# Effect of Continuous Nursing Model on Maternal Depression and Delivery Outcome

Li Qiu
BinZhou Polytechnic, Binzhou, 256603, China

**Keywords:** Continuous Nursing Mode; Maternal Mood; Depressed Mood; Delivery Outcome

**Abstract:** Postpartum depression is a common psychological disorder among pregnant women at present. It mainly occurs from the period of pregnancy to one year postpartum. Postpartum depression belongs to the special group of pregnant women, which has an impact on the physical psychology of pregnant women and even the life, health and safety of infants. With the current development of medical care in China, postpartum depression has been paid attention to by the majority of medical patients. Medical staff and maternal family members also began to pay attention to their mental health problems in maternal care, so as to ensure that maternal mood is comfortable and smooth delivery. This paper mainly studies the impact of continuous nursing model on maternal depression and delivery outcome. This paper expounds the situation of maternal depression, and then takes action on continuous nursing intervention measures, psychological counseling, nursing guidance and regular return visit guidance. In this paper, 150 pregnant women were divided into experimental group and control group to study the depression and delivery outcome of the two groups. The depression of pregnant women was evaluated by SDS and EPDS. The influence of maternal depression on delivery outcome was studied by studying the birth weight, length and gestational age of newborns. The experimental results show that continuous nursing has a good effect on alleviating maternal depression. Before the artificial continuous nursing intervention, there was little difference between the SDS and EPDS scores of the two groups. However, in the measurement of the scale after the continuous nursing intervention, the SDS depressive tendency of the pregnant women in group A was 31.23, which was much lower than that of the pregnant women in group B. in terms of EPDS scale, the depressive tendency of pregnant women in group A was 33.15, which was far less than that of pregnant women in group B was 39.12.

## 1. Introduction

Postpartum depression is a common psychological disorder of pregnant women in the process of pregnancy and production. Pregnant women tend to be depressed due to physical changes and physiological reactions during pregnancy. Postpartum depression burst out due to childbirth pain during production. It is difficult to balance between family and work during the recovery period after delivery, which is also easy to lead to depression [1-2]. There are various inducements. Maternal depression in a high incidence state will have a serious impact on maternal body and psychology, may also affect maternal delivery in the process of production, and even have suicidal or infanticide thoughts and behaviors in postpartum mothers [3-4]. As a new nursing mode, continuous nursing provides comprehensive care for patients, one-stop nursing service from hospitalization to discharge, paves the way for patients' discharge life, and turns patients' daily cooking from hospital to family and from medical care to relatives [5-6]. Continuous nursing for pregnant women, dredging their emotions, giving birth guidance to pregnant women, strengthening their psychological support and emotional comfort to alleviate their depression, which is a new treatment for maternal depression in recent years [7-8]. The continuous nursing model can effectively control maternal depression, reduce the incidence of postpartum depression, improve maternal self-efficacy and promote maternal adaptation to the role of mother. Therefore, the study of continuous nursing model has certain practical significance for maternal depression and delivery outcome [9-10].

Many domestic and foreign scholars have made some research on maternal depression and its outcome. Dewi R et al. pointed out that women should take care of their families while keeping their jobs,the pressure of life, economy and work on the part of women is increasing. The incidence rate of postpartum depression is increasing year by year is also increasing [11]. Ebott J A and others pointed out that the influence of various factors on postpartum depression is a regular pattern in the pregnant and puerperal period. The incidence of postpartum depression is different from that of the third trimester and the postpartum period. The symptoms of postpartum depression will be improved with the extension of postpartum time, and the incidence rate will gradually decrease and disappear [12]. These studies on maternal depression provide a theoretical basis for the continuous nursing model studied in this paper.

This paper mainly studies the impact of continuous nursing model on maternal depression and delivery outcome. This paper expounds the situation of maternal depression. The manifestations of maternal depression are the same as ordinary depression, but the harm caused by it is not only itself, but also may cause the dysplasia of newborn infants. Then, take action on continuous nursing intervention measures, psychological counseling, nursing guidance and regular return visit guidance were carried out for pregnant women. In this paper, 150 pregnant women were divided into experimental group and control group to study the depression and delivery outcome of the two groups. The depression of pregnant women was evaluated by SDS and EPDS. The influence of maternal depression on delivery outcome was studied by studying the birth weight, length and gestational age of newborns.

## 2. Study on the Effect of Continuous Nursing Model on Maternal Depression and Delivery Outcome

### 2.1 Maternal Depression

Depression is a kind of stress reaction emotion that is easy to appear in the current population. It is a negative mentality that people can't face, don't want to face or are in a bad situation. Depression is mostly manifested in depression, slow thinking, slow action, weak willpower, plummeting weight, inferiority and self-inhibition. Depression will cause great negative harm to the human body. The same is true of maternal depression. Maternal depression mostly occurs at the time point from maternal pregnancy to the first anniversary of maternal production. The manifestations of maternal depression are the same as ordinary depression, but the harm caused by it is not only itself, but also may cause the poor development of newborn infants.

With the change and development of the current era, the requirements of pregnant women for the process of childbirth and pregnancy are becoming higher and higher. Novice parents are mostly at a loss about pregnancy. The man's main attitude will focus on working hard to earn all the expenses of pregnant women in the process of childbirth and pregnancy. At this time, pregnant women are at a loss, novice mothers have poor self-care ability, low mental health level and low patience. They will form a habit when they are taken care of by both parents during pregnancy. After childbirth, the attention of both parents will shift to the baby, and the attention on the maternal will be slightly reduced. The maternal fatigue may not adapt to this gap after childbirth, due to the influence of physical, psychological, family and other comprehensive factors, postpartum depression occurs in pregnant women.

In the hospital nursing stage, medical staff also pay more attention to the physical care of pregnant women, and only slightly over the psychological care of pregnant women. At present, China's clinical medical resources are limited, and most of the medical staff are nursing related personnel of severe patients. These medical staff take proper care of the physical and physiological health of pregnant women, but seriously ignore the mental health of pregnant women. The traditional nursing mode is based on nurses' health education and psychological communication to patients. Patients passively accept relevant knowledge and can not mobilize patients' enthusiasm and initiative. Psychological needs are difficult to meet because they are not paid attention to, and the nursing quality can not be improved accordingly. The continuous nursing model is an

implementation method of social support. It uses the existing human and material resources to give full play to the ability of patients and family members to participate in health care, so that the pregnant women can actively master self-care skills, so that the family members and pregnant women can understand the relevant knowledge, avoid the knowledge loopholes of pregnant women after nurse health education, and effectively ensure that the pregnant women coordination between family members and nurses. In addition, the continuous nursing model can improve the quality of nursing, reduce the workload of medical staff to a great extent, and improve the work efficiency of medical workers. Rational use of intervention measures to improve the quality of life and mental health of primipara is very important.

### 2.2 Continuous Nursing Interventions

(1) Psychological counseling

During pregnancy and childbirth, always pay attention to the psychological situation of pregnant women. Once pregnant women have depression tendency, timely conduct psychological counseling for pregnant women, understand the psychological situation of pregnant women in real time, give appropriate care to pregnant women, remind their relatives of precautions about maternal production, help pregnant women adjust psychological pressure, establish a good relationship with them and improve their depression.

(2) Conduct nursing guidance

Give nursing guidance to pregnant women during hospitalization, so that they can understand the nursing knowledge of maternal life and health care, breastfeeding, newborn care and self-care, popularize the safety of production, introduce the specific management of operation, and carry out health education for pregnant women. On the eve of maternal discharge, carry out discharge guidance, issue health guidance manuals, etc., record maternal file addresses, and prepare regular return visits.

(3) Follow up guidance after discharge

After the parturient is discharged from the hospital, make regular return visits every month to understand the recovery and mental health status of the parturient, establish Internet contact with the parturient, and timely seek help from the medical patients through QQ WeChat and other contact methods when the parturient encounters problems, so as to help the parturient know more about mother and child knowledge.

### 2.3 Mean±Standard Deviation Algorithm

In this paper, the self rating depression scale (SDS) and Edinburgh Postpartum Depression Scale (EPDS) were used as the investigation and research indicators of maternal depression. The data results were entered and analyzed by Excel. T-test was used for comparison between groups, and the measurement data were expressed by mean±standard deviation. If $P < 0.01$, the difference was statistically significant; if $P > 0.05$, the difference was not statistically significant; if $P < 0.05$, the difference was statistically significant.

The mean is mainly used to calculate the average of all data in a group of data. In this paper, it is used to study the depression tendency of pregnant women, n is the sampling number of pregnant women. The specific algorithm formula is as follows:

$$\overline{X} = \frac{\sum_{i=1}^{n} X_i}{n} \tag{1}$$

As the arithmetic square root of the arithmetic mean of the square of the deviation from the mean, the standard deviation is often used as the measurement basis for the degree of statistical distribution. In this paper, it is used to study maternal depression. The specific algorithm formula is as follows:

$$\sigma = \sqrt{\frac{\sum_{i=1}^{n} (x_i - \overline{x})^2}{n}} \tag{2}$$

Where, $\sigma$ is the standard deviation of maternal depression, and n is the number of maternal samples.

## 3. Research and Analysis

### 3.1 Research Object

The main research object of this paper is pregnant women. According to the research theme of this paper, 150 pregnant women who gave birth in the obstetrics and gynecology department of a hospital were selected and divided into two groups. One group has 75 cases, of which group A is the observation group and group B is the control group. The criteria for selecting pregnant women samples are:(1)between the ages of 20 and 40;(2)gestational weeks ranged from 38 to 41 weeks;(3)there was no tendency of depression before delivery;(4)there were no patients with pregnancy complications or cardiovascular disease. All the selected parturients were informed of the observation experiment and signed the corresponding research agreement to cooperate with the study.

### 3.2 Research Process Steps

In the research method of the two groups of maternal samples, the pregnant women in group B were given routine nursing during hospitalization and any nursing intervention after discharge. For group a parturients, on the basis of routine nursing during hospitalization, observe the parturients, provide psychological counseling to the parturients, assist the parturients in production, and carry out nursing training before the parturients leave the hospital to help the parturients recover their bodies. After the parturients leave the hospital, conduct fixed-point and regular return visits to understand their psychological status, and answer online at any time in the face of problems that the parturients do not understand. In terms of maternal sample research indicators, this paper uses self rating Depression Scale (SDS) and Edinburgh Postpartum Depression Scale (EPDS) as maternal depression survey indicators. The higher the score, the more serious the maternal depression is, on the contrary, the smaller the maternal depression tendency is. For the data evaluated by the scale, this paper uses the form of mean±standard deviation for calculation and processing, where $p < 0.01$ indicates that the difference is statistically significant.

## 4. Experimental Study and Analysis of the Effect of Continuous Nursing Model on Maternal Depression and Delivery Outcome

### 4.1 Effect of Continuous Nursing Model on Maternal Depression

How about the effect of continuous nursing on maternal depression? It is necessary to continuously follow up the psychological situation of pregnant women. In the study of experimental observation on two groups of maternal samples, after the grouping of maternal samples, the current SDS and EPDS scales are evaluated for the two groups of pregnant women, and then a series of operations of continuous nursing mode are started for group A, the two groups of parturients were assessed by the scale after delivery and before discharge. The results of the scale were collected and integrated as shown in Table 1.

**Table 1.** Effect of continuous nursing model on maternal depression

| | Before SDS | After SDS | T | P | Before EPDS | After EPDS | T | P |
|---|---|---|---|---|---|---|---|---|
| A Group | 54.32 | 31.23 | 21.84 | <0.05 | 45.39 | 33.15 | 17.49 | <0.05 |
| B Group | 54.13 | 38.24 | 10.33 | <0.05 | 45.11 | 39.12 | 9.14 | <0.05 |

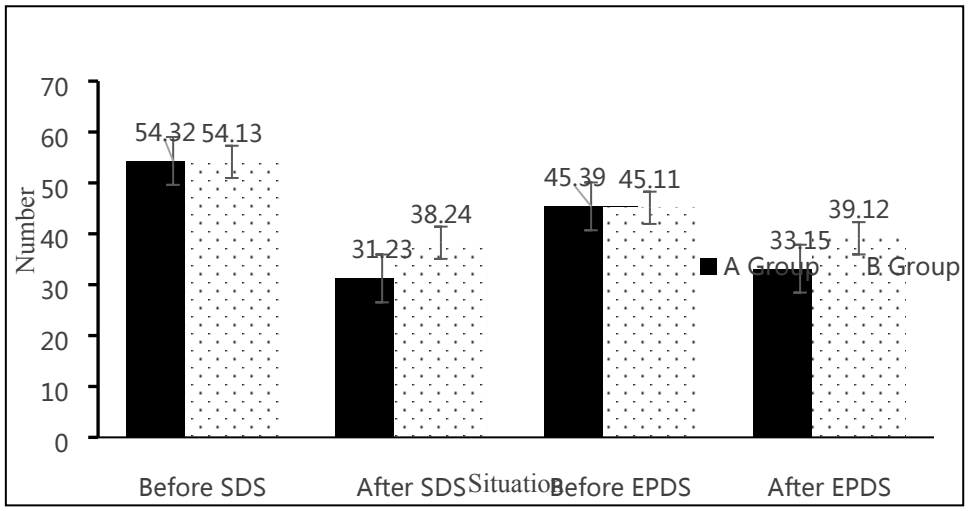


**Figure 1.** Effect of continuous nursing model on maternal depression

As can be seen from Figure 1, it has been proved that continuous nursing has a good effect on alleviating maternal depression. Before the artificial continuous nursing intervention, there was little difference between the SDS and EPDS scores of the two groups. However, in the measurement of the scale after the continuous nursing intervention, the SDS depressive tendency of the pregnant women in group A was 31.23, which was much lower than that of the pregnant women in group B. In terms of EPDS scale, the depressive tendency of pregnant women in group A was 33.15, which was far less than that of pregnant women in group B was 39.12.

### 4.2 Analysis of the Effect of Continuous Nursing Model on Maternal Delivery Outcome

While continuing nursing alleviates the tendency of maternal depression, whether it has an impact on the outcome of maternal delivery is also a focus of this paper. In this regard, this paper takes the birth weight, length and gestational age of newborns produced by the two groups of pregnant women as comparison indicators to study the impact of continuous nursing mode on maternal delivery outcomes. The data results are shown in Table 2.

**Table 2.** Effect of continuous nursing model on maternal delivery outcome

| | Birth Weight | Length | Gestational Age |
|---|---|---|---|
| A Group | 30.36 | 52.15 | 39.25 |
| B Group | 30.29 | 50.12 | 39.12 |
| T | 0.074 | 15.67 | -0.37 |
| P | >0.05 | <0.01 | >0.05 |

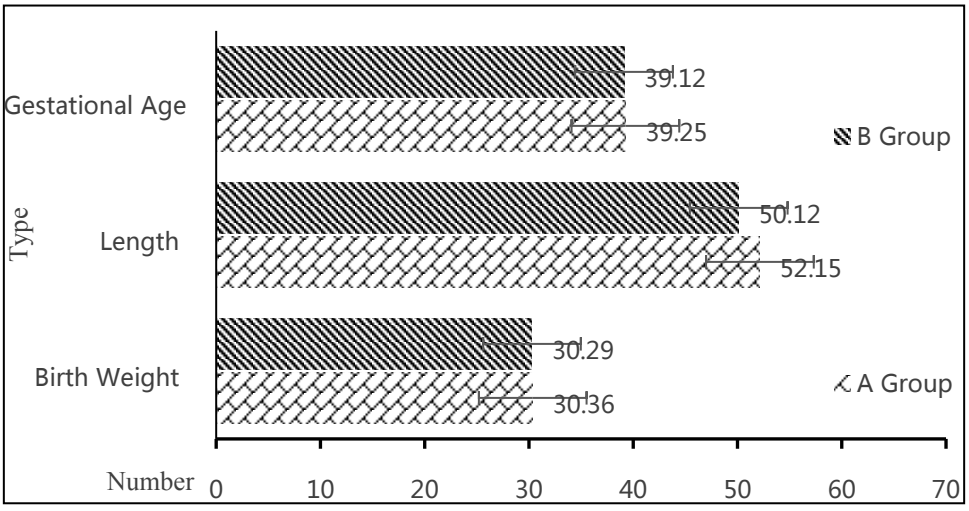


**Figure 2.** Effect of continuous nursing model on maternal delivery outcome

As can be seen from Figure 2, maternal depression has no significant impact on the birth weight and gestational age of newborns, but has a significant impact on the length of newborns. In the comparison between birth weight and gestational age of newborns, the difference between birth weight and gestational age of newborns in the two groups is $p > 0.05$, which is not statistically significant. In terms of early body length, the average body length of newborns in group A is 52.15cm, and the average body length of newborns in group B is 50.12cm, which is statistically significant.

## 5. Conclusions

At present, postpartum depression is one of the common negative emotions of pregnant women. If you are careless, it will develop into real postpartum depression. Therefore, it is very important to pay attention to the situation of postpartum depression, conduct psychological counseling for pregnant women, enable medical staff to carry out nursing intervention for pregnant women during their hospitalization, ensure their mental health, and carry out continuous nursing intervention for pregnant women to alleviate postpartum depression. This paper studies the impact of continuous nursing on maternal depression and delivery outcome. It is learned that continuous nursing plays a great role in alleviating maternal depression and ensuring maternal mental health. At the same time, it can also ensure the body length of newborns. Therefore, it is of practical significance to apply continuous nursing intervention to the clinical practice of maternal pregnancy and production.

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