

The Impact of Psychological Resilience Support Combined with Midwife Integrated Full-course Care on Breastfeeding of Primiparous Women

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Abstract: *Objective:* To analyze the nursing effect of psychological resilience support combined with midwife-integrated full-course care on primiparous women. *Methods:* A total of 66 primiparous women who were admitted to the hospital for delivery from April 2022 to April 2024 were selected, all of whom underwent vaginal delivery. They were randomly divided into two groups using a random number table. The combined group received integrated full-course care from midwives under the premise of psychological resilience support, while the conventional group only received routine care. The nursing effects were compared between the two groups. *Results:* The breastfeeding rate of the combined group was higher than that of the conventional group at different time points after delivery, the postpartum complication rate was lower than that of the conventional group, the psychological resilience scores were higher than those of the conventional group at different stages of labor, and the nursing satisfaction was higher than that of the conventional group ($P < 0.05$). *Conclusion:* Under the premise of psychological resilience support, integrated full-course care implemented by midwives can improve the breastfeeding rate, actively prevent postpartum complications, significantly improve psychological resilience, and achieve better nursing satisfaction.

Keywords: Psychological resilience support; Midwife integrated full-course care; Primiparous women; Breastfeeding

Online publication: April 4, 2025

1. Introduction

Primiparous women, or those who are giving birth for the first time, often experience strong fears regarding natural childbirth. Coupled with the complexity of the birthing process, this can lead to various stress reactions among primiparous women, thereby increasing their psychological pressure. Based on this, primiparous women may experience hormonal imbalances during childbirth, along with interference from birth canal factors and the pain of delivery, resulting in poor cooperation with natural childbirth^[1]. To improve the smoothness of childbirth, psychological resilience support is often provided to primiparous women throughout the entire birthing process.

This aims to improve their psychological coping abilities, encourage active cooperation during childbirth, and enhance their self-confidence in giving birth. Additionally, it can help them effectively transition into their new role and facilitate early mother-infant contact, thereby increasing the rate of breastfeeding. Simultaneously, the integration of midwife care can provide timely guidance to primiparous women through integrated and comprehensive nursing measures. By prioritizing modern nursing concepts, nursing procedures can be optimized to enhance the safety of childbirth ^[2]. Therefore, this study selected 66 primiparous women to evaluate the significance of implementing psychological resilience support and midwife care.

2. Materials and methods

2.1. General information

Sixty-six primiparous women who were admitted for childbirth via vaginal delivery between April 2022 and April 2024 were selected. They were randomly divided into two groups using a random number table. The combined group consisted of 33 women aged between 26 and 37 years, with a mean age of (29.68 ± 2.71) years. Their gestational age ranged from 38 to 42 weeks, with a mean of (39.72 ± 1.27) weeks. The conventional group also included 33 women, aged between 24 and 36 years, with a mean age of (29.76 ± 2.80) years. Their gestational age ranged from 37 to 41 weeks, with a mean of (39.06 ± 1.13) weeks. There were no significant differences in the baseline characteristics between the two groups ($P > 0.05$).

Inclusion criteria: full-term pregnancy, singleton with cephalic presentation; first childbirth; meeting the indications for vaginal delivery; normal communication skills; complete clinical data; informed consent for the study. Exclusion criteria: abnormal heart, liver, or kidney function; emergency admission with critical illness; presence of indications for cesarean section; comorbidity with mental illness; withdrawal from the study.

2.2. Methods

The conventional group received routine nursing care. After the primiparous women were admitted to the hospital, they were provided with detailed explanations about vaginal delivery. Once regular uterine contractions began, the midwife would escort them to the labor room, guide them on proper breathing techniques, and encourage them to maintain a comfortable position. The progress of labor was monitored intermittently, and the primiparous women were guided to cooperate during childbirth. After the baby was delivered, the new mothers were instructed on mother-infant contact and demonstrated proper breastfeeding positions.

The combined group received psychological resilience support, along with integrated and comprehensive midwife care:

(1) Establishment of a healthcare team

The team consisted of obstetricians, midwives, and psychologists, with the head nurse serving as the team leader.

(2) Psychological resilience support

During each prenatal check-up, natural childbirth processes, benefits, and cooperation points were explained to the primiparous women through graphic materials, educational videos, and animation demonstrations. Their views on natural childbirth were inquired about, and any misconceptions were corrected through language guidance and case references. Psychological support was also provided through physical comfort.

A psychological resilience scale was distributed to the primiparous women, and instructions were given

on how to fill it out. Based on the assessment results, differentiated nursing care was provided. For those with a prenatal score below 50, a comprehensive understanding of their family environment, occupation, and personality traits was obtained. They were encouraged to read, listen to music, or practice yoga during pregnancy to enrich their minds and enhance their psychological resilience. Those with a postpartum score below 50 received face-to-face education to help them actively adapt to their new roles. For those with a prenatal score of 50 or above, they were encouraged to continue their current lifestyle and mental state, and family members were invited to participate in prenatal care to provide reasonable assistance. Those with a postpartum score of 50 or above received direct breastfeeding guidance, focusing on explaining the adverse events caused by improper feeding to improve the standardization of breastfeeding.

(3) Integrated midwife care

Abnormal pregnancy check-up results of primiparous women were reported promptly, and abnormalities were clearly recorded. The women and their families were encouraged to participate in course training and attend regular prenatal care and breastfeeding courses at the maternity school. These courses covered coping methods for pregnancy reactions, dietary suggestions during pregnancy, breastfeeding methods, and lactation physiology knowledge, aiming to correct any misconceptions about breastfeeding. For older primiparous women, their prenatal check-up frequency could be reasonably increased, and they were encouraged to exercise moderately. In the second trimester, the Lamaze breathing method was demonstrated on-site to teach them the correct method of childbirth analgesia. In the third trimester, they and their families were guided to familiarize themselves with the obstetric environment, and key points of newborn care were popularized.

Knowledge lectures, exchange meetings, and other activities were held once a week to specifically answer questions about natural childbirth and breastfeeding through video playback, graphic demonstrations, or scenario simulations. Each activity lasted for 2 hours. QQ and WeChat groups were established, with midwives serving as group administrators. Relevant knowledge was pushed in the groups regularly every week, and primiparous women were encouraged to actively speak up and answer each other's questions to leverage peer support.

Delivery care were given to the primiparous women. Once regular uterine contractions occurred, the primiparous women were transferred to the labor room. The midwife accompanied them throughout the process, intermittently inquired about their feelings, and provided them with confidence during delivery through physical actions such as handshakes and pats on the back. Soft music was played in the labor room, and the indoor temperature, humidity, and lighting were adjusted based on their needs. They were guided on proper breathing techniques, position adjustments, and their psychological state was monitored to ensure a smooth delivery.

Specialized breastfeeding guidance were also provided. Instructions were provided on nipple latching positions, breast massage methods, and newborn hugging positions. Any incorrect feeding methods were corrected on-site. Both groups received care until 3 months postpartum.

2.3. Observation indices

- (1) Breastfeeding rate: Evaluate the breastfeeding rate at 1/2 day postpartum and before discharge, which is defined as the duration of quiet sleep of the newborn exceeding 2 hours after feeding, with normal bowel movements.
- (2) Postpartum complications: Observe the incidence of postpartum urinary retention, neonatal asphyxia, postpartum hemorrhage, postpartum depression, etc.
- (3) Psychological resilience score: Use the psychological resilience scale, including tenacity (13 items),

strength (8 items), and optimism (4 items). Each item is scored from 1 to 4, with a total of 25 items, giving a maximum score of 100. The scoring is done in a positive direction.

- (4) Nursing satisfaction: Use a self-made satisfaction scale including nursing attitude, nursing skills, delivery environment, and individual guidance, with a total score of 50. Scores above 35 indicate great satisfaction, 15–35 indicate basic satisfaction, and scores below 15 indicate dissatisfaction.

2.4. Statistical analysis

Data were processed using SPSS 28.0 software. Measurement data were compared and tested using t-values, while count data were compared and tested using chi-square (χ^2) values. The criterion for statistical significance was set at $P < 0.05$.

3. Results

3.1. Comparison of breastfeeding rates between the two groups

The breastfeeding rates of the combined group at different time points postpartum were higher than those of the conventional group ($P < 0.05$).

Table 1. Comparison of breastfeeding rates between the two groups (n,%)

Grouping	1 day after delivery	2 day after delivery	Before discharge
Combined group (n=33)	22(66.67)	26(78.79)	29(87.88)
Conventional group (n=33)	13(39.39)	18(54.55)	21(63.64)
χ^2	4.927	4.364	5.280
P	0.026	0.037	0.022

3.2. Comparison of postpartum complication rates between the two groups

The postpartum complication rate in the combined group was lower than that in the conventional group ($P < 0.05$).

Table 2. Comparison of postpartum complication rates between the two groups (n,%)

Grouping	Postpartum urinary retention	Neonatal asphyxia	Postpartum hemorrhage	Postpartum depression	Incidence rate
Combined group (n=33)	1(3.03)	0	0	0	3.03(1/33)
Conventional group (n=33)	2(6.06)	1(3.03)	2(6.06)	1(3.03)	18.18(6/33)
χ^2					3.995
P					0.046

3.3. Comparison of psychological resilience scores between the two groups

In early pregnancy, there was no difference in psychological resilience scores between the two groups ($P > 0.05$). In other time periods, the psychological resilience scores of the combined group were higher than those of the conventional group ($P < 0.05$).

Table 3. Comparison of psychological resilience scores between the two groups , ($\bar{x} \pm s\bar{x} \pm s$)

Grouping	Early pregnancy			Mid-pregnancy		
	Tenacity	Strength	Optimism	Tenacity	Strength	Optimism
Combined group (n = 33)	37.9 ± 3.74	24.62 ± 2.07	10.23 ± 1.65	30.15 ± 3.51	20.34 ± 2.11	8.11 ± 1.62
Conventional group (n = 33)	37.29 ± 3.44	24.49 ± 2.01	10.31 ± 1.66	27.01 ± 3.21	17.04 ± 2.09	6.04 ± 1.36
<i>t</i>	0.690	0.259	0.196	3.792	6.383	5.622
<i>P</i>	0.493	0.797	0.845	0.000	0.000	0.000

Grouping	Late pregnancy			Post-delivery		
	Tenacity	Strength	Optimism	Tenacity	Strength	Optimism
Combined group (n = 33)	25.64 ± 3.11	17.65 ± 2.07	7.19 ± 1.30	24.06 ± 3.08	15.29±1.86	7.11 ± 1.53
Conventional group (n = 33)	22.04 ± 2.91	14.77 ± 2.10	6.01 ± 1.28	20.33 ± 3.01	12.77±1.65	5.97 ± 1.42
<i>t</i>	4.856	5.611	3.716	4.975	5.822	3.137
<i>P</i>	0.000	0.000	0.000	0.000	0.000	0.003

3.4. Comparison of nursing satisfaction between the two groups

The nursing satisfaction of the combined group was higher than that of the conventional group ($P < 0.05$).

Table 4. Comparison of nursing satisfaction between the two groups (n,%)

Grouping	Very satisfied	Basically satisfied	Dissatisfied	Satisfaction rate
Combined group (n = 33)	20(60.61)	11(33.33)	2(6.06)	93.94(31/33)
Conventional group (n = 33)	12(36.36)	12(36.36)	9(27.27)	72.73(24/33)
χ^2				5.346
<i>P</i>				0.021

4. Discussion

Primiparous women often have limited knowledge about natural childbirth and breastfeeding, which is accompanied by negative emotions such as anxiety or panic that can affect the smoothness of their delivery ^[3]. To enhance their confidence in natural childbirth, systematic nursing care is often implemented. Although routine nursing can orderly carry out prenatal and childbirth care, its measures are single and have strong limitations. Comparatively, psychological resilience support can provide flexible intervention based on the psychological characteristics of primiparous women, individually addressing their negative emotions, and thus improving their cooperation during natural childbirth ^[4]. Simultaneously, combining this with one-on-one, continuous care from midwives allows for full participation in the nursing process of primiparous women, providing multi-level nursing guidance such as prenatal healthcare and breastfeeding, which has high nursing feasibility. The combination of the two can not only enhance the psychological resilience of primiparous women but also standardize their nursing behaviors, equipping them with basic self-care skills to rationally cope with natural childbirth ^[5].

The results showed that the breastfeeding rates in the combined group at 1 day, 2 days postpartum, and before

discharge (66.67%, 78.79%, 87.88%) were higher than those in the routine group ($P < 0.05$). This is because combined nursing emphasizes continuous guidance on breastfeeding, instilling the concept of breastfeeding in the early stages of pregnancy and gradually building confidence in breastfeeding. Individualized guidance during childbirth and postpartum can also accelerate oxytocin secretion, thereby increasing milk production and improving breastfeeding rates ^[6]. Additionally, combined nursing utilizes group interventions to fully leverage the professional strengths of team members. Psychologists and midwives jointly implement psychological resilience support, focusing on cultivating primiparous women's correct cognition of breastfeeding, highly recognizing its advantages, which helps stimulate their internal drive and enhance their confidence in breastfeeding. The group system also ensures the continuity and scientific nature of breastfeeding guidance, enabling primiparous women to clearly grasp the key points of breastfeeding and thus actively and persistently adhere to it.

The rate of postpartum complications in the combined group (3.03%) was lower than that in the routine group (18.18%) ($P < 0.05$). This is attributed to combined nursing being integrated throughout the entire pregnancy, allowing for reasonable adjustments to nursing content based on the primiparous women's physical and mental state. It provides refined prenatal care and childbirth guidance, maximally meeting their nursing needs and thus avoiding high-risk factors for complications ^[7, 8]. Furthermore, combined nursing stabilizes the sympathetic nervous system and promotes normal secretion of angiotensin, facilitating uterine contractions and accelerating postpartum recovery ^[9].

During the second and third trimesters of pregnancy and after childbirth, the psychological resilience scores of the combined group were higher than those of the routine group ($P < 0.05$). This is because combined nursing corrects primiparous women's misconceptions through educational videos and WeChat group knowledge push notifications, providing continuous childbirth education that helps them maintain a peaceful mindset, thereby enhancing their psychological resilience ^[10]. Moreover, psychological resilience support assesses primiparous women's levels of resilience before and after childbirth, dynamically understanding their changes, and implementing personalized nursing interventions. This approach enables an essential analysis of the problems and a deep exploration of the reasons for poor psychological resilience in primiparous women, ensuring the feasibility of nursing measures.

The nursing satisfaction rate in the combined group (93.94%) was higher than that in the routine group (72.73%) ($P < 0.05$). This is due to the meticulous and humanistic measures of combined nursing that fully consider the physical and mental specificities of primiparous women, offering them a high degree of understanding and care, thereby optimizing their nursing experience. Additionally, this nursing approach spans the entire pregnancy and childbirth process, fostering a mutually trusting and close nurse-patient relationship, increasing communication frequency, and thus enabling timely assistance and making patients feel cared for.

5. Conclusion

In summary, providing psychological resilience support, integrated midwifery care, and continuous nursing to primiparous women can improve their breastfeeding rates, enhance the safety of childbirth, and improve their psychological resilience, resulting in high nursing satisfaction.

Disclosure statement

The author declares no conflict of interest.

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