

## ORIGINAL RESEARCH ARTICLE

# An exploratory study on midwives' fear of childbirth in Türkiye

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## Abstract

This study examines Fear of Childbirth (FoC) among pregnant midwives in Türkiye using the Wijma Delivery Expectancy/Experience Questionnaire-Version A (W-DEQ A). A cross-sectional design was employed, including 270 healthy pregnant midwives in their 28th to 40th gestational weeks, who were employed in healthcare and had internet and social media access. Data were gathered through social media between platforms February and July 2023 using the Participant Introduction Form and W-DEQ A, and analyzed with SPSS 25.0 ( $p < 0.05$ ). The mean W-DEQ A score was 78.70 ( $\pm 26.59$ ), indicating severe FoC, with 53.3% experiencing clinically significant levels. FoC scores were higher among midwives working in labor and gynecology units compared to postnatal wards ( $p < 0.05$ ). Positive correlations were identified between FoC and variables such as age, midwifery experience, and perceived labor pain severity. These findings underscore the influence of professional settings on FoC, emphasizing the need for targeted support and training to improve outcomes. (*Afr J Reprod Health* 2025; 29 [1]: 77-86).

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**Keywords:** Childbirth; fear of childbirth; midwife

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## Résumé

Cette étude examine la peur de l'accouchement (FOC) parmi les sages-femmes enceintes à Türkiye en utilisant la Version du questionnaire A (WIJMA Delivery Espéranceur / Expérience A (W-Deq A)). Une conception transversale a été employée, dont 270 sages-femmes enceintes en bonne santé au cours de leurs 28e à la 40e semaines gestationnelles, qui étaient employées dans des soins de santé et avaient un accès à Internet et aux médias sociaux. Les données ont été recueillies via les réseaux sociaux entre les plateformes de février et juillet 2023 en utilisant le formulaire d'introduction des participants et W-Deq A, et analysé avec SPSS 25,0 ( $p < 0,05$ ). Le score W-DEQ A Moyenne était de 78,70 ( $\pm 26,59$ ), indiquant une sévère FOC, avec 53,3% connaissant des niveaux cliniquement significatifs. Les scores FOC étaient plus élevés chez les sages-femmes travaillant dans les unités de travail et de gynécologie par rapport aux quartiers postnatals ( $P < 0,05$ ). Des corrélations positives ont été identifiées entre le FOC et les variables telles que l'âge, l'expérience de sage-femme et la gravité de la douleur du travail perçue. Ces résultats soulignent l'influence des paramètres professionnels sur le FOC, soulignant la nécessité d'un soutien ciblé et d'une formation pour améliorer les résultats. (*Afr J Reprod Health* 2024; 29 [1]: 77-86).

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**Mots-clés:** accouchement; peur de l'accouchement; sage-femme

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## Introduction

While childbirth is a natural physiological event, it encompasses a spectrum of experiences, including both pain and joy, while also requiring the woman to navigate and manage expectations related to labor and its outcomes. This often places the woman in a position where she must grapple with these aspects on her own.<sup>1</sup> Approximately 14% of women experience severe fear of childbirth (FoC), which encompasses feelings of unease and anxiety before, during, or after the birthing process, as FoC

is associated with postnatal post-traumatic stress disorder.<sup>2</sup> The Wijma Delivery Expectancy Questionnaire (W-DEQ A) has been utilized to determine the prevalence of FoC across various studies. According to a global meta-analysis, the average prevalence of FoC was 14%, with evidence suggesting a rise in recent years.<sup>3</sup> For example, a study carried out in Norway found that 12% of women reported experiencing FoC.<sup>4</sup> In Ireland, the prevalence of high FoC was determined to be 36.7%.<sup>5</sup> Similarly, in Turkey, the incidence of FoC was found to be 38.7% in nulliparous women.<sup>6</sup>

FoC is triggered by the contemplation of one's upcoming labor, the anticipation of childbirth, or the observed apprehension of others towards labor and delivery.<sup>1</sup> FoC is generally perceived as a spectrum where the lowest point represents common concerns, and the highest point corresponds to tocophobia.<sup>7</sup> While pregnant women commonly articulate significant anxiety about childbirth, a condition known as tocophobia in the International Classification of Diseases-10 revision (ICD-10), there is presently no formally acknowledged diagnosis for tocophobia.<sup>8</sup> Tocophobia is divided into two categories: primary tocophobia is characterized by an intense fear of childbirth in individuals without prior birthing experience, while secondary tocophobia emerges after experiencing a previous childbirth.<sup>9</sup>

Among the primary concerns are the pain involved, the baby's well-being, and the potential loss of control during the birthing process. Consequently, experiencing apprehension at this point is completely natural. However, when this fear intensifies, it can lead to increased stress and unease, which may be detrimental during both pregnancy and childbirth.<sup>7</sup> Sleep disorders, palpitations, abdominal pain, panic attacks, post-traumatic stress responses, and an inclination toward cesarean section are among the factors associated with FoC. Midwives' professional experience significantly influences their perception, and factors might have long-term and strong impacts on the emotional well-being of the woman.<sup>10</sup>

A positive childbirth experience brings new mothers a sense of personal fulfillment. This sentiment not only affects their overall well-being and emotional bond with their newborns but also shapes their interactions with partners, future sexual desires, and even their openness to having more children. Conversely, a negative childbirth experience disrupts these aspirations, often pushing women to opt for a cesarean section as their preferred delivery method.<sup>11</sup>

Particularly, healthcare professionals specializing in the area of obstetrics and gynecology, notably midwives, along with nurses, physicians, and psychologists, are responsible for identifying attitudes like fear towards childbirth among women and even men, starting from the

preconception period up to the phases of prenatal, childbirth, and postnatal periods, in order to plan and implement appropriate interventions to prevent potential issues.<sup>12</sup> This group of professionals is fundamental to helping women identify their fear of childbirth and supporting them to develop coping mechanisms. Health professionals working in prenatal, intranatal, and postnatal health services must understand the underlying factors in advancing FoC. Furthermore, for public health, it is essential that individuals have knowledge of the potential consequences of FoC, can provide guidance to women during this process, and take appropriate precautions.<sup>13</sup> FoC in midwives can significantly impact the pregnant women under their care, potentially increasing anxiety, diminishing trust, and leading to negative childbirth experiences. Addressing this issue is crucial given their dual role as care providers and individuals who might experience FoC themselves. The way midwives manage their own FoC can directly influence the birth experiences of the women under their care. To frame the objectives of this research, we propose the following research question: "*Does the professional experience of midwives influence their perception and management of fear of childbirth?*" This question aims to provide insights into how midwives' professional experiences influence their comprehension and handling of FoC, revealing the impact of their expertise on their care decisions and the support they offer to others. This study aims to evaluate the FoC scores among pregnant midwives in Türkiye, using the W-DEQ A scale, and explore the factors associated with FoC. Additionally, it seeks to identify and raise awareness of FoC among pregnant midwives through exploring how they utilize their professional knowledge to guide their care decisions, highlighting the criticality of addressing FoC within this group.

## Methods

### *Study design and setting*

A cross-sectional study was conducted in Türkiye between February and July 2023. During this period, midwives in the 28th to 40th week of pregnancy were recruited through various social media platforms, including Instagram, Facebook,

and X. Recruitment posts were carefully crafted to provide detailed information about the study's objectives, inclusion criteria, and participation process. These posts were shared in professional midwifery groups, relevant community forums, and public pages dedicated to maternal health. Additionally, potential participants who met the study criteria were approached through direct messages on these platforms to ensure effective recruitment.

### **Participants**

The population of this study consists of pregnant midwives who meet the following criteria: willingness to participate in the research, ability to communicate in Turkish, being a practicing midwife, being a healthy pregnant individual in their 28th to 40th week of gestation, having access to the internet and the capability to use social media, and presently engaged in healthcare institution. The study's sample population established through the use of sample selection formula based on a previous study in which pregnant women's FoC was taken as 20%.<sup>14</sup> Accordingly, it is crucial to emphasize that the research is used to calculate the sample size. Since it was not possible to reach the entire population in the sample calculation, this study employed the method of sampling from an unknown population.<sup>15</sup> In the sample formula whose universe is unknown, the frequency of fear of childbirth was 20%<sup>14</sup>, 0.95 confidence. Sampling in the range of taking at least 246 pregnant women calculated required. During the study period, a total of 270 participants were reached.

### **Data gathering instruments**

Data were gathered through an online questionnaire incorporating the Participant Introduction Form and the Wijma Delivery Expectancy/Experience Questionnaire-Version A.

**Participant Introduction Form:** Consisting of 13 questions, the survey was designed by the researchers in alignment with existing literature, covering sociodemographic characteristics, pregnancy and childbirth history, and professional experience.<sup>6,16,17</sup>

The "Participant Introduction Form" was specifically designed by the research team and was subsequently evaluated by experts to assess content validity, clarity of the questions, and the need for any modifications.

**Wijma Delivery Expectancy/Experience Questionnaire-Version A (W-DEQ A):** The 33-item questionnaire, originally developed in Sweden, is widely utilized for assessing FOC throughout and after pregnancy. It evaluates women's sentiments regarding their experiences during pregnancy (W-DEQ A) and after childbirth (W-DEQ B). Each of the 33 items is analyzed on a six-point Likert scale, ranging from 0 (not at all) to 5 (extremely). The total score can vary from 0 to 165, with a higher score reflecting a higher level of FoC at the time of assessment. The questionnaire exhibits good reliability, with a Cronbach's alpha score of .89 for primiparous and .99 for multiparous women. During the assessment, respondents are prompted to envision how they anticipate their labor and delivery and how they expect to feel. Notably, in the W-DEQ A, certain items (2,3,6,7,8,11,12,15,19,20,24,25,27, and 31) are positively framed and need to be reversed to calculate the individual sum.<sup>18</sup> Körükcü and Kukulcu (2012) evaluated the scale's validity and reliability within the Turkish population, reporting a Cronbach alpha of 0.89 and a split-half reliability of 0.91.<sup>19</sup> In this study, the reliability was assessed using Cronbach's alpha, yielding a coefficient of .97. This indicates that the scale demonstrates high reliability.

### **Data sources and measurements**

Between February and July 2023, midwives in their 28th to 40th week of pregnancy in Turkey were contacted through social media platforms, including Instagram, Facebook, and X, and data were collected through an online questionnaire.

The questionnaire, which included the Participant Introduction Form and the Wijma Delivery Expectancy/Experience Questionnaire-Version A, was designed to enhance response validity by implementing features such as authenticated responses and response limits. Participants were given a specific time frame to

complete the questionnaire, with an estimated completion time of approximately 15 minutes. Follow-up reminders were provided to non-responding participants to strengthen the overall response rate.

### **Variables**

In this study, the implications of interest is FoC, defined as the anxiety and apprehension experienced by pregnant individuals regarding the childbirth process. The exposure variable is pregnancy status, specifically among currently pregnant midwives. Key predictors of FoC include profession (midwifery), gestational age, and previous birth experience. Potential confounders include age, educational level, and marital status, which may influence the perception of FoC. Effect modifiers, such as the category of healthcare facilities where the midwife works and access to childbirth education courses, can also impact FoC levels. The diagnostic criteria for FoC were established using specific cut-off points: Mild FoC (FoC scores  $\leq 37$ ), Moderate FoC (FoC scores 38-65), Severe FoC (FoC scores 66-84), and Clinically Important FoC (FoC scores  $\geq 85$ ), as outlined in Table 2.

### **Statistical analysis**

Data analysis was conducted with SPSS Statistics (Windows version 25.0), utilizing descriptive statistical methods such as frequency, percentage, mean, and standard deviation. To assess the normal distribution of the data, skewness and kurtosis values were evaluated, with acceptable ranges being  $\pm 2$ .<sup>20</sup> Additionally, the Shapiro-Wilk test was performed to confirm normality further. Since the assumptions of normality, homogeneity of variance, and independence were satisfied, parametric methods were applied for data analysis.

An independent samples t-test was conducted to assess if there was a significant difference between the scores of two independent groups for quantitative measures. To assess the means of more than two unrelated samples, an ANOVA (F) test was applied, followed by the Bonferroni test to recognize the sources of

differences among groups. A Pearson correlation analysis was carried out to evaluate the relationships between variables. Reliability analysis was conducted using Cronbach's alpha, with threshold values considered acceptable at  $\alpha \geq 0.70$ . A logistic regression analysis was undertaken to identify the factors influencing W-DEQ A status, specifically distinguishing between low to moderate fear of childbirth and severe clinical fear of labor. The regression coefficients ( $\beta$ ) and odds ratios (OR) were derived from the outcomes of the logistic regression analysis. To ensure robustness, multicollinearity among the predictors was assessed, and interaction terms were included to explore possible intricate relationships between variables within the model. Confounding variables were controlled for in the analysis. Statistical significance was considered at  $p < 0.05$  in this research.

### **Ethical considerations**

Ethical approval for the study was granted by the Noninvasive Clinical Research Ethics Committee of Van Yuzuncu Yil University (Approval Date: 09/12/2022, Decision No: 2022/12-15) and complied with the ethical standards of the Declaration of Helsinki. All participants gave their informed consent before participating in the study. To ensure anonymity and confidentiality, participants' personal information was anonymized, and data were securely stored, accessible only to the research team

### **Results**

In this study, 246 individuals were initially identified as potentially eligible participants. After an eligibility assessment, 270 participants were confirmed as eligible, and all ultimately participated in the study. The reasons for not participating in the study were being under 18 years of age, being pregnant before the 28th week or high-risk pregnancy. 11 participants submitted comprehensive data, resulting in no missing data. Reasons for non-participation included being under 18 years of age, being pregnant before the 28th week, and having a high-risk pregnancy, which resulted in individuals not continuing in the study.

**Table 1:** Descriptive characteristics and distribution of wijma birth expectancy/experience scale (w-deq a) mean scores based on participants' identifying information in a cross-sectional study of pregnant midwives in 2023, türkiye (n = 270)

Variables				W-DEQ A		Test value	P
		n	%	$\bar{X}$	SD		
Age (years)	$\bar{X}$ :30.48; SD:3.20; Min-Max:24-41						
Working time as a midwife (years)	$\bar{X}$ :6.96; SD:3.55; Min-Max:1-20						
Perception of Labor Pain Intensity	$\bar{X}$ :8.45; SD:1.21; Min-Max:5-10						
Working unit	Labor ward (1)	120	44.4	80.48	21.93	F=3.78	0.005*
	Postnatal ward (2)	60	22.2	70.40	29.44		
	Gynecology (3)	48	17.8	83.92	21.13		
	Neonatology (4)	22	8.1	90.55	39.86		
	Antenat ward (5)	20	7.4	67.30	28.96		
Number of pregnancies	1	136	50.4	79.16	24.71	t=0.29	0.773
	2+	134	49.6	78.22	28.45		
Number of abortions	0	162	60.0	77.98	23.77	t=-0.52	0.604
	1	108	40.0	79.78	30.42		
Gestational week	28-31	197	73.0	76.63	26.80	F=1	0.370
	32-35	60	22.2	86.30	26.84		
	36+	13	4.8	74.92	14.01		
Planned pregnancy	Yes	208	77.0	77.56	24.58	t=-1.11	0.271
	No	62	23.0	82.50	32.38		
Having a birth preference status	Yes	244	90.4	78.09	26.53	t=-1.15	0.252
	No	26	9.6	84.38	26.98		
Birth preference	Vaginal (1)	176	65.2	81.61	21.91	F=14.20	0.000*
	Caesarean section (2)	68	25.2	68.97	34.37		
	None (3)	26	9.6	84.38	26.98		
Getting spiritual assistance from family, or other relatives	No (1)	84	31.1	72.90	32.83	F=11.35	0.000*
	Very little support (2)	80	29.6	88.78	18.77		
	They are very supportive (3)	106	39.3	75.68	24.09		
Participation in childbirth preparation classes	Yes	142	52.6	79.28	30.53	t=0.39	0.699
	No	128	47.4	78.05	21.48		

\*p&lt;0.05; t: t test; F: ANOVA

**Table 2:** Distribution of participants' w-deq a responses and scale averages n a cross-sectional study of pregnant midwives in 2023, türkiye (n = 270)

Variables	1	2	3	4
W-DEQ A	1			
Age	<b>0.246**</b>	1		
Duration of work as a midwife	<b>0.305**</b>	0.894**	1	
Pregnant women's perception of the intensity of labour pain	<b>0.216**</b>	0.227**	0.184**	1

\*p&lt;0.05; \*\*p&lt;0.01; Pearson correlation

**Table 3:** The relationship between W-DEQ A and age, duration of employment as a midwife, and pregnant women's perception of the severity of labor Among Pregnant Midwives in 2023, Türkiye (N = 270)

Variables	1	2	3	4
W-DEQ A	1			
Age	<b>0.246**</b>	1		
Duration of work as a midwife	<b>0.305**</b>	0.894**	1	
Pregnant women's perception of the intensity of labour pain	<b>0.216**</b>	0.227**	0.184**	1

\*p&lt;0.05; \*\*p&lt;0.01; Pearson correlation

**Table 4:** Factors affecting W-DEQ A status

	$\beta$	p	OR	%95 GA
<b>Working unit</b> (#: Labor ward)		0.006		
Postnatal ward	-0.3	0.554	0.74	0.28-1.98
Gynecology	1.51	0.005	4.51	1.56-13.06
Neonatology	-0.13	0.849	0.88	0.24-3.25
Antenat ward	-1.14	0.088	0.32	0.09-1.19
<b>Birth preference</b> (#: Vaginal)		0.029		
Caesarean section	-1.27	0.027	0.28	0.09-0.87
None	0.33	0.591	1.39	0.42-4.55
<b>Getting spiritual assistance from family, or other relatives</b> (#: No)		0.000		
Very little support	2.54	0.000	12.69	3.87-41.67
They are very supportive	0.21	0.700	1.23	0.43-3.58
<b>Age</b>	-0.05	0.682	0.95	0.75-1.21
<b>Working time as a midwife (years)</b>	0.1	0.390	1.10	0.88-1.38
<b>Perception of Labor Pain Intensity</b>	1.05	0.000	2.84	1.98-4.09
Fixed	-7.32	0.022	0.001	
Cox-Snell R <sup>2</sup> =0.331 Nagelkerke R <sup>2</sup> = 0.451				
X <sup>2</sup> (p) = 59.689 (0.000)				
OR: Odds ratio. reference: #				
Overall percentage of classification =83.7				

All participants contributed comprehensive data, resulting in no missing data. The overall response rate for the study was 100% of the eligible individuals.

The distribution of participants' descriptive characteristics and Wijma Birth Expectancy/Experience Scale (W-DEQ A) mean scores are detailed in Table 1. The participants' average age is 30.48 ± 3.20 years, Nearly all, 97.8%, have a university degree, 44.4% work in the labor ward, the average working experience as a midwife is 6.96 ± 3.55 years, 50.4% have had one pregnancy, 60.0% have had no miscarriages, 73.0% are in the gestational weeks of 28-31, 77.0% have planned pregnancies, 90.4% have a birth preference, 65.2% prefer vaginal birth, 39.3% receive a lot of emotional support provided by

family, friends, or relatives, and 52.6% have attended childbirth preparation classes (Table 1).

Midwives working in neonatology services experience higher levels of childbirth fear (90.55 ± 39.86) compared to those working in labor wards (80.48 ± 21.93) and gynecology units (83.92 ± 21.13), as measured by the W-DEQ A scale. Additionally, midwives in labor wards (80.48 ± 21.93) and gynecology units (83.92 ± 21.13) have higher mean W-DEQ A scores than those working in postnatal wards (70.40 ± 29.44) (F=3.78, p=0.005) (Table 1). The Bonferroni test was applied to identify the group contributing to this difference. It was determined that the mean W-DEQ A scores differed significantly according to participants' birth preferences (p < 0.05). The mean W-DEQ A score of the group with no birth preference was

higher than the other groups. Bonferroni was applied to find the group that made a difference. The mean W-DEQ A scores of participants who did not have birth preference or preferred vaginal delivery were found to be significantly higher than those of participants who preferred cesarean delivery (Table 1). A statistically significant difference in the mean scores of the W-DEQ A scale was found based on whether participants received social support from family, friends, or relatives. The mean W-DEQ A score of the group whose family, friends, or relatives provide little support ( $88.78 \pm 18.77$ ), is higher than in the other groups. The Bonferroni test was applied to identify the group contributing to this difference. The mean W-DEQ A score of participants with very little support from family, friends, or relatives ( $88.78 \pm 18.77$ ) is higher than that of participants with no support ( $72.90 \pm 32.83$ ) or with substantial support from family, friends, or relatives ( $75.68 \pm 24.09$ ) ( $F=11.345$ ,  $p=0.000$ ). The variables that showed no statistical significance in relation to FoC as measured by the W-DEQ A scale include the number of pregnancies, number of abortions, gestational week, whether the pregnancy was planned, birth preference status, participation in childbirth preparation classes, age, working time as a midwife, and perception of labor pain intensity (Table 1).

The distribution of participants' W-DEQ A responses and scale averages is detailed in Table 2. In the research, it was observed that the mean score of the W-DEQ A scale for the entire sample was 78.70, indicating the central tendency of the participants' levels of FoC. Skewness and kurtosis values related to the scale are between -2 and +2 (Table 2). It is observed that 53.3% of the participants experienced clinically important FOC, while 34.1% experienced a moderate level of FOC (Table 2).

As presented in Table 3, the Pearson correlation analyses revealed significant positive correlations between W-DEQ A scores and both age ( $r = 0.25$ ,  $p < 0.01$ ) and the duration of working as a midwife ( $r = 0.31$ ,  $p < 0.05$ ). Older midwives and those with more experience reported higher levels of childbirth fear. Additionally, a positive correlation between W-DEQ A scores and midwives' perceptions of labor pain severity was found ( $r = 0.22$ ,  $p < 0.05$ ),

suggesting that those perceiving labor pain as more severe also experience more childbirth fear Table 3. A logistic regression analysis was applied to identify the factors affecting W-DEQ A status. The results indicate that the model is statistically significant in evaluating the impact of specific variables ( $X^2=59.69$ ;  $p<0.05$ ), with the explanatory power ranging between 33.1% and 45.1% ( $R^2$ ). The analysis revealed that the unit of work, birth preference, the level of spiritual support received, and pregnant women's perceptions of the severity of labor pain significantly affect midwives' levels of FoC. Specifically, midwives working in gynecological units were found to experience 4.512 times higher FoC compared to those working in labor wards. Birth preference emerged as a crucial factor, with midwives preferring vaginal delivery exhibiting  $1/0.282=3.546$  times more FoC than those preferring cesarean section. Furthermore, midwives who received very little spiritual support experienced 12.692 times more fear than those who received none. The perception of labor pain severity by pregnant women had an increasing effect on midwives' FoC, where each unit increase in perceived labor pain intensity was related to a 2.844 times increase in fear. The model demonstrated an accuracy of 83.7% in predictions, offering significant perception of the primary factors influencing midwives' FoC (Table 4)

## Discussion

In this analysis, we aimed to evaluate the levels of FoC among pregnant midwives in Türkiye using the W-DEQ A scale and to explore the associated factors within this unique subgroup. The main findings of our study showed that midwives working in specific units, such as neonatology services, experience significantly higher levels of childbirth fear compared to their counterparts in other units.

This study bridges a crucial gap in the existing literature, as an in-depth review showed that birth fears among pregnant midwives have not been directly examined in prior research. Although we aimed to raise awareness of this issue, our discussion had to rely on existing literature focused on pregnant women in general as a result of absence of studies on pregnant midwives. Interestingly, the

results showed that FoC levels in midwives were similar to those found in studies conducted with non-midwife pregnant women, highlighting the need for further research to understand the unique challenges pregnant midwives face and the importance of addressing FoC within this population.

Various factors, including culture, belief systems, individual experiences, and social norms<sup>6</sup>, influence FoC. In this study, midwives experienced severe FoC, as indicated by their scores on the W-DEQ A scale (Table 3). Previous studies in Türkiye reported varying levels of FoC among pregnant women, with some experiencing severe fear (W-DEQ A scores ranging from 66 to 84) and others exhibiting clinically significant fear (W-DEQ A scores  $\geq 85$ ), while a significant number reported moderate fear levels.<sup>10,21-27</sup> The variability in FoC scores across different studies underscores the multifaceted nature of this phenomenon, reflecting the complex interplay of psychological, social, and personal factors that shape women's experiences and decision-making regarding childbirth methods.

The study found that a large proportion of pregnant midwives had planned their pregnancies, with over half preferring vaginal birth. According to the study by Phunyanmalee and other researchers (2019), 63.6% of the participants planned their pregnancy, and 67.5% preferred vaginal delivery.<sup>28</sup> It was noted that approximately one-third of the pregnant midwives were not supported by family, friends, or relatives, while 39.3% reported receiving strong support. Both medical indications and psychological, social, and environmental factors can have a substantial impact on the mode of delivery. Providing necessary support during the antenatal period may help manage anxiety and concerns during labor.

Upon analysis of the mean scores of W-DEQ A, it was observed that pregnant midwives employed in neonatology services, primiparous individuals, those with a history of one prior abortion, midwives in gestational weeks 32-35, those with unplanned pregnancies, individuals with no birth preference, and participants in birth preparation training exhibited higher mean scores on the W-DEQ A. Various studies are in the literature to understand the association between FoC and parity. Our study found no significant difference between midwives'

mean W-DEQ A scores according to their parity ( $p=0.773$ ). However, in the study of do Souto *et al.* (2022), the prevalence of FoC in nulliparous women was 11.2%, while this rate was 7.2% in primiparous and multiparous women; fear was found to be lower and moderate in these groups, but no notable difference was detected between the groups.<sup>29</sup> In the study of Lai *et al.* (2020), it was found that FoC was higher in nulliparous and primiparous women.<sup>30</sup> Compared to similar to previous studies, our findings demonstrate that further research is needed to understand the effects of different demographic and pregnancy characteristics on FoC in midwives. Exploring future perspectives on how these factors influence FoC could offer critical insights into shaping targeted interventions and improving midwives' psychological well-being.

Our study involving pregnant midwives found that the mean W-DEQ A score ( $77.56 \pm 24.58$ ) of planned pregnancy was lower than the mean score ( $82.5 \pm 32.38$ ) of unplanned pregnancy. Still, there was no statistically significant difference ( $p=271$ ). Coşkuner *et al.* (2017) found that the FoC was lower in planned pregnancies<sup>31</sup>, and the study conducted by Lukasse *et al.* (2014) in 6 European countries revealed a negative relationship between planned pregnancies and severe FoC.<sup>32</sup> A study conducted in Croatia also reported higher FoC in unplanned pregnancies.<sup>33</sup> These findings are consistent with the literature and demonstrate that the planned status of pregnancy affects individuals' experiences of FoC.

This study's strengths consist of a comprehensive literature review aimed at understanding the demographic and pregnancy-related factors affecting FoC, with a specific focus on midwives. This approach strengthens the connection with existing literature and allows the findings to be translated directly into practical recommendations. Additionally, the study offers valuable insights into future research by offering a deeper understanding of the impact of various factors on FoC.

However, the study has some limitations. These include the restricted diversity of data sources, the focus solely on midwives, and the study's cross-sectional nature, which complicates establishing causal relationships. These limitations



may affect the findings' generalizability and the results' applicability to different populations.

## Conclusion

Our findings indicate significant variations in FoC levels among midwives, influenced by their professional contexts, birth preferences, and the support they receive. The mean scores suggest that many pregnant midwives experience severe FoC, underscoring a critical need for intervention. Significant positive correlations were detected between age, years of experience, and the perceived severity of labor pain. This indicates that midwives managing their pregnancies and labor face unique challenges managing their professional responsibilities alongside personal emotional experiences. To effectively address FoC among midwives and foster a safer, more supportive birth environment, it is essential to enhance professional support, provide targeted education, and foster emotional understanding. Fostering open communication and community sharing is crucial in addressing FoC within this population. These findings highlight the significance of considering individual profiles when designing interventions related to FoC, emphasizing that tailored approaches can lead to more effective outcomes. Addressing FoC among midwives is crucial for their well-being and for enhancing the quality of care provided to expectant mothers. The knowledge acquired from this study offer crucial direction for improving support mechanisms and practices for midwives across the globe.

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