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Application of participatory nursing in neonatal nursing of rooming-in.

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Abstract

Objective: To study the clinical effect of participatory nursing in neonatal nursing of rooming-in.
Methods: A total of 720 maternals in our hospital from February to December in 2016 were enrolled to be divided into control group and observation group, each group of 360 cases. The control group was treated by the traditional nursing, and the observation group was treated by the participatory nursing. The tension, ability of nursing new-borns and adaptability of the two groups of subjects were analyzed.
Results: The scores of maternal tension, ability of nursing neonatal and adaptation in the observation group were higher than those in the control group (P<0.05).
Conclusion: The participatory nursing has better clinical effect in neonatal nursing care.

Keywords: Participatory nursing, Traditional nursing, Rooming-in, Newborns.

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Introduction

In recent years, with the improvement of living standards and self-awareness of health care, nursing mode has also been changed [1]. Rooming-in nursing becomes an important part of obstetric care, and gradually replaces the traditional nursing of maternal separation [2-3]. Because the majority of maternal are single-child and become the mother for the first time, they lack relevant experience and nursing knowledge, most of them suffer from tension before and after birth [4]. How to relieve the stress of the pregnant women, promote their access to be a mother and master the neonatal nursing method are the important content of the delivery room nursing work at present. In 2013, we applied the participatory nursing in maternal and neonatal of rooming-in in our hospital. The report is as follows.

Materials and Methods

General information

Total of 654 cases of maternal in our hospital from January to June 2013 were selected for this study, all pregnant women were rooming-in primipara, and without obstetric complications. This study was approved by the Hospital Ethics Committee and all maternal informed consent. According to the order of informed consent, the patients were randomly divided into control group and observation group, 327 cases in each group. The basic conditions of maternal (age, mode of delivery, length of hospital stay) and the new-borns (weight, gestational age and sex) were not statistically significant (P>0.05) (Table 1).

Table 1. *Comparison of the basic conditions of the two groups of pregnant women and new-borns ($\bar{x} \pm s$), (n. (%)).*

Groups	Maternal				Newborns			
	Age (y old)	Vaginal delivery	Cesarean delivery	Hospital stay (d)	Weight (kg)	Gestational age (w)	Baby boy	Baby girl
Control group	28.16 ± 3.25	173 (52.91)	154 (47.09)	4.26 ± 1.48	3.47 ± 1.24	40.33 ± 1.45	173 (52.27)	158 (47.73)
Observation group	28.24 ± 3.39	179 (54.74)	148 (45.26)	4.17 ± 1.52	3.39 ± 1.36	40.46 ± 1.52	178 (52.82)	159 (47.18)
T value	0.308	-	0.767		0.786	1.119	-	
χ^2	-	0.221	-		-	-	0.020	
P value	0.758	0.638	0.444		0.432	0.264	0.886	

Methods

Two groups of mothers and new-borns received traditional routine nursing, and given psychological, dietary and other nursing measures combined with the specific conditions. In the control group, the new-borns were treated with Et observation, diaper replacement, bath, umbilical and leg care and feeding independently by the nurse. In observation group, the maternal

and baby were observed for 2 h in the delivery room after birth, if there is no abnormality, they will be transferred to the rooming in. The designated nurses will help baby to practice sucking to promote the secretion of milk, and guide the maternal or family members to complete the daily observation of newborns, and participate in neonatal diapers, bathing, umbilical and hip care, while universal neonatal physiological knowledge and nursing operations points will be told to the maternal or family for health education.

Obvervational index

The self-designed maternity questionnaire was used to investigate maternal tensions, nursing infant ability, role adaptability and nursing satisfaction. Tension degree was divided into three levels: no tension, mild tension and severe tension. The ability of nursing new-borns includes breastfeeding, daily care of new-borns and knowledge of new-born physiology and the full score is 100. Role adaptation assessment is divided into very adaptable, mildly adaptable and not adaptable. Evaluation of nursing satisfaction consists of maternal attitude to nurses, nursing skills and level, psychological care, life care, health education and other aspects of evaluation, divided into very satisfactory, mildly satisfactory, not satisfactory.

Statistical methods

SPSS 15.0 was used for data analysis and processing. The measurement data were expressed as mean ± standard deviation ($\overline{x} \pm s$), t test was used to compare between groups. The count data were expressed as percentage (%). $P<0.05$ means the difference was statistically significant.

Results

The comparison of maternal tension, nursing new-born ability and role adaptation ability between the two groups.

In the observation group, the degree of tension, the score of nursing neonatal ability and role adaptation were significantly better than those in the control group, the difference was statistically significant ($P<0.05$ or $P<0.01$) (Table 2).

Table 2. *The comparison of maternal tension, nursing new-born ability and role adaptation ability between the two nursing modes (n (%)), (x ± s).*

Groups	Tension degree			Nursing new-born ability		Role adaptation ability	
	No tension	Mild tension	Severe tension	Very adaptable	Mildly adaptable	Not adaptable	
Control group	169 (51.68)	134 (40.98)	24 (7.34)	76.54 ± 6.14	134 (40.98)	165 (50.46)	28 (8.56)
Observation group	193 (59.02)	126 (38.53)	8 (2.45)	88.68 ± 6.75	149 (45.47)	170 (51.99)	8 (2.45)
T value		-		24.059		-	
χ2 value		9.837		-		11.981	
P value		P<0.05		0.000		0.003	

Comparison of nursing satisfaction between the two groups

The nursing satisfaction of observation group was significantly better than that of the control group, the difference was statistically significant ($P<0.01$) (Table 3).

Discussion

The creation of a baby-friendly hospital is a commitment of the Chinese government to the international community, and also a part of the reform of the hospital management system [5]. At present, rooming-in as a new hospital management system has been widely carried out.

Rooming-in refers to that the maternal and infant postpartum are arranged in the same room to enhance the emotional exchanges, adjust the maternal feelings, and lay a good foundation for the follow-up breeding [6]. The current care for new-borns has generally been changed from the traditional closed intensive care of maternal and child separation into the open rooming-in care [7].

Table 3. *Comparison of nursing satisfaction between the two groups (n (%)).*

Groups	Very satisfactory	Mildly satisfactory	Not satisfactory
Observation group	153 (46.79)	156 (47.71)	18 (5.50)
Control group	179 (54.74)	143 (43.73)	5 (1.53)
χ^2 value	9.949		
P value	0.007		

After the foetus leaves the maternal, the internal and external environment has tremendous difference, the adaptability of new-borns is not yet perfect, so postpartum neonatal environment is essential for its development. The implementation of rooming-in is conducive for early breast milking to promote breastfeeding success, and improve mother care and nursing ability of babies [8,9]. Another study pointed

out that feeding on baby timely can improve the contraction of maternal uterus, reduce the amount of postpartum hemorrhage, and effectively promote the mother and child feelings, so as to effectively improve the new-born's intelligence and psychological development [10]. The participatory nursing mode from Oren's self-care theory is an advanced nursing model in modern care [11]. In this care mode, the main responsibility of nurses is to help and promote the patient self-observation, self-operation and self-psychological adjustment. This nursing mode meets the patient's self-care needs, changed from passive obedience to co-participants. Therefore, this kind of nursing mode on the one hand give full play to the educational function of nurse, on the other hand fully respect the patient's autonomy and informed consent.

Female delivery is an important process in life, and the physical and psychological changes will occur significantly, some of which may have adverse effects on the delivery and postpartum rehabilitation, the psychological and health of infants [12]. Because the majority of maternal mothers lack experience and knowledge of nursing, postpartum tension occurs. This study showed that in the control group 51.68% of maternal were not nervous, 7.34% were severe nervous, while in the observation group 59.02% were not nervous, only 2.45% were severe nervous, so the participatory nursing mode helps to ease the tension of maternal. The results of this study indicated that the neonatal nursing ability score of observation group was (88.68 ± 6.75), compared with traditional nursing mothers increased 11.58%, suggesting that participatory nursing is helpful to improve the nursing ability of maternal, this will provide more opportunities for learning and practicing to improve maternal care ability. In this study, 40.98% maternal in the control group were very suitable for the mother role, 8.56% were not suitable, while 45.57% in the observation group were very adaptable to the mother role, 2.45% were not adaptable, the difference was statistically significant ($P<0.01$), indicating the participatory nursing model can improve the maternal care ability of infants. The nurse plays an important role in helping maternal adapt mother role: on the one hand the nurses give guidance and help of the new-born care, on the other hand provide psychological intervention to assist the maternal gradually adapt to the role of mother. In this study, 54.74% of the maternal in the observation group were very satisfied with the nursing, only 1.53% of the patients were not satisfied, while 46.79% of the maternal in control group were very satisfied with the nursing care, and 5.50% were not satisfied, the difference was statistically significant ($P<0.01$), indicating that the participatory nursing is conducive to improve nursing satisfaction of maternal. In summary, participatory nursing can relieve maternal tension, improve the ability of nursing new-borns and role adaption, and enhance nursing satisfaction, worthy of clinical promotion.

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