



Antenatal Schools – Benefits and Attitudes

 Hristina Gencheva

Medical University “Prof. Dr. Paraskev Stoyanov” – Varna, Shumen Affiliate, Bulgaria

Abstract

Antenatal schools are structured educational programs aimed at supporting expectant mothers and their partners during pregnancy, childbirth, and providing early newborn care.

Objective: This study aims to explore the opinions and attitudes of expectant parents regarding participation in antenatal school programs.

Materials and Methods: A cross-sectional study was conducted using a combination of sociological and statistical methods. Data were collected through an online survey administered to pregnant women and expectant parents. Descriptive statistical analysis was applied to evaluate participants’ attitudes toward antenatal school attendance and perceived benefits.

Results: Antenatal schools currently reach a considerable proportion of pregnant women; however, the findings indicate potential for broader participation. Pregnant women and mothers-to-be demonstrate a high level of awareness regarding the importance and usefulness of antenatal education, whereas their partners show comparatively lower engagement. Most respondents identify antenatal school participation as beneficial, particularly in relation to preparation for childbirth and newborn care.

Conclusion: Antenatal schools play a significant role in preparing expectant mothers for childbirth and in developing practical skills for newborn care. Midwives have a central supportive role in antenatal education and contribute substantially to improving maternal knowledge and confidence.

Keywords: Antenatal school, pregnancy, education, benefits, midwife

Introduction

Pregnancy is one of the most important and sensitive periods in a woman's life and requires adequate awareness, emotional support, and access to high-quality healthcare. Antenatal schools are specialized educational programs designed to support expectant mothers and their partners throughout pregnancy, childbirth, and the early postpartum period, including newborn care [1]. These programs are organized by hospitals, healthcare centers, municipalities, or non-governmental organizations and typically include educational lectures, practical training, and psychological support.

The primary aim of antenatal schools is to provide expectant parents with essential knowledge and practical skills that facilitate a healthier pregnancy, a calmer childbirth experience, and a smoother transition to parenthood [2]. The training usually covers a wide range of topics, including physiological changes during pregnancy, healthy nutrition, preparation for labor, breathing and relaxation techniques, newborn care, and breastfeeding.

Participation in antenatal school offers numerous benefits, the most significant of which is the enhancement of maternal awareness and self-confidence [3]. When pregnant women have a better understanding of the physiological processes occurring in their bodies and are adequately prepared for childbirth, levels of fear and anxiety are reduced, thereby supporting a healthier pregnancy and birth experience. Additionally, training in relaxation and pain management techniques may significantly ease the labor process [4].

Beyond medical and practical knowledge, antenatal schools also provide important psychological and social support. They encourage a positive perception of childbirth, helping women view it as a natural and manageable process rather than a frightening or painful event. Furthermore, partner involvement and interaction with other expectant mothers contribute to reduced feelings of isolation and stress. Partners play a crucial role in antenatal education, as their active participation prepares them to support women during pregnancy, childbirth, and the postpartum period, strengthening shared responsibility and family bonding [5].

Antenatal schools also address postpartum care, including breastfeeding practices, diaper changing, basic first aid, and newborn safety. This education increases parental confidence during the first months after birth and enhances parents' ability to respond appropriately to common challenges. Overall, attendance at an antenatal school represents an important investment in maternal and child health, as it increases knowledge and skills, reduces anxiety, and fosters positive attitudes essential for successful childbirth and adaptation to parenthood. For these reasons, antenatal schools are widely recommended by healthcare professionals as an integral component of comprehensive care for expectant parents [6].

Materials and Methods

Study Design, Setting, and Period

A cross-sectional study was conducted in May 2025 in the town of Novi Pazar, Bulgaria, at the S-O-S – Center for Public Support (CPS). At the time of the study, a newly established antenatal school was available in Novi Pazar, which adds particular relevance to the assessment of expectant parents' attitudes and perceived needs regarding antenatal education.

Participants and Data Collection

An anonymous online survey was administered to a total of 37 respondents attending the antenatal school, including pregnant women, postpartum women, and their partners. Participation in the study was voluntary, and informed consent was obtained electronically prior to questionnaire completion.

Statistical Analysis

The collected data were analyzed using descriptive and comparative statistical methods. Results were summarized as frequencies and percentages and presented in both tabular and graphical formats. Microsoft Office Excel 2010 and SPSS version 19 software package were used for data management and visualization.

Study Limitations

This study has several limitations. The primary limitation is the relatively small sample size ($n = 37$), which restricts the generalizability of the findings. Additionally, the study was conducted in a single town where a newly established antenatal school was functioning at the time of data collection, which may have influenced participants' awareness and attitudes. Nevertheless, the results provide valuable preliminary insights into the

expectations and needs of expectant parents and may serve as a foundation for future studies with larger and more diverse samples.

Results and Discussion

According to the survey, 64,9% of the respondents attending the antenatal school are pregnant women, 24,3% of them postpartum women and 10,8% of the respondents are their partners. (Table 1.)

Table 1. Distribution of study participants

	N	%*	%**
Postpartum women	9	24,3	24,3
Pregnant women	24	64,9	89,2
Partners	4	10,8	100,0
Total	37	100,0	

N: number, %*: Column percentage, %**: Cumulative percentage

The interest among pregnant women in antenatal school participation is high (64,9%), which is a positive indicator of growing awareness and a desire to prepare for childbirth and newborn care. The participation rate among postpartum women is lower (24,3%), suggesting that some did not have the opportunity to attend prenatal training or were not sufficiently informed or motivated. This level of participation highlights the need for improved organization, promotion, and institutional support for antenatal education, particularly in smaller communities.

Participation among partners is limited (10,8%). Although lower, this percentage is still important, as partner involvement is essential for supporting women during pregnancy and childbirth and for fostering active paternal engagement from the earliest stages of parenthood.

Overall, the results of the present study align with findings from international research on the benefits and challenges of antenatal education programs. This pattern of greater maternal involvement compared to paternal involvement is consistent with previous research, which has shown that men are often less engaged in pregnancy-related educational activities despite the recognized importance of their involvement in perinatal care.

Several studies [9, 15, 14] have demonstrated that antenatal education can positively influence psychological and behavioral outcomes. For example, antenatal programs have been linked with reduced anxiety and fear during childbirth, increased maternal attachment to the fetus, and improved breastfeeding outcomes. In a secondary analysis involving expectant fathers in Greece [9], participation in antenatal education was shown to be associated with increased paternal attitudes toward breastfeeding and attachment, although the results were not always statistically significant.

The study revealed the age distribution and the education level of the respondents. (Table 2.)

Table 2. Age and education level of the study participants

		Education level			Total
		Primary	Secondary	University	
Under 21 years	N	0	0	2	2
	% *	,0	,0	100,0	100,0
	% **	,0	,0	8,7	5,4
21-30 years	N	1	10	21	32
	% *	3,1	31,3	65,6	100,0
	% **	100,0	76,9	91,3	86,5
31-40 years	N	0	3	0	3
	% *	,0	100,0	,0	100,0
	% **	,0	23,1	,0	8,1
Total	N	1	13	23	37
	% *	2,7	35,1	62,2	100,0
	% **	100,0	100,0	100,0	100,0

N: number, %*: Row percentage, %**: Column percentage

The differences observed in participation by age and education level in the present study also reflect broader social patterns reported in the literature. Younger and more educated women tend to be more proactive in seeking health information and services, including participation in prenatal programs, which may partly explain the higher attendance observed in these groups (65, 6%). Overall, these comparisons show that while

antenatal education programs may vary in content and delivery across different settings, their general effects on knowledge, attitudes, and psychosocial outcomes are consistently positive across diverse populations.

Attendance at antenatal school according to participants' place of residence is shown in Table 3.

Table 3. Place of residence of the study participants

		Place of residence		Total
		Urban area	Rural area	
Postpartum women	N	9	0	9
	% *	100,0	,0	100,0
	% **	37,5	,0	24,3
Pregnant women	N	15	9	24
	% *	62,5	37,5	100,0
	% **	62,5	69,2	64,9
Partners	N	0	4	4
	% *	,0	100,0	100,0
	% **	,0	30,8	10,8
Total	N	24	13	37
	% *	64,9	35,1	100,0
	% **	100,0	100,0	100,0

N:number, %*:Row percentage, %**: Column percentage

Women living in urban areas demonstrated higher engagement (64,9%) compared to those living in rural areas (35,1%). This difference can be explained by better accessibility to healthcare and educational services in urban settings, as well as higher levels of awareness and social support.

Conversely, 37,5% of women from rural areas did not attend antenatal school, which is a concerning proportion and highlights the need to improve both access and awareness in these communities. The observed disparity in participation indicates social and structural inequalities that may affect preparation for motherhood and the utilization of available resources.

The study investigated the respondents' attitudes to the antenatal school. The highest proportion of positive attitudes was observed among pregnant women (65,7%) and postpartum women (22,9%), whereas lower interest was reported among partners. (11,4%) (Table. 4.)

Table 4. Attitudes to the antenatal school

		Attitudes			Total
		Positive	Negative	Neutral	
Postpartum women	N	8	1	0	9
	% *	88,9	11,1	,0	100,0
	% **	22,9	100,0	,0	24,3
Pregnant women	N	23	0	1	24
	% *	95,8	,0	4,2	100,0
	% **	65,7	,0	100,0	64,9
Partners	N	4	0	0	4
	% *	100,0	,0	,0	100,0
	% **	11,4	,0	,0	10,8
Total	N	35	1	1	37
	% *	94,6	2,7	2,7	100,0
	% **	100,0	100,0	100,0	100,0

N:number, %*:Row percentage, %**: Column percentage

The study clearly highlights the respondents' assessment of the antenatal school. (Tabl. 5.)

Table 5. Respondents' assessment of the antenatal school

		Assessment			Total
		Useful	Not useful	Partially useful	
Postpartum women	N	7	0	2	9
	% *	77,8	,0	22,2	100,0
	% **	21,9	,0	50,0	24,3
Pregnant women	N	22	1	1	24
	% *	91,7	4,2	4,2	100,0
	% **	68,8	100,0	25,0	64,9
Partners	N	3	0	1	4
	% *	75,0	,0	25,0	100,0
	% **	9,4	,0	25,0	10,8
Total	N	32	1	4	37
	% *	86,5	2,7	10,8	100,0
	% **	100,0	100,0	100,0	100,0

N: number, %*: Row percentage, %**: Column percentage

A larger proportion of pregnant women (68,8%) and postpartum women (21,9%) consider the antenatal school to be useful, while only a small proportion regard it as not useful or partially useful (4,2%). A small percentage of respondents across all groups consider it partially useful. Interestingly, only a few respondents from all groups rated the antenatal school as partially useful, indicating that most participants have a clear and positive assessment of the program's benefits. The high proportion of positive responses among pregnant and postpartum women is consistent with their direct engagement in the program and the immediate relevance of the knowledge and skills provided. This aligns with previous studies showing that women who attend antenatal education report increased confidence in pregnancy management, improved preparedness for childbirth, and enhanced understanding of newborn care [7, 14].

Partners and non-pregnant women showed lower perceived usefulness, which can be explained by their indirect involvement or lack of direct personal need for the information. However, the fact that even some partners rated the program as useful (9,4%) highlights the potential for expanding educational initiatives to include fathers more actively. Research has demonstrated that partner involvement in antenatal education positively influences maternal outcomes and father-child bonding [11, 15]. Studies from different countries show similar trends: antenatal education is highly valued by women directly involved, while partner participation remains limited [11].

The findings of the present study reflect broader trends in the literature regarding antenatal education participation, its determinants, and psychosocial outcomes for expectant parents.

Participation Trends and Demographic Influences

In this study, pregnant women demonstrated the highest attendance, followed by postpartum women, while partners participated less. This pattern is consistent with previous research, which indicates that women who directly benefit from antenatal education are more likely to participate than those without immediate personal need [7]. Attendance is strongly influenced by sociodemographic factors, including education and place of residence. Women with higher education levels and those living in urban areas were more engaged, reflecting better access to services, information, and social support [8].

Partner Involvement

Partner participation remains low, which aligns with international studies showing that fathers are often underrepresented in antenatal programs despite their potential positive impact on family outcomes. Evidence suggests that engaging partners can improve paternal attitudes, maternal breastfeeding outcomes, and family preparedness [9, 10]. These findings highlight the importance of designing antenatal education programs that actively include partners.

Psychosocial and Health Benefits

Antenatal education programs are shown to enhance maternal self-efficacy, reduce fear of childbirth, and improve coping strategies [11]. Participation also encourages better utilization of maternal healthcare services,

including regular antenatal visits and facility-based delivery [12]. Such programs provide both knowledge and emotional support, empowering women to approach childbirth and early parenthood with confidence.

The present study clearly outlined the benefits of the antenatal school. (Table 6.)

Table 6. Benefits of the antenatal school

Benefits	N	%*
Birth preparation	17	22,6
Massages	14	19,0
Umbilical cord care	11	14,2
Breathing & pain relief techniques	10	13,1
Newborn swaddling	9	11,9
Psychological support	5	6,6
Newborn nutrition/feeding	4	5,3
Total	70	100,0

N: number, %*: Column percentage

Table 7 shows the distribution of the training team at the prenatal school according to the respondents. The majority of participants highlighted the key role of midwives, followed by doctors, psychologists, and other staff members involved in the training. This distribution indicates that midwives are perceived as the primary source of knowledge and support during the prenatal education program.

Table 7. Distribution of the training team members

Training team member	N	%
Midwife	28	75,6
Obstetrician/Gynecologist	5	13,5
Social worker	2	5,5
Nurse	1	2,7
Total	37	100,0

N: number, %*: Column percentage

The overwhelming preference for midwives (76%) confirms findings from multiple studies that midwives are perceived as the primary source of practical knowledge, guidance, and emotional support for pregnant women [11,12]. Their central role ensures that participants feel confident in preparing for childbirth and caring for the newborn.

Obstetricians and gynecologists, chosen by 13% of respondents, are valued for their specialized medical knowledge. This indicates that while midwives handle the majority of practical training, medical supervision and advice remain important to ensure safety and accurate information, particularly for high-risk pregnancies [9].

The smaller percentages for social workers (5%) and nurses (3%) highlight the holistic nature of antenatal education. Including social and psychological support addresses emotional well-being, stress management, and social challenges, which are important for maternal and family health [11,14]. The results emphasize that successful antenatal education should be multidisciplinary, but with midwives as the central facilitators. Programs should consider the integration of obstetricians for medical guidance and social/psychological professionals to provide holistic support. This approach aligns with international best practices, ensuring both practical skills and emotional readiness.

Conclusion:

Antenatal schools already reach a significant proportion of pregnant women, but there is potential for even wider coverage. Awareness among mothers and partners about the benefits of participation needs to be raised. The low activity among women with primary education indicates a need for wider dissemination of information and promotion of participation in antenatal schools among these groups. The lack of infrastructure, transport or an appropriate health network in smaller settlements is probably a reason for the lower attendance. Antenatal schools are defined as useful by the main target group – pregnant women and mothers-to-be. Pregnant women and mothers-to-be are aware of the need for training in antenatal schools, unlike their partners. The main focus

of the antenatal school is on preparation for childbirth and practical skills for caring for the newborn. Midwives play a key supporting role in antenatal schools and contribute to maternal education.

References

1. WHO recommendations on antenatal care for a positive pregnancy experience (2016). - World Health Organization. Some rights reserved. License: CC BY-NC-SA 3.0 IGO
2. Zaigham, Mehreen et al. Announcing the Lancet Commission on Maternal and Newborn Health. *The Lancet*. 2025.
3. Krysa, Justyna & Iwanowicz-Palus, Grazyna & Bien, Agnieszka & Rzońca, Ewa & Zarajczyk, Marta. (2016). Antenatal classes as a form of preparation for parenthood: analysis of benefits of participating in prenatal education. *Polish Journal of Public Health*. 126. 10.1515/pjph-2016-0040.
4. Larkai E, Davies A, Toolan M, Lynch M, Plachcinski R, Larkin M, Fraser A, Burden C, Merriel A. What Do Antenatal Women Want From Their Antenatal Education? A National Survey. *Matern Child Health J*. 2025 Mar;29(3):324-337. doi: 10.1007/s10995-025-04048-z. Epub 2025 Feb 3. PMID: 39900851; PMCID: PMC11926007.
5. Alizadeh-Dibazari Z, Abdolalipour S, Mirghafourvand M. The effect of prenatal education on fear of childbirth, pain intensity during labour and childbirth experience: a scoping review using systematic approach and meta-analysis. *BMC Pregnancy Childbirth*. 2023 Jul 27;23(1):541. doi: 10.1186/s12884-023-05867-0. PMID: 37501120; PMCID: PMC10373291.
7. Gagnon, A. J., & Sandall, J. (2007).
6. Kovala S, Cramp AG, Xia L. Prenatal Education: Program Content and Preferred Delivery Method From the Perspective of the Expectant Parents. *J Perinat Educ*. 2016;25(4):232-241. doi: 10.1891/1058-1243.25.4.232. PMID: 30643370; PMCID: PMC6310907.
7. Cognitive predictors of attendance at antenatal classes. *PubMed*. 1990. Available from: <https://pubmed.ncbi.nlm.nih.gov/2364197/>
8. Dettwyler K, et al. Determinants of antenatal education and breastfeeding uptake in refugee-background and Australian-born women. *Int J Environ Res Public Health*. 2024;3(2):20. Available from: <https://www.mdpi.com/2673-4184/3/2/20>
9. Dagla C, Antoniou E, Sarantaki A, et al. The effect of antenatal education on expectant fathers' attitudes toward breastfeeding and attachment to the fetus. *Nurs Rep*. 2023;13(1):243–254. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC9944450/>
10. Palioura Z, Sarantaki A, Antoniou E, Iliadou M, Dagla M. Fathers' educational needs assessment in perinatal care: a systematic review. *Healthcare*. 2023;11(2):200. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC9859150/>
11. Athinaidou AM, Vounatsou E, Pappa I, Harizopoulou VC, Sarantaki A. Influence of Antenatal Education on Birth Outcomes: A Systematic Review Focusing on Primiparous Women. *Cureus*. 2024 Jul 14;16(7):e64508. doi: 10.7759/cureus.64508.
12. Azhar, K., Dharmayanti, I., Tjandrarini, D.H. et al. The influence of pregnancy classes on the use of maternal health services in Indonesia. *BMC Public Health*. 2020;20:8492. Available from: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-020-08492-0>
13. Dettwyler K, et al. Determinants of antenatal education and breastfeeding uptake in refugee-background and Australian-born women. *Int J Environ Res Public Health*. 2024;3(2):20. Available from: <https://www.mdpi.com/2673-4184/3/2/20>
14. Homer C, et al. The role of midwives in antenatal education: a systematic review. *Midwifery*. 2022; 108:103269.
15. Renfrew MJ, et al. Midwifery-led care for healthy women: systematic review and meta-analysis. *Lancet*. 2014; 384:1226–1235.