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GEBE OKULU EĞİTİMİNİN GEBELERİN DOĞUM ÖZ YETERLİKLERİNE ETKİSİ
GEBE OKULU EĞİTİMİ VE DOĞUM ÖZ YETERLİĞİ

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ÖZET

Amaç: Doğum öz yeterliği, kadınların doğum sürecini yönetme becerisine olan inançlarını ifade eder ve bu inanç, doğum deneyiminin kalitesini etkiler. Bu çalışma, antenatal eğitimin gebe kadınların doğum öz yeterlik düzeylerine etkisini değerlendirmeyi amaçlamaktadır.

Materyal-Metod: Araştırma, yarı deneysel tipte, kontrol grubu olmayan ön test-son test tasarımı ile gerçekleştirilmiştir. Veriler Haziran 2024 ve Aralık 2024 tarihleri arasında toplanmıştır. Katılımcılar, İstanbul'da bulunan bir Eğitim ve Araştırma Hastanesi Gebe Okulu'ndan gönüllü olarak seçilmiş 60 primigravid kadından oluşmaktadır. Veri toplama araçları olarak katılımcıların sosyodemografik ve obstetrik özelliklerini belirlemek amacıyla hazırlanan Personel Veri Formu ile Doğum Öz Yeterlik Ölçeği - Kısa Form (DÖYÖ-KF) kullanılmıştır. Katılımcılar ölçekleri antenatal eğitim öncesinde ve sonrasında doldurmuştur. Tüm istatistiksel analizler IBM SPSS Statistics sürüm 26.0 kullanılarak gerçekleştirilmiştir.

Bulgular: Araştırma örnekleminin demografik özellikleri incelendiğinde, maternal yaş ortalamasının 27 yıl, gestasyonel yaşın ise ortalama 24 hafta olduğu saptanmıştır. DÖYÖ-KF toplam puanı eğitim öncesinde 212.3 ± 38.5 iken, eğitim sonrasında bu puan anlamlı bir artışla 240.1 ± 41.7'ye yükselmiştir ($p < 0.001$). Sonuç Beklentisi (SB) alt boyutunda eğitim öncesi ortalama puan 123.6 ± 27.7 iken, eğitim sonrasında 135.0 ± 18.7'ye çıkmıştır ($p < 0.010$). Benzer şekilde, Yeterlik Beklentisi (YB) alt boyutunda da anlamlı bir artış gözlenmiştir; eğitim öncesi ortalama 88.7 ± 25.9, eğitim sonrası ise 105.2 ± 31.9 olarak hesaplanmıştır ($p < 0.003$).

Sonuç: Çalışmadan elde edilen veriler, gebe okulu eğitim programlarının doğumda öz yeterliliği artırdığını göstermektedir. Gelecekte, farklı eğitim programlarının etkinliğini karşılaştırmak ve bu müdahalelerin uzun vadeli etkilerini incelemek için daha kapsamlı çalışmalar önerilmektedir.

Anahtar Kelimeler: Antenatal Eğitim, Doğum Öz Yeterliği, Gebelik, Kadın Sağlığı, Eğitim Programları.

THE EFFECT OF PREGNANCY SCHOOL EDUCATION ON BIRTH SELF-EFFICACY OF PREGNANT WOMEN

ABSTRACT

Objective: Birth self-efficacy refers to women's belief in their ability to manage the childbirth process, and this belief significantly influences the quality of the birth experience. This study aims to evaluate the effect of antenatal education on the birth self-efficacy levels of pregnant women.

Materials & Method: This quasi-experimental study was conducted using a pre-test/post-test design without a control group. Participants were 60 primigravid women who voluntarily attended the Pregnancy School of a Training and Research Hospital in Istanbul between June 2024 and December 2024. The participants' mean age was 27 years (range: 18-41), and the mean gestational week was 24 (range: 17-36). Data were collected using a Personal Data Form and the Birth Self-Efficacy Inventory - Short Form (BSEI-SF), completed by participants before and after the antenatal education program. Data analysis was performed using the Wilcoxon Signed Rank Test for variables that did not show normal distribution. All statistical analyses were performed using IBM SPSS Statistics version 26.0.

Results: The participants' total BSEI-SF scores significantly increased from a pre-test mean of 212.3 ± 38.5 (SD) to a post-test mean of 240.1 ± 41.7 ($p < 0.001$). In the Outcome Expectancy (OE) subscale, the mean score rose from 123.6 ± 27.7 before education to 135.0 ± 18.7 after education ($p < 0.010$). Similarly, the Efficacy Expectancy (EE) subscale also showed a significant increase, from a pre-test mean of 88.7 ± 25.9 to a post-test mean of 105.2 ± 31.9 ($p < 0.003$).

Conclusion: The findings indicate that pregnancy school education programs enhance childbirth self-efficacy, contributing positively to the childbirth process. These programs should be more widely implemented to improve maternal outcomes. Future studies are recommended to compare the effectiveness of different educational programs and to examine the long-term effects of such interventions.

Keywords: Antenatal Education, Birth Self-Efficacy, Pregnancy, Women's Health, Education Programmes.

1. INTRODUCTION

Childbirth is one of the most significant physiological and psychological experiences in a woman's life, encompassing profound changes that affect not only the mother but also the newborn and the family unit (1,2). This process, while inherently natural, can be influenced by multiple factors, including physical preparation, psychological resilience, and external support systems. Central to navigating childbirth successfully is the concept of self-efficacy, which refers to an individual's belief in their capability to perform specific tasks to achieve desired outcomes (3,4).

Birth self-efficacy is a specialized form of self-efficacy that reflects a pregnant woman's confidence in her ability to successfully manage the processes of labor and delivery. Rooted in Bandura's social cognitive theory, self-efficacy is defined as the perceived ability to organize and execute actions required to manage prospective situations (5). In the context of childbirth, it is influenced by factors such as previous experiences, education, coping strategies, and emotional support (6). High levels of birth self-efficacy have been consistently associated with positive birth outcomes, including a higher likelihood of vaginal delivery, reduced use of medical interventions such as epidural analgesia, and lower rates of unnecessary caesarean sections (7). Moreover, women with greater confidence in their ability to manage labor report less fear, anxiety, and distress during the process, which can significantly enhance their overall birth satisfaction (8,9). Conversely, low self-efficacy has been linked to increased labor pain, heightened fear of childbirth, and higher rates of dysfunctional labor and medical intervention (10).

Several studies underscore the pivotal role of prenatal education in enhancing birth self-efficacy. For instance, Ip et al. (2009) demonstrated that women who participated in childbirth preparation programs exhibited significantly higher levels of confidence in their ability to manage labor and delivery compared to those who did not receive such training (1). Similarly, Yazıcıoğlu and Yavuz (2022) observed that participation in pregnancy school programs led to a marked reduction in the fear of childbirth, suggesting that education not only boosts self-efficacy but also mitigates psychological barriers to a positive birth experience (11). Additionally, prenatal education has been shown to improve coping strategies during labor. Practical components such as breathing techniques, relaxation exercises, and knowledge of labor stages empower women to feel more in control during childbirth (12). These programs also foster a supportive environment where expectant mothers can share experiences, reducing feelings of isolation and building communal resilience (13,14).

Despite the growing body of evidence supporting the benefits of prenatal education, there remain significant gaps in our understanding of how such interventions can be optimized to maximize their impact. While many studies focus on the short-term benefits of prenatal education, there is a lack of longitudinal research examining the sustained effects of enhanced self-efficacy on postnatal outcomes, such as maternal mental health and bonding with the newborn. Moreover, the heterogeneity of educational programs, both in terms of content and

delivery methods, makes it challenging to draw definitive conclusions about best practices (15). Another notable gap is the underrepresentation of diverse populations in these studies. Most research has been conducted in high-income settings, leaving questions about the transferability of findings to low- and middle-income countries, where access to prenatal education and healthcare resources may be limited (16). Addressing these gaps is crucial to developing more inclusive and universally applicable interventions.

This study aims to address some of these gaps by examining the effects of a structured prenatal education program on birth self-efficacy among pregnant women. By focusing on a diverse cohort, our research seeks to provide insights into the generalizability of such interventions. Furthermore, the findings of this study have the potential to inform clinical practice by emphasizing the importance of incorporating self-efficacy-enhancing strategies into routine prenatal care. The primary objective of this study is to evaluate the impact of antenatal education on the birth self-efficacy levels of pregnant women. By exploring both the Outcome Expectancy (OE) and Efficacy Expectancy (EE) dimensions of self-efficacy, we aim to provide a comprehensive assessment of how education influences women's perceptions of their capabilities and expectations regarding childbirth (1,17). Research hypotheses were as follows: (1) antenatal education significantly increases women's overall birth self-efficacy; (2) antenatal education leads to a significant improvement in both the OE and EE dimensions of self-efficacy; and (3) women with higher levels of birth self-efficacy are more likely to report positive labor and delivery experiences.

This study not only contributes to the scientific literature by filling existing gaps but also has practical implications for enhancing maternal care services. By highlighting the value of structured prenatal education, it supports the integration of such programs into standard obstetric care practices, potentially transforming the way childbirth is approached in diverse settings.

2. METHODS AND MATERIALS

Type of the Research

This study utilized a quasi-experimental, intervention-based pre-test/post-test design without a control group to evaluate the impact of Pregnancy School education on birth self-efficacy levels. The design relied on consecutive measurements taken from the same group of participants before and after the intervention.

Place of the Research

The study was conducted at Haseki Training and Research Hospital's Pregnancy School, located in Istanbul, Türkiye.

Universe and Sample of the Research

The study population consisted of all primigravid women who attended the Pregnancy School of Haseki Training and Research Hospital between June 2024 and December 2024 and met the inclusion criteria. During this period, the total number of participants in the program was N=62, of whom 60 were included in the study. Thus, nearly the entire population was reached, and

instead of a sampling procedure, a practical census was conducted. Accordingly, the sample size calculation was reported as the minimum required number and was determined as 54 using the Raosoft Sample Calculator (http://www.raosoft.com/samplesize.html), based on a 95% confidence level, 5% margin of error, and 50% response distribution. The sampling method was consecutive case inclusion, and the accessibility rate was 96.7%.

Participants were included in the study if they were experiencing their first pregnancy and had provided voluntary informed consent to participate. Exclusion criteria encompassed a documented history of psychiatric disorders, the presence of systemic illnesses that could impede active participation in the study, and cognitive impairments that might compromise the participant's ability to comprehend or accurately complete the research instruments.

Data Collection Instruments

Two data collection tools were used:

Personal Data Form: This form collected demographic, socioeconomic, and obstetric information including age, educational status, income level, gestational week, BMI, smoking habits, exercise habits, partner support, and previous childbirth preparation information.

Childbirth Self-Efficacy Inventory - Short Form (CBSEI-SF): The Childbirth Self-Efficacy Inventory - Short Form (CBSEI-SF) is a psychometric instrument originally developed by Ip et al. (2007) to assess pregnant women's perceived self-efficacy in relation to labor and childbirth (1). The scale is grounded in Bandura's self-efficacy theory, which posits that individuals' beliefs in their capabilities to manage prospective situations play a crucial role in shaping behaviors and emotional responses. Accordingly, the CBSEI-SF is designed to measure the extent to which pregnant individuals feel confident in their ability to cope with labor and childbirth processes.

The instrument comprises two theoretically distinct but related subdimensions:

Outcome Expectancy (OE): This subdimension evaluates the extent to which the participant believes that the behaviors she adopts during labor (e.g., breathing, focusing, relaxation) will lead to positive outcomes.

Efficacy Expectancy (EE): This dimension assesses the participant's perceived confidence in her own ability to perform the necessary coping behaviors effectively during labor.

Each subdimension contains 16 items, scored on a 10-point Likert scale ranging from 1 ("Not at all certain") to 10 ("Completely certain"), resulting in subscale scores ranging from 16 to 160. The total scale score, which is the sum of OE and EE subscales, ranges from 32 to 320, with higher scores indicating greater perceived childbirth self-efficacy.

The Turkish version of the scale was adapted and psychometrically validated by Ersoy (2011). The adaptation process included translation and back-translation procedures, expert reviews, and pilot testing to ensure conceptual and cultural equivalence. In the Turkish validity and reliability study, the scale demonstrated high internal consistency, with a Cronbach's alpha coefficient of 0.90, indicating excellent reliability (1,17).

Educational Program Content

Participants received a structured educational intervention as part of the Pregnancy School program, consisting of five sessions. These sessions were designed to prepare expectant mothers for the prenatal, perinatal, and postnatal periods. Topics included: Nutrition during pregnancy; Labor and breathing techniques; Breastfeeding and lactation; Newborn care; Postpartum recovery.

The training emphasized practical applications (e.g., relaxation exercises, birthing positions, partner involvement) and encouraged collaborative learning among participants.

Data Collection Process

The study was conducted between June 2024 and December 2024 in two phases:

Phase 1: Participants completed the Personal Data Form and the CBSEI-SF via Google Forms before training (pre-test).

Phase 2: The same questionnaire was completed after the training to assess changes in self-efficacy (post-test).

Statistical Analysis

All statistical analyses were performed using IBM SPSS Statistics version 26.0. In the initial phase of data analysis, descriptive statistics—including arithmetic means, standard deviations (SD), frequencies, and percentages—were utilized to characterize the participants in terms of their sociodemographic and obstetric attributes, as well as their baseline scores on the Childbirth Self-Efficacy Inventory - Short Form (CBSEI-SF).

Prior to conducting inferential statistics, the normality assumption for continuous variables was evaluated using the Shapiro-Wilk test. The results indicated a non-normal distribution of the data; hence, non-parametric statistical methods were deemed appropriate for subsequent analyses.

To assess the impact of the educational intervention, pre-test and post-test CBSEI-SF scores were compared using the Wilcoxon Signed Rank Test, which is suitable for paired, non-normally distributed data. This test was conducted separately for the two subdimensions of the scale: Outcome Expectancy (OE) and Efficacy Expectancy (EE), in addition to the total self-efficacy score.

A significance level (alpha) of $p < 0.05$ was adopted for all statistical tests. The results were interpreted in accordance with this threshold to determine whether participation in the Pregnancy School program was associated with statistically significant improvements in perceived childbirth self-efficacy.

Variables of the Research

Independent variable: Participation in the Pregnancy School education program. Dependent variable: Childbirth self-efficacy scores (CBSEI-SF total and subdimension scores). Control variables (considered through baseline data): Gestational week, BMI, partner support, etc.

Ethical Approval

Ethical approval was obtained from the Istanbul Medipol University Non-Interventional Clinical Research Ethics Committee (Approval Date: 20 May 2024; Approval Number: E.02-3032). The study design involved remote data collection through online surveys (Google Forms) from participants who had previously attended Haseki Hospital's Pregnancy School. Since the research did not require access to hospital facilities, patient records, or institutional resources, and data collection was conducted independently through online platforms, institutional permission from Haseki Hospital was not required. All ethical considerations were reviewed and approved by the Medipol University Ethics Committee. Participation was voluntary, and informed consent was collected online prior to enrollment. The study upheld the principles of anonymity and confidentiality throughout all phases.

3. RESULTS

The demographic and socioeconomic characteristics of the participants are summarized in Table 1. The participants' ages ranged from 18 to 41 years, with an average age of 27 years. Among the participants, 63.3% were higher education graduates, 50% were housewives, and 91.7% lived in nuclear family structures. Furthermore, 58.3% of participants reported having sufficient income, and the BMI distribution showed that 36.7% had normal weight (18.5-24.9 kg/m²), 50% were overweight (25.0-29.9 kg/m²), and 13.3% were obese (≥30 kg/m²). While the majority (88.3%) did not smoke, 51.7% indicated they exercised occasionally. Only 5% experienced high-risk pregnancies, while half (50%) expressed being very satisfied with their pregnancy experiences. Additionally, 88.3% of participants reported receiving adequate spousal support during pregnancy.

Table 1. Demographic and Socioeconomic Characteristics of Participants (n=60)

Characteristics	Groups	Mean (min-max) / SD	n	%
Age		27.25 (18-41) ± 4.25		
Educational status	Pre-high school		5	8.3
	High school		17	28.3
	Higher education		38	63.3
Occupational status	Housewife*		30	50.0
	Unemployed		15	25.0
	Employed		15	25.0
Family type	Nuclear family		55	91.7
	Extended family		5	8.3
Gestational week		24.77 (17-36) ± 4.29		
Income	Inadequate		25	41.7
	Adequate		35	58.3
Preconception BMI, kg/m²	18.5-24.9		22	36.7
	25.0-29.9		30	50.0
	≥30		8	13.3
Smoking	Yes		7	11.7
	No		53	88.3
Exercise	Yes		5	8.3
	No		24	40.0

	Sometimes		31	51.7
High-risk pregnancy	Yes		3	5.0
	No		57	95.0
Satisfaction with pregnancy experience	Slightly satisfied		6	10.0
	Moderately satisfied		24	40.0
	Very satisfied		30	50.0
Partner support sufficient	Yes		53	88.3
	No		7	11.7
Received childbirth preparation info before	Yes		34	56.7
	No		26	43.3
If yes (N=34), source of information	Health institution		18	52.9
	Social media		9	26.5
	Family and friends		7	20.6

**Housewife status was classified separately from unemployment to distinguish between active job seekers and individuals primarily engaged in unpaid domestic responsibilities.*

The analysis of the Childbirth Self-Efficacy Inventory - Short Form (CBSEI-SF) scores before and after the training is presented in Table 2. The mean overall score of childbirth self-efficacy prior to the training was 212.3 ± 38.5, reflecting the participants' baseline performance levels. Following the Pregnancy School education, the mean score increased significantly to 240.1 ± 41.7 ($p < 0.001$), indicating a substantial improvement in overall self-efficacy levels.

For the Outcome Expectancy (OE) subdimension of the CBSEI-SF, the initial mean score was 123.6 ± 27.7, suggesting a moderate baseline level of expectancy regarding childbirth outcomes. After the training, the mean OE score rose to 135.0 ± 18.7, demonstrating a statistically significant increase ($p < 0.010$). This result suggests that the training positively influenced participants' expectations about achieving favorable outcomes during childbirth.

In the Efficacy Expectancy (EE) subdimension, the mean pre-training score was 88.73 ± 25.99, reflecting relatively low confidence in participants' perceived competence regarding labor management. Post-training, the mean EE score increased markedly to 105.17 ± 31.93 ($p < 0.003$). This increase indicates a notable enhancement in participants' perception of their competence and ability to manage the labor process effectively.

Table 2. Childbirth Self-Efficacy Inventory - Short Form (CBSEI-SF) Measurement Scores (n=60)

	Pre-test Mean±SD	**Pre-test Range**	**Post-test Mean±SD**	**Post-test Range**	**p***
CBSEI-SF Total Score	212.3 ± 38.5	110-305	240.1 ± 41.8	168-320	.001
CBSEI-SF Outcome Expectation	123.6 ± 27.7	48-160	135.0 ± 18.7	80-160	.010
CBSEI-SF Efficacy Expectation	88.7 ± 26.0	38-150	105.2 ± 31.9	43-160	.003

**Related-Samples Wilcoxon Signed Rank Test.*

These findings highlight the positive impact of the Pregnancy School program on enhancing the birth self-efficacy levels of pregnant women.

4. DISCUSSION

This study investigated the impact of antenatal education on the birth self-efficacy of pregnant women, revealing that structured educational programs significantly enhance women's confidence and ability to manage the challenges of labor and childbirth. The findings align with a growing body of literature suggesting that prenatal education plays a pivotal role in improving psychological and physical preparedness for childbirth.

The significant improvement in both Outcome Expectancy (OE) and Efficacy Expectancy (EE) subdimensions underscores the comprehensive benefits of antenatal education. The increase in OE indicates that participants developed more positive expectations regarding the outcomes of their labor, suggesting they felt better equipped to handle uncertainties during childbirth. Meanwhile, the improvement in EE reflects enhanced confidence in their competence to manage labor-related tasks, such as enduring pain, maintaining focus, and using learned techniques effectively.

These findings are consistent with earlier studies. For instance, Ip et al. (2009) demonstrated that childbirth education significantly improved women's belief in their ability to perform successfully during labor (1). Similarly, Yazıcıoğlu and Yavuz (2022) reported that antenatal education reduced childbirth-related fear and anxiety among participants, leading to more positive birth experiences (11). Brixval et al. (2016) found that small-group antenatal classes significantly boosted childbirth self-efficacy, suggesting that interactive and supportive learning environments enhance maternal preparedness (18). More recent systematic reviews also confirmed that antenatal education interventions lead to reductions in childbirth fear, greater maternal confidence, and more positive labor experiences (12,15).

In addition to improving confidence, antenatal education addresses psychosocial barriers to a positive birth experience. Yazıcıoğlu and Yavuz (2022) showed that pregnancy school programs reduced fear of childbirth, while İsbir et al. (2016) and El-Kurdy et al. (2017) highlighted that such interventions not only increase maternal self-efficacy but also mitigate the risk of postpartum stress and trauma (11,13,14). These findings complement the current study by indicating that strengthening self-efficacy before birth can have sustained protective effects on maternal mental health.

The mechanisms behind these outcomes are multifactorial. Structured education provides women with practical skills—such as breathing, relaxation, and positioning—that enhance their sense of control during labor (12). Furthermore, group-based formats foster peer interaction, reducing feelings of isolation and encouraging collective resilience (19). Healthcare professionals' involvement further builds trust, decreases uncertainty, and enhances adherence to coping strategies (20).

Importantly, higher self-efficacy has been linked to clinically significant outcomes, such as lower rates of unnecessary caesarean sections, reduced use of epidural analgesia, and improved

vaginal delivery rates (7,9). Thus, the increase in self-efficacy observed in this study is not only a psychological gain but may also contribute to improved obstetric outcomes.

The present findings also align with international evidence showing the value of integrating antenatal education into routine maternity care. For example, Khresheh et al. (2018) demonstrated the successful implementation of childbirth preparation programs in community health centers in Jordan, highlighting their feasibility and effectiveness even in resource-limited settings (21). Such evidence suggests that expanding access to pregnancy school programs could contribute to global strategies aimed at improving maternal and neonatal health outcomes (16,22).

The findings of this study underscore the critical need for integrating antenatal education programs into routine prenatal care. By enhancing women's self-efficacy, these programs not only improve psychological readiness but also reduce the likelihood of unnecessary medical interventions, such as caesarean sections performed without clinical indication. Moreover, by addressing common fears and misconceptions about childbirth, antenatal education can improve maternal satisfaction and long-term mental health outcomes.

Healthcare providers and policymakers should consider expanding access to such programs, particularly in underserved areas. The cost-effectiveness of pregnancy schools, combined with their demonstrated benefits, makes them an attractive intervention for improving maternal and neonatal health outcomes on a broader scale. Tailoring these programs to the cultural and social contexts of different populations could further enhance their effectiveness (21,23).

The results of this study add to the existing evidence base by providing a detailed analysis of both OE and EE dimensions of childbirth self-efficacy. While previous research has primarily focused on short-term outcomes, this study highlights the importance of examining specific psychological constructs, such as self-efficacy, which have long-term implications for maternal health. Moreover, the findings support the recommendations of systematic reviews emphasizing the necessity of prenatal education in achieving optimal birth experiences (18,21).

Limitations and Strengths

While the findings are promising, this study has certain limitations. The relatively small sample size and the focus on a single center limit the generalizability of the results. The homogeneity of the sample, which predominantly consisted of participants from similar socioeconomic and cultural backgrounds, may not reflect the diversity of experiences in broader populations. Additionally, the reliance on self-reported measures, such as the CBSEI-SF, introduces the potential for response bias.

Another limitation lies in the short duration of the study, which focused solely on pre- and post-intervention measurements. The absence of a control group limits causal inferences, though the significant improvements observed suggest a strong association between the intervention and outcomes. Future studies should incorporate longitudinal follow-ups to assess the sustained impact of antenatal education on postpartum outcomes, including maternal mental health, breastfeeding success, and mother-infant bonding.

The strengths of this study include its comprehensive assessment of both dimensions of birth self-efficacy using a validated instrument, the high accessibility rate (96.7%) which minimized selection bias, and the structured educational intervention that provided standardized content to all participants. The study also contributes to the limited literature from middle-income countries, providing valuable insights for similar healthcare settings.

Future research should aim to address these limitations by conducting multicenter studies with larger and more diverse populations. Comparative analyses of different antenatal education models, including online, in-person, and hybrid approaches, could provide insights into optimizing delivery methods. Additionally, qualitative studies exploring women's subjective experiences of antenatal education could enrich our understanding of the factors that contribute to its effectiveness.

5. CONCLUSION

This study demonstrates that antenatal education significantly enhances the birth self-efficacy of pregnant women, particularly in terms of improving both outcome expectations and perceived competence. These findings underscore the value of structured educational programs in preparing women for one of the most challenging yet rewarding experiences of their lives. By fostering confidence and reducing fear, antenatal education has the potential to transform maternal care practices, making childbirth a more positive and empowering experience.

The practical implications of these findings are substantial for midwifery practice and maternal health policy. Healthcare institutions should prioritize the establishment of pregnancy school programs as an integral component of routine prenatal care. These programs should be standardized yet flexible enough to accommodate diverse cultural and socioeconomic contexts. Training healthcare professionals, particularly midwives, to deliver evidence-based antenatal education could amplify the reach and effectiveness of these interventions.

From a policy perspective, integrating pregnancy schools into national maternal health strategies could contribute to achieving better obstetric outcomes and reducing healthcare costs associated with unnecessary medical interventions. The demonstrated improvements in self-efficacy suggest that such programs could help reduce cesarean section rates and improve overall birth satisfaction, aligning with global efforts to promote physiological birth when appropriate.

The results of this study highlight the need for widespread implementation of pregnancy schools and similar programs, especially in regions where access to prenatal education is limited. Future research should focus on developing culturally sensitive curricula, evaluating long-term maternal and neonatal outcomes, and exploring innovative delivery methods such as digital platforms to increase accessibility. By continuing to build evidence for the effectiveness of antenatal education, we can work towards ensuring that all women have the knowledge, skills, and confidence needed for a positive childbirth experience.

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