

Observation on the Application Effect of Bedside Nursing Mode of Mother-Infant Rooming-in High-Quality Obstetric Care

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Abstract: *Objective:* To observe the application effect of bedside nursing mode of mother-infant rooming-in in high-quality obstetric care. *Methods:* Selected mothers (60 cases) from our hospital (January 2022–December 2022) were recruited and randomly divided into two groups (30 cases/group). The effects were compared between the routine nursing mode (control group) and the bedside nursing mode of mother-infant rooming-in (observation group). *Results:* Compared with the control group, the observation group scored higher in health education knowledge, and the total satisfaction was higher than that of the control group ($P < 0.05$). *Conclusion:* The bedside nursing mode of mother-infant rooming-in can improve mothers' parenting skills and lay a foundation for post-discharge parenting. This nursing mode is novel and effective and has significant advantages in reducing anxiety while protecting mothers and babies.

Keywords: Mother-infant rooming-in; Bedside nursing mode; Obstetrics; High-quality nursing

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1. Introduction

Obstetric care involves both pregnant women and fetuses. The service content can be challenging due to its complexity and changeability, high requirements and difficulties, various disputes, as well as the uneven quality and ability of nursing staff. The quality of obstetric nursing work is directly related to medical quality and safety [1]. Therefore, the sustainable improvement of high-quality obstetric care is necessary and imperative. Bedside nursing comprehensive care is a family-centered and high-quality service to ensure the health of mothers and babies [2]. It is highly encouraged for obstetrics to adopt the bedside nursing mode of mother-infant rooming-in to provide warm and compassionate services for mothers during puerperium (also known as postpartum) [3,4]. The purpose of this study was to explore the effectiveness of the mother-infant bedside nursing mode in obstetric care. This model includes newborn bathing, stroking, disease screening, breastfeeding guidance, health education, and vaccinations, allowing mothers to completely supervise the behavior of nursing staff. A total of 60 cases of mothers who recently gave birth in our hospital were selected to implement the nursing model, and the reports after the implementation were collected and analyzed.

2. Materials and methods

A retrospective study was carried out from January 2022 to December 2022 at Jinan Maternity and

Childcare Hospital Affiliated with Shandong First Medical University, China. The inclusion criteria included mothers with abnormal pregnancies judged by clinicians, complete medical records, as well as normal mental and consciousness. The exclusion criteria included mothers withdrawing before the end of the study due to various reasons, those with communication problems, and those who had malignant tumors or ≥ 2 fetuses. Sixty mothers who fulfilled the inclusion criteria were recruited and informed, signed the consent form, and were randomly divided into two groups, the control group that received routine nursing, and the observation group that was under the bedside nursing mode of mother-infant rooming-in. The upper and lower age limits of the control and observation group were 20–35 and 21–35 years old, respectively, and the mean age was 27.54 ± 4.28 years old and 28.17 ± 4.25 years old, respectively; the difference between the two groups was small and insignificant ($P > 0.05$).

For the control group, the routine nursing mode was used to popularize puerperium-related knowledge to mothers and their families, allowing the nursing staff to understand the current state of mind of mothers, comfort and encourage mothers, mobilize maternal breastfeeding confidence, provide reasonable advice and supervision on drug treatment and daily diet to mothers, maintain a clean, safe, and comfortable hospital environment to improve the comfort of mothers, provide professional consulting services for mothers, as well as assist mothers to overcome various problems encountered during puerperium.

For the observation group, the bedside nursing mode of mother-infant rooming-in was used. In order to ensure the comprehensiveness of neonatal care, the nursing staff completed all nursing operations related to the mother. Therefore, the comprehensive quality of the nursing staff was strengthened, where delivery knowledge training was carried out regularly and the work quality and service attitude of the obstetric nursing staff improved. The bedside nursing mode enhances the sense of professional responsibility and continues to expand the knowledge of professional nursing and health education, ensuring that nursing behaviors comply with the standard of practice. Strengthening education on maternal health, disseminating relevant knowledge about childbirth, and conveying precautions for bedside nursing care of mothers and infants allowed improvement of the mothers' and newborns' health. The bedside nursing mode included personalized care plans for mothers depending on their actual needs, as well as the implementation of newborn vaccination and disease screening according to the family doctor's recommendations. Meanwhile, mothers were reminded to maintain personal hygiene, a reasonable diet, and moderate exercise. Their body temperature, abdomen, incisions, breasts, skin, *etc.*, were regularly checked, along with the recovery of the uterus. They were guided in physical training, and any breastfeeding problems were promptly corrected. Mothers and their families were able to obtain detailed postpartum nutrition introduction and operation demonstration. Maternal and newborn care including vaccination, bedside bathing, daily touching, intellectual protection training, bedside disease screening, and health education was given to ensure good health.

The effect judgment of the study was as follows:

- (1) Mastery of health education knowledge: Each item was scored from 0 to 100 points; the higher the score, the higher the level of health education;
- (2) Nursing satisfaction: A questionnaire survey was carried out; those who scored less than 60 points were judged as dissatisfied, those who scored more than 60 points but less than 90 points were judged as generally satisfied, and those who scored 90 points and above were judged as satisfied; those that fell under dissatisfied were excluded, and the remaining statistics represented total satisfaction.

Statistical software SPSS 22.0 was used to process data. The measurement data were represented by mean \pm standard deviation (SD), and the *t*-test was used. Enumeration data were expressed in percentage (%), and the χ^2 test was used. The probability $P < 0.05$ indicated a statistically significant difference.

3. Results

3.1. Scoring of health education knowledge mastery

As shown in **Table 1**, the health education knowledge score of the observation group was higher as compared to the control group ($P \leq 0.001$).

Table 1. Knowledge of health education

Group	Number of cases	Massage on newborn	Bathing	Breastfeeding	Postpartum nutrition
Observation group	30	96.87 ± 12.18	95.35 ± 13.48	95.87 ± 2.23	97.34 ± 1.28
Control group	30	84.54 ± 11.04	84.44 ± 10.47	79.85 ± 2.24	80.64 ± 2.20
<i>t</i>		4.108	3.5010	27.761	35.937
<i>P</i>		0.000	0.001	0.000	0.000

3.2. Comparison of nursing satisfaction between the two groups

Table 2 shows the total nursing satisfaction of the two groups, where the observation group was higher than that of the control group (100% versus 70%, $P = 0.001$).

Table 2. Comparison of nursing satisfaction between the two groups

Group	Number of cases	Satisfied	Generally satisfied	Dissatisfied	Total satisfaction
Observation group	30	23 (76.67%)	7 (23.33%)	0 (0.00%)	30 (100.00%)
Control group	30	14 (46.67%)	7 (23.33%)	9 (30.00%)	21 (70.00%)
χ^2		5.711	0.000	10.588	10.588
<i>P</i>		0.017	1.000	0.001	0.001

4. Discussion

Fertility is an extremely important physiological process, especially for primiparous women, who not only need to recover their bodies quickly but also adapt to the role of mothers. Such complex changes are often difficult to deal with [5,6]. Additionally, new mothers are often insecure due to a lack of knowledge about newborn care. Traditional clinical nursing often uses a centralized education method to gather all newborns into one bathing room for bathing and nursing. However, this method hinders mothers from fully grasping the health knowledge and skills related to babies; hence, this needs to be improved [7]. Therefore, our hospital has developed the bedside nursing mode to help new mothers adapt to their role, reduce depressive symptoms, and make nursing closer to the clinic. The bedside nursing mode of mother and baby sharing a bed further improves maternal satisfaction and promotes communication and contact between nurses and mothers. For traditional tertiary-level nursing, bedside care is more comprehensive. During the perinatal period, we adopt the bedside nursing mode, which not only avoids the traditional operation of mother-infant separation nursing but also effectively promotes the touching and bathing of newborns [8,9]. Dividing care into different modes has the potential to reduce opportunities for communication with patients, shorten maternal-infant contact, and distort the nature of care. Modern medicine attaches great importance to humanistic nursing, which also increases people's demand for health. In clinical medicine, the concept of humanization has been widely used. Maternal women want to have control over their situation and the right to make their own choices. Bedside care in the same room can protect the rights of mothers without separating mothers and babies, while it helps mothers learn knowledge and skills about baby care and health care, so mothers are willing to accept this mode. In order to improve the professionalism of the medical

staff, obstetric nurses need to provide thoughtful service and effective communication with patients to help them find peace. They must be proficient in technology, enrich their professional knowledge, and constantly improve their quality. Bedside care helps nurses grow closer to patients while strengthening their clinical practice of humanistic care. Meanwhile, continuing in-depth study of neonatal nursing knowledge is also essential for nurses, so that they can combine theory and practice with operational skills, as well as master them proficiently, which then helps mothers change smoothly ^[10,11].

Firstly, the nurse-in-charge will demonstrate various nursing methods for newborns, such as changing diapers, bathing, buttocks, and umbilical care, so that family members can learn and master the correct skills. Bedside care facilitates mother-infant interaction, family care, and the transfer of parenting experiences. The mother's sense of participation and responsibility can be effectively strengthened, while anxiety and stress can be relieved. In addition, through bedside care, mothers can adapt to the newborn's lifestyle faster, improve parenting confidence, and successfully pick up the proper role as a mother. Breastfeeding, bathing, and other methods can effectively promote emotional communication between mother and child. Moreover, relevant knowledge can also help mothers understand neonatal diseases and improve nursing safety. The use of "one-to-one" bedside care not only increases communication opportunities but also solves the doubts of mothers and family members; thus, it is worthy of widespread application in clinical practice ^[12,13].

The study found significant differences in the way patients received care between the two groups. Through bedside care, nurses can be closer to the actual situation and communicate more closely with mothers. However, traditional obstetric care services are staged according to different service objects, separating mothers and infants into different service modes, such as bathing, massage, and treatment. This leads to the interruption of nursing continuity and the emergence of communication barriers, which cannot realize humanized comprehensive nursing well. Today, people's demand for health care is increasing, including the right to know, the right to choose, the right to participate, the right to family care, and the right to personal privacy. Bedside care prevents the separation of mother and baby as much as possible, as well as maximizes the protection of multiple rights and interests of mothers and their families; hence, they are highly expected and popular in society. Under the guidance and assistance of nursing staff, the nursing relationship between mothers and babies is more harmonious, and the quality of nursing can also be improved. Nurses' professional knowledge, comprehensive services, and excellent technology have won the trust and recognition of mothers, which has greatly improved their satisfaction with nursing services ^[14,15]. The results of the study showed that patients in the observation group who received health education had better knowledge than those in the control group who did not receive any education. This is because the nurses in charge of bedside care for mothers and infants provided demonstration, explanation, guidance, and practical operations, as well as encouraged the mothers and family members to actively participate, thereby realizing the mastery of self-care and parenting skills. Carrying out periodic planned health education and avoiding excessive publicity for mothers are conducive to mastering the key points of education in stages and improving the effect of postpartum education. The teaching method combined with maternal operation is more effective than the traditional mother-infant care mode.

The quality of obstetric nursing work is directly related to medical quality and medical safety, and it is related to society's satisfaction with hospitals and medical staff. The obstetric nursing work is special, changeable, difficult, and highly disputed. With the improvement of living standards and the emergence of advanced maternal age, the requirements for obstetric care continue to rise. By implementing the "people-oriented" principle, we can continue to improve high-quality obstetric care services through the bedside care model of mothers and babies ^[16], as it increases patients' satisfaction and trust in the hospital and medical staff, improves word-of-mouth, makes patients feel happy and recover quickly, shortens hospitalization time, reduces the economic pressure of individuals, families, and society, and generates

good social and economic benefits. Nursing staff in hospitals who find their deficiencies at work improve through learning and training from the nursing echelon with high-level nursing knowledge and talents. This promotes the rapid development of the hospital. The management mode of the hospital reduces internal friction in work and resistance to facilitate the smooth development of various tasks and the rapid development of the hospital, acquires sustainable improvement experience in clinical nursing, builds a nursing team and brand, and provides valuable experience and reference for the nursing work of the whole hospital and even outside the hospital.

4. Conclusion

In summary, the bedside care model of mother-infant rooming-in has several benefits. It improves patient satisfaction and helps family members master the key points of newborn care. During the implementation of nursing care, mothers can be self-aware of the transformation of roles and regain confidence in baby care, thereby improving their sense of responsibility. Meanwhile, nursing staff should pay attention to their emotional state at any time, find out the reasons for their psychological changes, and provide specific guidance and related support.

Disclosure statement

The authors declare no conflict of interest.

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