
	F (P-value)	0.997 (0.370)	2.333 (0.099)
Family type	Nuclear (n = 221)	5.68 \pm 3.50	37.97 \pm 12.38
	Extended (n = 41)	6.24 \pm 3.42	43.29 \pm 16.70
	t (P-value)	- 0.936 (0.350)	- 2.378 (0.018*)
Smoking	Yes (n = 36)	6.38 \pm 3.90	40.61 \pm 14.39
	No (n = 226)	5.67 \pm 3.41	38.52 \pm 13.08
	t (P-value)	1.137 (0.257)	0.878 (0.381)
Inter-spousal relationship	Positive (n = 243)	5.66 \pm 3.46	37.86 \pm 12.37
	Neutral (n = 19)	7.15 \pm 3.62	50.84 \pm 18.03
	t (P-value)	- 1.801 (0.073)	4.239 (0.000**)
Exposure to intimate partner violence during pregnancy	Yes (n = 42)	5.61 \pm 3.28	50.114 \pm 16.96
	No (n = 220)	5.80 \pm 3.53	36.65 \pm 11.24
	t (P-value)	- 0.315 (0.753)	6.490 (0.000**)
Planned pregnancy status	Yes (n = 160)	5.73 \pm 3.42	36.31 \pm 11.35
	No (n = 102)	5.83 \pm 3.61	42.71 \pm 15.03
	t (P-value)	- 0.216 (0.829)	3.910 (0.000**)
Gravidity	First pregnancy (n = 85)	6.03 \pm 3.32	37.38 \pm 12.44
	Second pregnancy (n = 87)	5.45 \pm 3.36	39.12 \pm 13.46
	Third or more (n = 90)	5.83 \pm 3.76	39.84 \pm 13.82
	F (P-value)	0.602 (0.549)	0.786 (0.457)
Regular check-ups during pregnancy	Yes (n = 248)	5.75 \pm 3.50	38.47 \pm 13.01
	No (n = 14)	6.07 \pm 3.31	44.78 \pm 16.50
	t (P-value)	- 0.326 (0.745)	- 1.740 (0.83)
Gestational age	r (P-value)	- 0.049 (0.427)	- 0.131 (0.034*)

PSQI= Pittsburgh Sleep Quality Index, EVS= Exposure to Emotional Violence Scale, SD = Standard Deviation, t = Independent samples t-test, F = One-way analysis of variance, r = Pearson's correlation coefficient, *p < 0.05, difference statistically significant.

Table 4. Comparison of Emotional Violence Scale (EVS) scores among pregnant women according to the Pittsburgh Sleep Quality Index (PSQI)

EVS total and subdimensions	PSQI sleep quality*		t (P-value)
	Good (PSQI < 5) n = 120	Poor (PSQI \geq 5) n = 142	
Scale total	36.73 \pm 10.96	40.56 \pm 14.74	- 2.350 (0.020**)
Obstruction	12.78 \pm 4.78	14.23 \pm 6.47	- 2.028 (0.044**)
Threat	5.51 \pm 1.18	5.71 \pm 1.62	- 1.128 (0.261)
Humiliation	7.15 \pm 2.49	7.85 \pm 3.11	- 2.006 (0.046**)
Harm	7.44 \pm 2.68	8.37 \pm 3.62	- 2.328 (0.021**)
Verbal abuse	3.84 \pm 1.62	4.38 \pm 2.07	- 2.305 (0.022**)

PSQI=Pittsburgh Sleep Quality Index, EVS=exposure to Emotional Violence Scale, *According to the PSQI, sleep quality is classified as poor with a global score ≥ 5 and as good with a score < 5. t = Independent samples t-test, **p < 0.05, difference statistically significant.

Discussion

This study examined the relationship between exposure to emotional violence and sleep quality among pregnant women in Türkiye. More than half of the participants (54.2%) reported poor sleep quality, and although the overall levels of emotional violence were relatively low, women with poor sleep quality scored significantly higher in emotional violence exposure, particularly in the subdomains of obstruction, humiliation, harm, and verbal abuse. These findings underscore the potential interplay between psychosocial stressors and physiological well-being during pregnancy.

The prevalence of poor sleep quality observed in this study is consistent with previous research, indicating that sleep disturbances are common during pregnancy. For example, Gundogdu et al. (21) reported a prevalence of 41.9%, Kumari et al. (22) found 87%, and Smyka et al. (23) reported 95%. This wide variation may reflect differences in measurement tools, study designs, cultural contexts, and the timing of assessments across trimesters. The current study's rate of 54.2% falls within this reported range and reinforces the need for targeted sleep hygiene education and interventions during prenatal care. The lack of association between sleep quality and most demographic and obstetric variables in our study is consistent with Kumari et al. (22); however, other studies have demonstrated trimester-specific differences, with poorer sleep quality more frequently observed in the third trimester (24,25).

The prevalence of emotional violence in this study (16.03%) was lower than in some previous reports, such as Ozcan and Uzun (26), who documented psychological violence in 51.6% of pregnant women. Discrepancies in prevalence may be due to differences in definitions, cultural attitudes toward reporting, or the sensitivity of the measurement instruments. Emotional violence, unlike physical violence, can be subtle and more easily concealed due to stigma, fear, or normalization within certain family or community contexts. Given that prenatal care involves regular contact with healthcare providers, these visits present critical opportunities for early identification and intervention.

Several sociodemographic and obstetric factors were found to be associated with emotional violence. Women in the third trimester reported higher exposure, consistent with Li et al. (27). This may be explained by the heightened emotional sensitivity and vulnerability associated with hormonal changes in late pregnancy, coupled with possible relationship tensions as childbirth approaches. The association between extended family living arrangements and higher emotional violence aligns with prior findings (28), suggesting that complex power dynamics and communication patterns in multigenerational households may contribute to conflict and coercive behaviors. Similarly, the observed relationship between unplanned pregnancies and higher emotional violence mirrors prior literature (29) and may be related to increased stress, reduced preparedness, or strained partner relationships.

Our findings that emotional violence is associated with poor sleep quality are consistent with Li et al. (27), who also identified lower sleep quality scores among women exposed to emotional abuse. The mechanisms underlying this association are likely multifactorial. Psychological pathways may include heightened anxiety, rumination, and emotional distress, while biological mechanisms involve hyperactivation of the hypothalamic-pituitary-adrenal (HPA) axis, dysregulation of cortisol, and increased sympathetic nervous system activity (7). Sleep disturbances may further exacerbate inflammatory processes via markers such as C-reactive protein (CRP) and interleukin-6 (IL-6), contributing to adverse perinatal outcomes, including preterm birth, low birth weight, and impaired fetal neurodevelopment (8,9). This bidirectional reinforcement between emotional violence and sleep disruption highlights the need for integrated maternal care approaches.

From a clinical and public health perspective, these results suggest that routine prenatal care should incorporate screening for both emotional violence and sleep quality. Early detection of these issues can inform timely psychosocial support and targeted interventions, potentially mitigating risks to maternal mental health and obstetric outcomes. Interventions could include counseling services, stress management strategies, and family-based education to address relationship dynamics and improve communication.

Limitations and strengths

The primary limitation of this study is its single-center design, as data were collected from pregnant women attending a hospital in Samsun, Türkiye. This limits the generalizability of the findings to broader populations. A multi-center approach could have improved external validity by including a more diverse and representative sample.

Due to the cross-sectional design, it is not possible to determine causal relationships between emotional violence and sleep quality. Although a significant association was observed, longitudinal studies are needed to explore causality. Data collection relied on self-report instruments, which may be prone to recall and social desirability biases. Participants might underreport experiences of violence or overreport positive aspects of their sleep. Moreover, the study focused only on emotional violence, excluding other forms of intimate partner violence such as physical, sexual, or economic violence. Including these could provide a more comprehensive understanding of their combined effects.

Despite these limitations, the study offers several notable strengths. It is among the first in Türkiye to examine the relationship between emotional violence and sleep quality in pregnant women, contributing to a relatively unexplored area within a specific cultural context. Data were collected face-to-face by the primary researcher, enhancing clarity and completeness. Ethical principles, including the Declaration of Helsinki, were fully upheld, and informed consent was obtained from all participants. The study achieved a high response rate of 90.7%, strengthening its validity.

Conclusion

This study determined that women who experienced emotional violence had reduced sleep quality. Healthcare professionals need to inquire about sleep quality in pregnant women. Therefore, identifying emotional violence during pregnancy and improving sleep quality is crucial for enhancing maternal and fetal health. Future studies should employ longitudinal, multi-center designs to clarify causal pathways and assess whether interventions targeting emotional violence can improve sleep quality, and vice versa. Expanding the scope to include physical, sexual, and economic violence would provide a more comprehensive understanding of IPV's cumulative impact on maternal health.

Acknowledgement

We would like to express our deep gratitude to the hospital where the research was conducted and to all women who participated in the study.

Funding sources

No funding was received to assist with the preparation of this article.

Ethical statement

Approval was obtained from Ondokuz Mayıs University Social and Human Sciences Ethics Committee (Decision date: 26/01/2023, Decision No: 2024/49) and from the hospital where the research was conducted. The principles of the Declaration of Helsinki were followed at every stage of the research. Before data collection, ethical approval for the study was obtained from the Ethics Committee, and institutional permission was secured from the administration of Samsun Educational and Research Hospital. It was explicitly stated that participation was completely voluntary, and participants had the right to withdraw at any time without penalty or affecting their medical care. After ensuring full comprehension, both written and verbal informed consent were obtained from all participants. For those who were literate, written consent was secured via a signed consent form. Verbal consent was additionally confirmed for all participants to ensure understanding and agreement.

Conflicts of interest

The authors declare that they have no competing interests.

Author contributions

Conceptualization (N.KY); Formal analysis (N.KY; U.D; T.S; H.A); Investigation (N.KY; U.D; T.S; H.A), Methodology (N.KY; U.D; T.S); Project administration (N.KY), Resources (N.KY; U.D; T.S; H.A); Supervision (N.KY); Writing - Original draft (N.KY; U.D; T.S; H.A); Writing - Review and Editing (N.KY).

Data availability statement

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

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Cite this article as:

Kaya-Yilmaz N, Demirci Ü, Söylemez T, Alper H. The evaluation of emotional violence and sleep quality in Turkish pregnant women: A cross-sectional study. *J Res Dev Nurs Midw.* 2025;22(3):34-9. <http://dx.doi.org/10.29252/jgbfm.22.3.34>