

Birth Companionship as a Non-Pharmacological Strategy to Reduce Maternal Anxiety and Enhance Perceived Support and Safety During Childbirth

Nila Trisna Yulianti^{1*}, Rika Handayani², Rahmat Haji Saeni³, Fajar Akbar⁴

¹ Borneo Medistra Polytechnic, Balikpapan, Indonesia

² Bachelor of Public Health, Faculty of Public Health, Universitas Muhammadiyah Kalimantan Timur, Indonesia

³ Department of Nutrition, Health Polytechnic of Mamuju, Indonesia

⁴ Department of Environmental Health, Health Polytechnic of Mamuju, Indonesia

*Corresponding author: nila@poltekborneomedistra.ac.id

Article Information: received in September 2025; approved in November 2025; published in December 2025

ABSTRACT

Birth companionship is globally recognized as an effective non-pharmacological approach to improving maternal psychological well-being during labor, yet evidence from Indonesian urban settings remains limited. This study evaluated mothers' perceptions of birth companions and examined changes in anxiety levels before and after an intervention consisting of antenatal education and continuous companionship during labor. A quasi-experimental one-group pretest-posttest design was conducted involving 30 primigravida mothers in Balikpapan, Indonesia. Data were collected using closed-ended nominal questionnaires and analyzed with the McNemar test. Significant improvements were observed in several maternal perception indicators, including feeling calmer ($p = 0.000$), emotionally supported ($p = 0.004$), physically assisted ($p = 0.016$), helped in communicating with health workers ($p = 0.008$), and safe and comfortable during labor ($p = 0.031$). Maternal anxiety levels also decreased significantly across key indicators, including fear of childbirth ($p = 0.016$), negative thoughts ($p = 0.016$), restlessness while waiting for labor ($p = 0.001$), and feelings of helplessness ($p = 0.016$). These findings indicate that antenatal education combined with continuous birth companionship is effective in enhancing perceived support and safety while reducing pre-delivery anxiety. However, because this study used a one-group pretest-posttest design without a comparison group, the generalizability and causal interpretation of the findings remain limited. Further research employing controlled or randomized designs is recommended to strengthen causal inference and expand applicability.

Keywords: Maternal anxiety; birth companion; perception; antenatal education; childbirth

INTRODUCTION

Childbirth is a complex biopsychosocial event involving physiological processes such as uterine contractions, cervical effacement, and fetal descent leading to the delivery of the fetus and placenta. Within modern maternity care frameworks, woman-centered care is increasingly emphasized, prioritizing emotional well-being, autonomy, and continuous support during labor. A critical component of this approach is continuous labor companionship, defined as the uninterrupted presence of an individual providing emotional, physical, and informational support throughout labor ¹.

A substantial body of evidence demonstrates that continuous companionship during labor significantly improves maternal outcomes, including shorter labor duration, reduced need for analgesia, lower rates of instrumental delivery, enhanced maternal satisfaction, and decreased childbirth-related anxiety. These benefits are consistent across diverse health systems, underscoring companionship as a universally protective factor during childbirth. The World Health Organization (WHO) explicitly recommends that every woman should have the right to be accompanied by a companion of her choice during labor and childbirth ².

The effectiveness of labor companionship as a non-pharmacological strategy has been consistently validated across global health systems ³. However, contextual studies that systematically evaluate its psychological impact in urban Indonesian settings remain scarce. Balikpapan, as an industrial hub, presents unique challenges that may influence the dynamics of labor companionship, including high population mobility, a prevalent shift-work culture, and limited spousal availability during childbirth. These characteristics make Balikpapan a relevant context for examining the effectiveness of companionship in reducing maternal anxiety and enhancing perceived safety and support.

In Indonesia, psychological aspects of childbirth remain under-addressed. National data from Riskesdas (2018) reveal that only 58% of women were accompanied by family members during labor, despite more than 80% expressing a desire for such support. This discrepancy highlights structural and cultural barriers in implementing family-integrated maternity care. Furthermore, the prevalence of perinatal anxiety in Indonesia ranges from 28% to 32%, exceeding global averages and underscoring the magnitude of unmet psychological needs during childbirth ^{4,5}.

Previous studies have emphasized the importance of companion support. Significant association between spousal support and reduced anxiety among primigravida mothers ⁶. Meanwhile, ⁷ found that although the

statistical relationship was not significant, many mothers still perceived emotional comfort and reassurance when accompanied during labor. These findings highlight the critical role of maternal subjective perception in shaping the psychological impact of companionship.

As a theoretical foundation, this study draws upon social support theory and self-efficacy theory. Social support theory posits that the presence of trusted individuals can foster a sense of security, reduce stress, and enhance psychological well-being. Self-efficacy theory emphasizes that an individual's belief in her ability to cope with challenging situations such as childbirth can be strengthened through emotional and informational support. Labor companionship thus has the potential to reinforce maternal self-efficacy and improve the overall childbirth experience.

Based on this background, the present study aims to analyze maternal perceptions of birth companionship and to assess changes in maternal anxiety before and after educational and companionship interventions, as a non-pharmacological strategy to enhance the quality of maternity care in Balikpapan.

MATERIALS AND METHODS

This study employed a quantitative pre-experimental One-Group Pretest–Posttest design to assess changes in maternal perceptions and anxiety before and after an antenatal educational session combined with continuous labor companionship. Measurements were obtained using a closed-ended Yes/No questionnaire that evaluated emotional support, physical support, and pre-labor anxiety indicators. The instrument was validated using the Corrected Item-Total Correlation (cut-off ≥ 0.30) and its reliability was tested using Cronbach's Alpha ($\alpha \geq 0.70$)⁸.

The study was conducted in Balikpapan, East Kalimantan, from January 7 to June 7, 2025, involving 30 pregnant women of varying parity who were purposively selected and delivered vaginally. Inclusion criteria required that each participant be accompanied by a birth companion and willing to complete both pre-test and post-test assessments. A birth companion was operationally defined as a husband or first-degree family member chosen by the mother. The inclusion criteria for the sample consisted of both primigravida and multigravida mothers.

Prior to data collection, all companions received a brief standardized orientation delivered by midwives and the research team, covering supportive behaviors expected during labor, such as emotional reassurance, communication assistance, and simple physical comfort techniques⁹.

The educational intervention consisted of a structured 20–30-minute antenatal education session provided before labor, facilitated by a certified midwife with support from a health promotion officer. The session included a leaflet-based module, verbal explanation, and demonstration of breathing and relaxation techniques. The educational content emphasized childbirth expectations, coping strategies, and the supportive role of birth companions^{10,11}.

Data were collected at two time points before labor began (pre-test) and after childbirth (post-test) to measure changes in perceived support and maternal anxiety. Variables assessed included feelings of safety, comfort, emotional support, and cognitive-emotional anxiety indicators, enabling evaluation of maternal perceptions and psychological readiness.

Data analysis included univariate methods to describe frequency distributions and bivariate analysis using the McNemar test, appropriate for paired nominal data in a single group. Ethical approval was obtained from the Health Research Ethics Committee, Faculty of Public Health, Hasanuddin University (Approval No. 524/UN4.14.1/TP.01.02/2025), and all participants provided informed consent.

RESULT

The results of the Chi-Square test for the respondents' characteristic variables are presented in the table below. Table 1 shows that the majority of respondents were in the 36–40-year age group, totaling 24 individuals (80%). The most common gestational age was 39 weeks, reported by 12 respondents (40%). In terms of ethnicity, most respondents were Javanese (43%). Regarding educational background, half of the respondents had completed junior high school (50%), and the majority were housewives, totaling 27 individuals (90%). For parity, most respondents were primigravida, comprising 16 individuals (53%), while multigravida mothers accounted for 14 individuals (47%).

Table 1. Frequency Distribution of Respondent's Characteristic (n=30)

Age Group (years)	Frequency	Percentage (%)
31-35	1	3
36-40	24	80
41-45	5	17
Gestational Age (weeks)	Frequency	Percentage (%)
35	1	3
36	1	3
37	3	10
38	4	13
39	12	40
40	5	16
41	3	10
42	1	3
Ethnic Group	Frequency	Percentage (%)
Dayak	2	6
Jawa	13	43
Banjar	3	10
Bugis	3	10
Buton	3	10
Flores	1	3
Madura	1	3
Toraja	4	14
Last Education	Frequency	Percentage (%)
Diploma	2	7
Elementary	1	3
Junior High	15	50
Senior High	3	10
Vocational	9	30
Occupation Status	Frequency	Percentage (%)
Housewife	27	90
Employee	1	3
Sales	1	3
Private Worker	1	3
Parity	Frequency	Percentage (%)
Primigravida	16	53
Multigravida	14	47
Total	30	100

Table 2. Frequency Distribution of Mothers' Perceptions of Birth Companions
(Pre-Test Phase, N = 30)

Perception Indicator	Yes (n)	Percentage (%)	No (n)	Percentage (%)
Felt calmer with a companion	13	43	17	57
Felt emotionally supported	19	63	11	37
Felt physically assisted	19	63	11	37
Felt more confident	24	80	6	20
Felt their information needs were supported	22	73	8	27
Felt helped in communicating with health workers	8	27	22	73
Felt safe and comfortable	24	80	6	20
Felt respected	10	33	20	67
Believed the companion influenced delivery decisions	20	67	10	33

Table 2 shows the pre-test results indicating that mothers' perceptions of the role of birth companions were still varied and not entirely positive. This reflects a limited understanding among mothers regarding the functions and contributions of birth companions during labor. Most mothers stated that they felt more confident (80%) and safe and comfortable (80%) when accompanied during childbirth, suggesting a tendency for the presence of a

companion to influence maternal psychological conditions. Additionally, 73% felt that their information needs were met, and 67% believed the companion had an influence on delivery decision-making. This indicates that some mothers had begun to recognize the companion's role as an informational and decision-making partner, though not consistently across all participants.

However, some perception aspects remained relatively low. About 63% reported feeling emotionally supported and physically assisted, but only 43% felt calmer when accompanied, while the remaining 57% did not feel emotionally settled during the early stage of labor. This indicates that the presence of a companion did not fully stabilize maternal emotions. The perception of being helped in communicating with healthcare professionals was also low only 27% felt assisted in communication, while 73% did not. Similarly, only 33% felt personally respected, while the majority (67%) did not perceive being treated with dignity. These findings suggest that companion involvement had not yet reached its optimal potential, likely due to limited understanding of the strategic roles companions should fulfill.

Therefore, prior to receiving educational intervention, mothers' perceptions of birth companions tended to be partial and focused mainly on aspects such as self-confidence and physical comfort. The lower perceptions in communication, emotional calmness, and respect underscore the need for educational interventions to enhance both mothers' and companions' awareness and knowledge of the importance of active, empathetic, and communicative support, which is essential to promoting woman-centered care during childbirth.

Table 3. Frequency Distribution of Mothers' Perceptions of Birth Companions
(Post-Test Phase, N = 30)

Perception Indicator	Yes (n)	Percentage (%)	No (n)	Percentage (%)
Felt calmer with a companion	29	97	1	3
Felt emotionally supported	28	93	2	7
Felt physically assisted	26	87	4	13
Felt more confident	27	90	3	10
Felt their information needs were supported	29	97	1	3
Felt helped in communicating with health workers	20	67	10	33
Felt safe and comfortable	30	100	0	0
Felt respected	7	23	23	77
Believed the companion influenced delivery decisions	21	70	9	30

Table 3 presents the post-test results indicating that mothers' perceptions of the role of birth companions during labor were generally very positive. These outcomes were obtained following the delivery of educational sessions emphasizing the importance of labor companions, provided to both mothers and their companions before labor began. The education highlighted the significance of emotional support, effective communication, and participation in decision-making.

Most respondents reported that the presence of a companion had a meaningful impact on their comfort and emotional well-being. Specifically, 97% of mothers felt calmer when accompanied, and 93% felt emotionally supported. Additionally, 87% felt physically assisted, and 90% stated that the presence of a companion helped them feel more confident during labor. A similarly high percentage (97%) reported that their information needs were supported. Notably, all respondents (100%) stated that they felt safe and comfortable with a companion present, making this the most consistent and strongest perception indicator. These findings suggest that the prior educational intervention contributed significantly to enhancing positive perceptions related to safety and comfort.

However, only 67% of mothers felt helped in expressing their preferences to healthcare workers, indicating that communication through companions still requires reinforcement. This suggests that the education provided may not have fully empowered companions to function as effective communicative bridges between mothers and healthcare staff. Moreover, only 23% of mothers felt respected, while the remaining 77% did not share this perception. Despite the emotional and physical reassurance provided by companionship, personal respect from the healthcare environment or system was still lacking. This highlights the need to strengthen education for healthcare providers to recognize and value the presence and contribution of birth companions.

In terms of decision-making, 70% of mothers believed that the companion had an influence, indicating that the educational sessions succeeded in fostering awareness among mothers and companions about their right to actively participate in childbirth decisions. These findings underscore the strategic role of companions in promoting participatory practices and the importance of involving families in clinical decision-making.

In conclusion, the post-test findings not only reflect positive perceptions of companion presence but also demonstrate that educational interventions provided before labor played a crucial role in improving understanding and preparedness among mothers and their companions throughout the childbirth process.

Table 4. Frequency Distribution of Maternal Anxiety Levels Prior to Labor
(Pre-Test Phase, N = 30)

Anxiety Indicator	Yes (n)	Percentage (%)	No (n)	Percentage (%)
Felt afraid of childbirth	27	90	3	10
Often imagined negative outcomes	29	97	1	3
Felt anxious while waiting for labor	30	100	0	0
Felt incapable of handling childbirth	19	63	11	37

Table 4 displays the pre-test frequency distribution of maternal anxiety levels prior to childbirth, revealing that the majority of mothers experienced considerable anxiety. A total of 90% reported feeling afraid of childbirth, indicating a deep sense of fear regarding the upcoming process. Furthermore, nearly all respondents (97%) often imagined negative scenarios occurring during childbirth, reflecting high levels of worry and uncertainty. All mothers (100%) felt anxious while waiting for labor to begin, demonstrating that pre-labor anxiety was widespread and affected every participant. This heightened anxiety may be attributed to a lack of knowledge about what to expect and uncertainty surrounding both the physical and emotional aspects of the childbirth process.

Meanwhile, 63% of mothers felt incapable of handling labor, while 37% felt emotionally and mentally prepared. Overall, these pre-test findings illustrate elevated levels of anxiety among mothers before delivery, which could significantly influence their childbirth experiences.

Table 5. Frequency Distribution of Maternal Anxiety Levels Prior to Labor
(Post-Test Phase, N = 30)

Anxiety Indicator	Yes (n)	Percentage (%)	No (n)	Percentage (%)
Felt afraid of childbirth	20	67	10	33
Often imagined negative outcomes	22	73	8	27
Felt anxious while waiting for labor	19	63	11	37
Felt incapable of handling childbirth	12	40	18	60

Table 5 presents the post-test results showing a reduction in maternal anxiety levels following the presence of a birth companion. While 67% of mothers still reported fear of childbirth down from 90% during the pre-test this indicates a measurable improvement, though fear remained prevalent. The indicator "often imagined negative outcomes" also declined, from 97% to 73%, suggesting reduced cognitive anxiety or fewer negative thoughts prior to labor.

A significant decrease was observed in the "felt anxious while waiting for labor" indicator, which dropped from 100% to 63%, showing that most mothers felt calmer after receiving companionship. Similarly, for the indicator "felt incapable of handling childbirth," a substantial improvement was noted: only 40% of mothers still felt unprepared, down from 63% at pre-test, while 60% began to feel more emotionally and mentally ready.

Overall, the post-test findings indicate that the presence of a birth companion contributed to lowering maternal anxiety levels. However, a portion of mothers continued to experience elevated anxiety, particularly regarding fear and negative thoughts. This underscores the need for ongoing support through education, counseling, and emotional assistance to further optimize psychological readiness for childbirth.

Table 6. McNemar Test Results for Pre–Post Maternal Perceptions
of Birth Companions (N = 30)

Perception Indicator	Pre: No Post: Yes (b)	Pre: Yes Post: No (c)	Exact Sig. (2-tailed)	Note
Felt calmer with a companion	16	0	0.000	Significant
Felt emotionally supported	9	0	0.004	Significant
Felt physically assisted	7	0	0.016	Significant
Felt more confident	3	0	0.250	Not Significant
Felt information needs were supported	7	0	0.016	Significant
Felt helped in communicating with health workers	15	3	0.008	Significant
Felt safe and comfortable	6	0	0.031	Significant
Felt respected	0	3	0.250	Not Significant
Believed companion influenced delivery decisions	3	2	1.000	Not Significant

Table 6 reveals significant changes in several maternal perception indicators after labor companionship. The most notable change occurred in the perception of feeling calmer with a companion 16 mothers who previously did not feel calm reported feeling calm after being accompanied, with no respondents experiencing a decrease. This result shows strong statistical significance ($p = 0.000$).

Other significantly improved indicators include feeling emotionally supported ($p = 0.004$), physically assisted ($p = 0.016$), and supported in their information needs ($p = 0.016$), with no declines reported in these areas. Similarly, the feeling of safety and comfort improved in 6 mothers post-intervention ($p = 0.031$). Additionally, the ability to express preferences to healthcare professionals also showed significant improvement ($p = 0.008$), although 3 mothers reported a decrease.

Not all indicators showed significant change. For "feeling more confident," although there was an increase (3 mothers changed from "no" to "yes"), the result was not statistically significant ($p = 0.250$). The perception of feeling respected actually declined, with 3 mothers reporting feeling respected pre-intervention but not post-intervention ($p = 0.250$). Similarly, the belief that the companion influenced delivery decisions showed no meaningful change ($p = 1.000$).

These perception changes were influenced not only by the experience of being accompanied during labor but also by educational interventions provided beforehand. The sessions covered the importance of companionship in ensuring safety, emotional and physical support, and communication with healthcare professionals. This enhanced understanding likely fostered more positive perceptions, which were reinforced through direct experience during childbirth.

Overall, the findings suggest that combining educational interventions with labor companionship significantly improves maternal perceptions, particularly regarding calmness, safety, emotional support, and physical assistance. However, aspects such as personal respect and influence in decision-making still require further strengthening.

Table 7. McNemar Test Results for Pre–Post Maternal Anxiety Levels Prior to Labor (N = 30)

Anxiety Indicator	Pre: No Post: Yes (b)	Pre: Yes Post: No (c)	Exact Sig. (2-tailed)	Note
Felt afraid of childbirth	7	0	0.016	Significant
Often imagined negative outcomes	7	0	0.016	Significant
Felt anxious while waiting for labor	11	0	0.001	Significant
Felt incapable of handling childbirth	7	0	0.016	Significant

Table 7 demonstrates a significant reduction in maternal anxiety across all indicators following labor with companionship. All p-values from the McNemar test indicate statistical significance ($p < 0.05$), suggesting real psychological changes occurred prior to labor.

For instance, 7 mothers who initially did not feel afraid reported fear after intervention, but none transitioned from fear to calmness resulting in a significance level of $p = 0.016$. A similar trend was seen in "often imagined negative outcomes," with 7 reporting increased anxiety and no reductions ($p = 0.016$).

The most striking improvement was in "felt anxious while waiting for labor," where 11 mothers moved from anxious to calm, with no increase in anxiety yielding a highly significant result ($p = 0.001$). Moreover, the perception of being incapable of facing childbirth also improved significantly, with 7 mothers shifting from feeling incapable to capable ($p = 0.016$).

These changes highlight that labor companionship contributes positively to improving mental readiness and maternal confidence. The effect is attributed not only to physical presence but also to the prenatal education provided, which included information about the childbirth process, relaxation techniques, fear management, and the value of emotional support from trusted individuals.

By gaining a better understanding of the process, mothers became mentally more prepared and better able to manage their anxiety. The education also helped foster realistic expectations and positive coping strategies effectively reducing excessive fear, negative thoughts, and feelings of helplessness.

Overall, the results affirm that a combination of education and companionship during labor has a significant impact on lowering maternal anxiety levels. This intervention effectively enhances calmness, reduces negative thinking, alleviates pre-labor worry, and strengthens maternal self-perception regarding their ability to navigate childbirth.

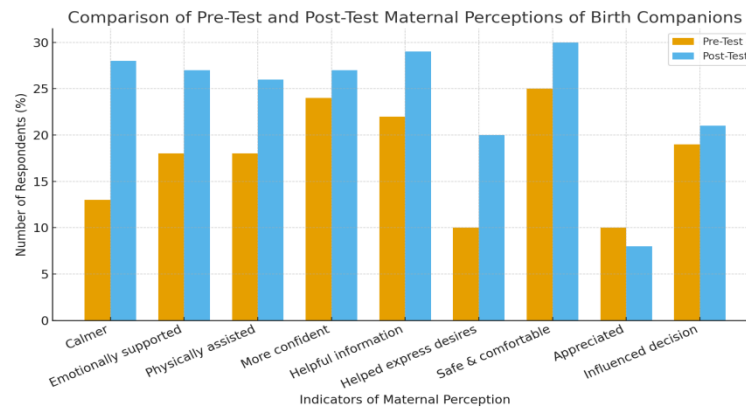


Figure 1. Comparison of Pre-Test and Post-Test Maternal Perceptions of Birth Companions

Figure 1 illustrates an increase in mothers' positive perceptions of the role of birth companions following the educational and support intervention. The most prominent improvements were observed in the indicators "felt calmer" (increasing from 13 to 29 respondents) and "felt safe and comfortable" (increasing from 24 to 30 respondents). Other indicators, such as emotional support, physical assistance, and access to information, also showed notable increases.

However, the perception of "feeling respected" declined slightly, from 10 to 7 respondents, indicating that personal recognition and respect from the healthcare environment remain areas in need of improvement.

These findings highlight the effectiveness of education and presence of a birth companion in enhancing key aspects of maternal experience, while also emphasizing the continued need for strengthening respect-based care within maternity services.

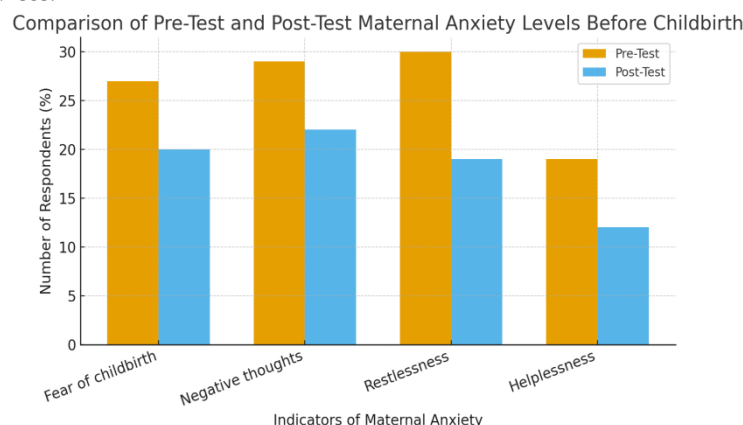


Figure 2. Comparison of Pre-Test and Post-Test Maternal Anxiety Levels Prior to Labor

Figure 2 illustrates a decrease in maternal anxiety across all indicators following the educational and support intervention. The number of mothers who reported feeling afraid decreased from 27 to 20; those who often imagined negative outcomes decreased from 29 to 22; those who felt anxious while waiting for labor dropped from 30 to 19; and those who felt incapable of handling childbirth declined from 19 to 12.

This reduction indicates that prenatal education and the presence of a birth companion were effective in significantly lowering maternal anxiety particularly in alleviating fear and enhancing mental readiness for the childbirth experience.

DISCUSSION

Maternal Perceptions of the Role of Birth Companions Before and After Educational Intervention

The findings of this study show that antenatal education combined with continuous companionship during labor significantly improved several maternal perception indicators, particularly in terms of emotional support, physical assistance, calmness, and perceived safety. These results are consistent with previous evidence demonstrating that structured prenatal education enhances maternal confidence and preparedness for childbirth^{12,13}. Similar patterns have been reported in Indonesian settings, where non-pharmacological and education-based interventions such as prenatal yoga and antenatal exercise have been shown to reduce anxiety and improve labor-

related outcomes^{14,15}. This aligns with Bandura's self-efficacy theory, which posits that improved knowledge and perceived control foster psychological resilience in stressful situations such as labor.

However, these findings must be interpreted with caution due to demographic inconsistencies particularly the mismatch between age and parity. Although the study aimed to include primigravidas, many participants were aged 36–40 years and several were multiparous, a pattern atypical for first-time pregnancies. This demographic profile may reflect the characteristics of Balikpapan as a high-mobility, industrial city where delayed childbearing is more common. Multiparous women may also bring prior expectations of care quality, potentially influencing their baseline perceptions and the extent of change observed following the intervention. Moreover, local evidence suggests that gender norms and household decision-making dynamics can shape women's experiences and autonomy during childbirth, which may further interact with age and parity in influencing perceptions of care¹⁶.

A notable finding is the decline in the perception of "feeling respected," which decreased from 33% to 23%. While other perception indicators improved, respect-related perceptions did not follow the same pattern. This contrasts with studies showing that respectful maternity care is central to empowering women during facility-based childbirth¹⁷. Respectful care is shaped predominantly by institutional culture, provider attitudes, and communication practices rather than by the presence of a companion. Thus, a brief educational session and limited orientation for companions are unlikely to modify systemic or provider-driven behaviours. It is also plausible that increased awareness of childbirth rights following the educational session heightened women's expectations, making them more critical of provider interactions.

Institutional constraints such as limited space, staff workload, and lack of formal respectful maternity care policies have similarly been identified as barriers to effective companionship in other settings¹⁸. The minimal training provided to companions in this study may further explain the limited influence on respect-related indicators. Evidence suggests that untrained companions often lack confidence to advocate for women or engage meaningfully with providers¹⁹. These findings underscore that improving respectful maternity care requires systemic reform, including provider training, policy implementation, and structural support that enables meaningful participation of birth companions.

Maternal Anxiety Levels Before and After Educational Intervention

The results of this study demonstrate that the combined intervention of antenatal education and continuous labor companionship substantially reduced maternal anxiety across all indicators. This aligns with evidence from randomized trials showing that structured labor support improves psychological outcomes, including comfort, emotional stability, and postpartum adjustment. Bandura's self-efficacy theory provides a relevant explanation, as enhanced knowledge and perceived control increase an individual's capacity to manage fear and uncertainty during labor.

Local Indonesian studies further corroborate these findings. Autogenic relaxation and prenatal yoga¹⁴ have both been shown to significantly reduce anxiety among third-trimester pregnant women, indicating that non-pharmacological, education-based interventions effectively improve emotional readiness for childbirth. However, not all forms of support consistently reduce anxiety. For example, a Makassar study reported that although many women perceived their husbands as supportive, spousal presence did not significantly correlate with lower anxiety²⁰, suggesting that companionship alone is insufficient without structured preparation an insight relevant to the present study, where companions received only brief orientation.

Despite the overall reduction in anxiety, these findings must be interpreted cautiously due to demographic inconsistencies, particularly the mismatch between age and parity. Although the study targeted primigravidas, many respondents were aged 36–40 years and some were multiparous, a demographic profile atypical for first pregnancies. This likely reflects Balikpapan's industrial, high-mobility context, where delayed childbearing is more common. Prior childbirth experiences among multiparous women could influence baseline anxiety, either lowering it due to familiarity or increasing it due to prior negative experiences. Such heterogeneity may partly explain variation in anxiety reduction across individuals.

An important contextual factor is the observed decline in perceived respect from 33% to 23% despite improved emotional and informational support. Respectful maternity care is strongly associated with emotional safety and anxiety regulation, and its reduction may have tempered the psychological benefits of companionship. Respect is largely influenced by systemic and provider-level factors such as communication style, autonomy, and institutional culture^{17,19}. Therefore, a brief educational session and minimally trained companions are unlikely to shift deeply rooted practices within facility-based care. Increased awareness of childbirth rights following antenatal education may also have led to higher expectations, making women more critical of provider interactions.

The minimal orientation provided to companions may have further limited their capacity to buffer maternal anxiety. Evidence shows that untrained companions often lack confidence to advocate for women or engage constructively with healthcare providers²¹. Inconsistencies in demographic characteristics, absence of a control group, and small sample size additionally constrain the generalizability of the findings and raise the possibility of selection bias.

Overall, these results indicate that antenatal education combined with companionship can reduce maternal anxiety, but its effectiveness is strongly moderated by demographic profiles, prior childbirth experiences, and institutional conditions. Integrated interventions that include structured coping skills, comprehensive companion training, and respectful maternity care practices are likely to produce more consistent psychological benefits and enhance maternal resilience during childbirth.

CONCLUSION AND RECOMMENDATIONS

This study concludes that antenatal education combined with birth companionship effectively improves maternal perceptions particularly emotional support, physical assistance, calmness, and perceived safety and significantly reduces pre-labor anxiety. These improvements reflect strengthened maternal self-efficacy and better psychological readiness for childbirth.

To ensure practical implementation, several measurable and actionable strategies are recommended. First, maternity facilities should integrate a standardized 30–45-minute companion training module into antenatal classes. Second, healthcare providers should aim for at least 80% of vaginal births to be supported by an oriented companion. Third, relaxation techniques should be included in antenatal care through a minimum of two supervised practice sessions during late pregnancy. Additionally, to strengthen respectful maternity care, facilities should adopt an RMC monitoring checklist with $\geq 90\%$ completion rates, and ensure annual RMC refresher training for all staff.

AUTHOR'S CONTRIBUTION STATEMENT

- Nila Trisna Yulianti: Conceptualization, Methodology, Data Collection, Writing – Original Draft.
- Rika Handayani: Formal Analysis, Validation, Writing – Review & Editing.
- Rahmat Haji Saeni: Critical Review of Manuscript, Validation, Writing – Review & Editing
- Fajar Akbar: Visualization, Data Curation.

CONFLICTS OF INTEREST

The authors declare that they have no conflict of interest related to this study.

SOURCE OF FUNDING

This research was funded by an internal grant from Yayasan Pendidikan Borneo Medistra, Balikpapan, Indonesia.

ACKNOWLEDGMENTS

The author would like to express sincere gratitude to all parties who contributed to the completion of this research. Special appreciation is extended to the Borneo Medistra Education Foundation, Balikpapan, as the provider of the Internal Research Grant, for their invaluable financial support that made this study possible. The author also acknowledges the cooperation of all respondents, partner institutions, and individuals involved in data collection, analysis, and instrument validation. Their assistance, dedication, and contributions were essential to the successful completion of this research. Finally, the author hopes that the findings of this study will contribute meaningfully to the advancement of scientific knowledge and to the improvement of service quality and professional practice in the relevant field.

REFERENCES

1. Grant Ad, Erickson En. Comprehensive Psychoneuroendocrinology Birth , Love , And Fear : Physiological Networks From Pregnancy To Parenthood. *Compr Psychoneuroendocrinology*. 2022;11(April):100138. Doi:10.1016/J.Cpnec.2022.100138
2. Id Mab, Hazfiarini A, Vazquez M, Id C, Portela A. Plos Global Public Health From Global Recommendations To (In) Action : A Scoping Review Of The Coverage Of Companion Of Choice For Women During Labour And Birth. Published Online 2023. Doi:10.1371/Journal.Pgph.0001476
3. Colak Mb, Akin B, Kalkan Sc. Effects Of Labor Support On Pregnant Women ' S Childbirth Comfort , Satisfaction And Postpartum Comfort Levels : A Randomized Controlled Trial. 2025;6.
4. Yulia N, Lestari D. Anxiety Of Pregnant Women In The Third Trimester In Facing Childbirth : A Literature Review. 2025;26(03):2449-2456.
5. Rahmawati, Asri Hidayat Eks. Effectiveness Of Prenatal Class Participation On Maternal Anxiety : A Scoping Review. 2025;20(3). Doi:10.14710/Jpki.20.3.228-242
6. Wijayanti La, Nurseskasatmata Se, Yulifah R. Husband ' S Support And Anxiety Levels In Primigravida Mothers Facing Childbirth : A Cross-Sectional Study. 2025;8(4):825-831.
7. Nirmala G, Oktavia S, Yuting L. The Husband As A Labor Companion Has A Good Influence On The Duration Of Labor. 2023;6(2):70-76.
8. Sugiyono. *Metode Penelitian Kuantitatif, Kualitatif Dan R&D*. Alfabeta; 2021.
9. Creswell Jw. *Research Design: Qualitative, Quantitative, And Mixed Methods Approaches (4th Ed.)*. Sage

- Publications; 2014. <https://www.amazon.com/Research-Design-Qualitative-Quantitative-Approaches/Dp/1452226105>
10. Lestari W, Karo Mb, Sitompul Es, Et Al. *Metodologi Penelitian Kebidanan*.; 2021.
 11. Handayani R, Saeni Rh. *Metode Penelitian Dan Statistik*. Bintang Semesta Media; 2024.
 12. Ghasemi M, Mahmoodi Z, Yazdani F, Shoghi M. The Effect Of Prenatal Education On Health Anxiety Of Primigravid Women: A Randomized Controlled Trial. *Bmc Pregnancy Childbirth*. 2024;24(67). <https://doi.org/10.1186/S12884-024-06718-2>
 13. Kaufman Mr, Hsu Cd, Mccullough M, Spong Cy. An Interactive Childbirth Education Platform To Improve Pregnancy-Related Anxiety In A High-Risk Population: A Randomized Controlled Trial. *Am J Obstet Gynecol*. 2023;229(3):290.E1–290.E9. <https://doi.org/10.1016/J.Ajog.2023.04.042>
 14. Natsir M, Nurjannah, Nawir S. Efektivitas Prenatal Yoga Terhadap Tingkat Kecemasan Ibu Hamil Trimester Iii Di Tpmh Hj. A. Nani Nurcahyani Kota Makassar. *Media Kesehat Politek Kesehat Makassar*. 2024;19(2):75–81.
 15. Ningsi A, Rahmawati R, Suriani B, Mumtihan N. Senam Hamil Dengan Lamanya Persalinan Kala Ii Pada Ibu Bersalin Di Puskesmas Samata Dan Puskesmas Moncobalang Kabupaten Gowa. *Media Kesehat Politek Kesehat Makassar*. 2022;17(2):50–56.
 16. Subriah S, Husain H, Nurfatimah N, Ningsi A, Muhasidah, S U. Peran Gender Dalam Pengambilan Keputusan Pelayanan Masa Persalinan Primigravida Di Puskesmas Kassi-Kassi Makassar. *Media Kesehat Politek Kesehat Makassar*. 2023;18(1):1–8.
 17. Miyauchi A, Shishido E, Horiuchi S. Women's Experiences And Perceptions Of Women-Centered Care And Respectful Care During Facility-Based Childbirth: A Meta-Synthesis. *Japan J Nurs Sci*. 2022;19(3). <https://doi.org/10.1111/Jjns.12475>
 18. Al-Mahrouqi Ma, Al-Rashdi S, Al-Busaidi I, Al-Balushi S. Exploring Healthcare Providers' And Women's Perspectives Of Labor Companionship: A Qualitative Study. *Bmc Pregnancy Childbirth*. 2023;23(59). <https://doi.org/10.1186/S12884-023-05962-2>
 19. Evans K, Pallotti P, Spiby H, Spiby-Eldridge J. Supporting Birth Companions For Women In Labour, The Views And Experiences Of Birth Companions, Women And Midwives: A Mixed Methods Systematic Review. *Birth*. 2023;50(4):689–710.
 20. Mutmainnah D, Syaniah U, Marhaeni, Suriani B. Efektivitas Teknik Relaksasi Autogenic Terhadap Tingkat Kecemasan Ibu Hamil Trimester Iii Di Puskesmas Tamalate Kota Makassar. *Media Kesehat Politek Kesehat Makassar*. 2024;20(1):50–57.
 21. Mumtihan N, Ningsi A, Suriani B, R. R. Peran Suami Dalam Mengatasi Kecemasan Ibu Hamil Menjelang Persalinan Di Wilayah Kerja Puskesmas Cendrawasih Kota Makassar. *Media Kesehat Politek Kesehat Makassar*. 2024;19(2):46–53.