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# Influences of family-centered maternity care nursing on puerperal depression of delivery women during puerperal period.

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## Abstract

**Objective: Discuss the preventive effects of family-centered maternity care nursing on puerperal depression of delivery women during puerperal period and relieve burden of natural delivery women and decrease the possibility of delivery women's postpartum depression.**

**Methods: 120 natural delivery women in the obstetrics of Yuhuangding Hospital from July 2015 to 2016 were randomly divided into two groups: the control group (n=60) was endowed with the conventional nursing. Delivery women accepted examination of prepartum, instruction of delivery, and conventional nursing of puerperium. The experimental group (n=60) accepted the family-centered maternity care nursing based on the control group. There was no statistical significance on age, cycle of gestation, education level, personal incomes and frequency of gestation (P>0.05) in both group, showing comparability. Before nursing and after one month of postpartum, Self-Rating Anxiety Scale (SAS) and Edinburgh Postpartum Depression (EPDS) were applied to do effect evaluation. Incidence of puerperal depression of delivery women in both groups were observed and compared.**

**Results: By making a comparison on SAS and EPDS between two groups, there was no statistical significance at pre-care nursing in both groups, but scores after birthplace in both groups were slightly reduced by comparing with pre-care nursing. Moreover, significance of the experimental group was less than the control group (P<0.05). The depression rate in the control group was up to 53%, while the experimental group was only 37%. The number of the depression in the experimental group was obviously less than the control group. The difference between them had statistical significance ($\chi^2$=9.6, P<0.05).**

**Conclusions: Family-centered maternity care nursing has the important role on relieving puerperal depression and improving life quality of delivery women, thus delivery women will pass through delivery period and puerperium without pressure.**

**Keywords:** Maternity care nursing, Family-centered, Puerperal depression, Delivery women.

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## Introduction

Puerperal depression is the depressive symptoms of delivery women after delivery. It is a common emotional spiritual obstacle disease. Delivery women often feel solitary and they are hard to focus attention and profoundly pessimistic or even have suicidal tendency and illusion [1]. Puerperal depression can be sustainable in the entire puerperium or even the longer time. This not only does harms to delivery women's physical and psychological health and marriage harmony, but also affects intelligence development of infants, emotional formation and behavioral development. What's more, delivery women may kill their babies. As a result, puerperal depression receives more attention of clinical and research workers. Adhering to the nursing purport of "people-oriented", Family-centered Maternity Care (FCMC) is gradually approved by pregnant and delivery women and relatives by individualized and personalized services. As a result, FCMC for delivery women effectively combines FCMC with puerperal depression to help delivery women to acquire relevant physiological and health knowledge, reduce anxious emotions of delivery women, and help delivery women to adapt to the role, and effectively improve gestation conclusion of delivery women [2]. In the study, FCMC was applied in clinical nursing of delivery women to discuss influences of FCMC on puerperal depression of delivery women with the main purpose of reducing possibility of delivery women with puerperal depression, thus delivery women can pass through the delivery period and puerperium.

## Methods

### Clinical data

120 natural delivery women who were in the obstetrics of our hospital were selected at random. Inclusion criteria were shown as follows; (1) all respondents signed the informed consent; (2) they accepted SAS; (3) Various physiological indexes were normal; (4) they had no obstacles of mental disorder, dysgnosia, cerebral injury, complication of pregnancy and complication; (5) They had senior high school or above and could comprehend questionnaire contents. They were willing to cooperate voluntarily. They passed the approval of Ethics Committee. According to random digital method, 120 delivery women were divided into the experimental group and research group at random, including 60 patients in each group. The mean age was (26.40 ± 6.75). Gestation length was (41.23 ± 3.16 w). The education years were (13.90 ± 4.62). Individual incomes were (2784.60 ± 386.53 Yuan). There were 35 uniparas and 250 multiparas. The control group had 60 delivery women with the mean age of (28.20 ± 6.13) and gestation length of (39.87 ± 3.46). The education years were (12.30 ± 3.91) and individual incomes were (29.14.20 ± 368.97 Yuan). There were 34 uniparas and 26 multiparas. The statistical analysis showed that there was no statistical difference in age, gestation length, educational status, individual incomes and gestation times of both groups (P>0.05).

### Nursing method

**The control group:** The conventional nursing was applied. Delivery women accepted prenatal examination, parturient guide and conventional nursing in puerperium.

**The experimental group:** Based on the conventional nursing, the group was endowed with FCMC. The implementation steps were shown as follows.

*Establishment of the FCMC concept:* Though pregnant women take place obvious changes in physiology and mentality, but they still belong to healthy people, but they just stay in the special physiological stage and need to complete healthcare in gestation period and take care of new-born. During the hospitalization, the maternity care range should cover the entire family, instead of being limited to delivery women.

*Comfortable and warm hospitalization environment:* After hospitalization, one-to-one accompany service should be applied to encourage relatives to positively participate in the birth process of delivery men, emphasize importance of harmonious family relationship on mental health of mothers and children, and reduce anxiety and fearfulness of delivery women and relatives.

*The family-centered healthy education:* It is necessary to complete communication between nurses and patients, conduct psychological counselling for delivery women, and help them to adapt to role transfer; teach a relaxed method, correct incorrect view of birth for delivery women and relatives, explain relevant knowledge after puerperal depression and obtain support of relatives.

*The family-centered delivery support:* As delivery, it is necessary to encourage delivery women with kind attitude, make them keep in the favorable state, reduce spiritual stimulation caused by various causes, inform discomfort symptoms for delivery women, make a corresponding explanation for anxiety of delivery women and relatives, and relieve their concern.

*The family-centered postnatal nursing:* It is necessary to timely relieve emotional depression caused by delivery pain and fatigue, convey parenting experience and breast feeding, guide balance dieting, sufficient rest and good mood.

### Evaluation method

Delivery women in both groups accepted mental questionnaire after hospitalization and one month after delivery. Self-rating Anxiety Scale (SAS) and Edinburgh Postpartum Depression Scale (EPDS) were used as the evaluation tools.

**SAS:** SAS is suitable for adults with anxiety to evaluate subjective feeling of patients. This contains 20 items. The grade 4 evaluation is applied to obtain standard scores by summing scores of each item. Diagnosis standard: no anxiety refers to scores<50; 50-59 scores, 60-69 scores and scores>60 refer to light, middle and severe anxiety. The higher score is, the more obvious tendency will be.

**EPDS:** There is no uniform diagnosis standard for puerperal depression. The cognized one is the Edinburgh Postpartum Depression Scale (EPDS) established by Cox et al. And it is used as the standard for diagnosis. The sensitivity and specificity are higher. EPDS belongs to mental self-evaluation scale and includes 10 items. According to severity of symptoms, grade 4 scoring mechanism is applied to get the sum of 10 items. Diagnosis standards are shown as follows: <9 scores are used as no postpartum depression, ≥ 13 scores refer to puerperal depression and 9-13 scores are diagnosed as puerperal depression.

### Statistical method

SPSS16.0 software was used for statistical disposal. Measurement data applied t for testing. The measurement data applied $\chi^2$ inspection. P<0.05 showed that the difference had the statistical significance.

## Results

### Comparison of anxiety in both groups

By making a comparison on SAS and EPDS before and after nursing in both groups, the difference of delivery women in the experimental group before and after the nursing had no statistical significance (P>0.05), but the anxiety of both groups after nursing was improved (P<0.05). Moreover, compared with the control group, anxiety in the experimental group had the statistical significance (P<0.05), showing that FCMC was

superior to the conventional nursing in reducing anxiety (Table 1).

***Table 1.*** *SAS and EPDS scoring comparison of delivery women before and after nursing in both groups* $\bar{x} \pm s$.

| Group types | Examples | SAS | | EPDS | |
|---|---|---|---|---|---|
| | | Before nursing | After nursing | Before nursing | After nursing |
| Control group | 60 | 59.48 ± 8.25 | 43.52 ± 8.15 | 12.87 ± 3.92 | 9.56 ± 2.96 |
| Experimental group | 60 | 58.96 ± 8.56 | 31.11 ± 7.83 | 12.35 ± 3.67 | 7.71 ± 3.04 |
| t value | | 0.31 | 7.764 | 0.69 | 3.083 |
| P value | | >0.05 | <0.05 | >0.05 | <0.05 |

### *Depressive situation comparison of delivery women in both groups*

Depressive rate in the control group was up to 50% and that of the experimental group was only 36%. The number of depressive delivery women was obviously less than the control group. The difference in both groups had statistical significance ($\chi^2$=9.6, P<0.05), showing that the improved depression situation of the FCMC was superior to the conventional nursing (Table 2).

## Discussion

Postpartum Depression (PPD) refers to mental obstacles of delivery women after 6 w, including depression, sorrow, irritability, or even illusion and delusion. The severe one even damaged children and committed suicide. More than half of delivery women had instable emotions after delivery. 10%-15% of new mothers had the strong performance. According to literature reports, overseas PPD morbidity was 3.5%-33.0%, while the domestic was 3.8%-16.7%. PPD not only affects life quality of delivery women, but also brings great pain to the family [3].

PPD is the result of subjective and objective factors for delivery women. Hormonal readiness of delivery women *in vivo* was dropped rapidly by comparing with gestation. This was the important cause for delivery women's mental depression. However, delivery women are young and short of delivery knowledge and parenting experience, they sustain the great mental burden in gestation period. They even show excessive concern and anxiety for infant health, gender and nursing; thus, they always have tension and dread feeling, which is the direct induction factor of puerperal depression. Delivery women are short of husbands' concern and care in the puerperium. Lying in bed after delivery will cause constipation or complications for postnatal wound infection and breast distending pain will make delivery women depressed or even have anxiety emotions. These will intensify symptoms of postpartum depression [4].

With the medical mode transformation today, the maternity nursing mode turns to "people first" and value diversified, characteristic and personalized services. What's more, it must promote and improve ideal expectation in gestation, delivery and lying-in, reduce complications of mothers and children, and relieve depressive symptoms of delivery women [5]. The conventional maternity nursing focuses on the medical workers' tasks and staging service mode. Medical workers don't consult with relatives of delivery women and make a diagnosis decision. Meanwhile, as delivery, relatives can't accompany in the whole process. All of these will result in unsmooth doctor-patient communication and lengthen hospitalization time of delivery women [6].

Family-centered Maternity Care (FCMC) is centered on individual management to organically combine technical support of medical workers with relatives' emotional support, take care of mothers and babies, and improve compliance of delivery women. FCMC pursues for informed consent right and personalized service philosophy. Therefore, delivery women can be encircled by family support and encouragement. FCMC embodies the overall nursing philosophy and humanistic concern, thus delivery pain can be minimized, thus delivery women can feel warmth and love, promoting family harmony. FCMC sets up prenatal education for knowledge training and psychological counselling [7]. In this way, delivery women and relatives can understand and know about all nursing activities in delivery period. This is good for improving maternity nursing quality and enhancing delivery women's satisfaction on maternity nursing. Meanwhile, psychological and emotional support is given to delivery women to reduce anxiety and fearfulness of delivery women in delivery process, to relieve puerperal depression.

The study showed that the depressive rate of conventional maternity nursing was up to 53%, while the FCMC could obviously reduce puerperal depression and it was only 37%. Depression in FCMC was obviously less than the control group, showing that FCMC was superior to the conventional maternity nursing as improving puerperal depression. The nursing philosophy with the center of individual management and humanistic concern with the core of reducing delivery women's pains enable delivery women to feel family love and warmth and promote family harmony.

The study made a comparison on SAS and EPDS before and after nursing, showing that anxiety of delivery women after nursing was slightly improved, while SAS and EPDS scoring of delivery women in FCMC group after nursing were less than the control group, showing that FCMC was superior to the conventional maternity nursing mode as reducing anxiety. Beginning with reducing prenatal and delivery anxiety and depression, FCMC uses prenatal education and technical guide to increase healthy knowledge and delivery knowledge in perinatal period, thus the effective self-nursing method can be used to improve self-nursing ability and relieve anxiety of delivery women in gestation process, to reduce postpartum depression.

As a new nursing mode, it is the best maternity nursing mode in international medicine. We mainly studied influences of FCMC on delivery women's puerperal depression. FCMC can obviously reduce possibility for delivery women's puerperal depression, thus delivery women can pass through the gestation period and puerperium.

***Table 2.*** *Comparison of depression status in both groups.*

| Group types | Examples | No depression | Light depression | Middle depression | Severe depression | Depression rate |
|---|---|---|---|---|---|---|
| Control group | 60 | 28 | 21 | 6 | 5 | 0.53 |
| Experimental group | 60 | 38 | 20 | 2 | 0 | 0.37 |

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