

# *The Effect of Comprehensive Nursing Intervention based on Intelligent fog Calculation on Postoperative Rehabilitation of Cesarean Section Women*

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**Abstract:** Science and technology are constantly improving, as is medical technology. Now the medical methods are very advanced, and women's fertility methods have another option-cesarean section, but the problem of postpartum rehabilitation of cesarean section has always been medical. A research hotspot in the field is related to the physical and mental health of pregnant women. To this end, this article presents a study on the effect of comprehensive nursing intervention on postpartum rehabilitation of cesarean delivery. In this paper, we set up a control group experiment and observed the effect of comprehensive nursing intervention on the postpartum rehabilitation index of cesarean section to achieve the purpose of the study. In this paper, the degree of postoperative pain, milking time, milk production, exhaust time and uterine recovery are selected as indicators, and a control group experiment is set up for research. This study found that the average milking time of the women in the experimental group was 36 hours, the average milking time in the control group was 43 hours, the average milk production in the experimental group was 425 ml, the average milk production in the control group was 368 ml. The average exhaust time is 25h, and the control group's average exhaust time is 36h. The results of this study show that comprehensive nursing interventions have a positive impact on the postoperative recovery of cesarean women.

## **1. Introduction**

The development of science and technology will undoubtedly create better conditions for medical and health care. With the improvement of medical technology, more mothers have now chosen cesarean section as the method of delivery. Especially in recent years, the rate of cesarean section in hospitals is slowly improving, it has

become the most important delivery method at present, but everything has advantages and disadvantages. Although the rate of cesarean section is increasing, the postoperative recovery problems after cesarean section and the advantages and disadvantages of cesarean section have fallen. We all know that in some cases, cesarean section can undoubtedly guarantee the health and survival rate of mothers and infants, but cesarean section is ultimately an abdominal operation, and there may be complications after the operation.

As an emerging nursing intervention model in the field of modern medical nursing, comprehensive nursing requires attention to the nursing needs of maternal physiology and psychology, so as to improve maternal psychological and physiological comfort through interventions in environment, cognition, psychology and pain. Degree, reduce the discomfort of cesarean section during perioperative period, which is of great significance for the study of postpartum rehabilitation of cesarean section.

Harrison explore the effect of the choice of analgesia method after cesarean section on the analgesic effect and postoperative treatment, 90 women were randomly divided into 3 groups, 30 in each group. The analgesia after cesarean section adopts classic intramuscular injection and PCA (patient-controlled analgesia) two kinds of analgesia methods. Within 48 hours after cesarean section, respectively, the awakening and pain of the women were observed. Women in the DV group received intramuscular injection of 75 mg of diclofenac every 12 hours. Harrison, M. S evaluated the effectiveness and safety of various analgesic methods in terms of postoperative opioid demand, pain numerical score, side effects, and the first walking time after 48 hours[1]. Shin evaluated the effect of low-dose ketamine subcutaneous infiltration before incision on pain management after cesarean section, 70 healthy women underwent cesarean section under lumbar anesthesia. Three minutes before the surgical incision, the patient received 30 mg of ketamine (study group; n = 35) or 0.9% saline (placebo group, n = 35) as a subcutaneous injection at the incision. The volume of the solution is 6 ml. The placebo group was intramuscularly injected with 30 mg of ketamine to the control group to observe any related systemic ketamine side effects. Hemodynamic parameters were recorded regularly during the operation[2]. Mahshid Ghasemi conducted a randomized controlled trial to observe the effect of intrathecal injection of low-dose atropine on nausea and vomiting after cesarean section. Mahshid Ghasemi ASA I ~ II women who elective cesarean section and agreed to spinal anesthesia received 0.5% high-pressure bupivacaine 12.5 mg, morphine 200 µg and one of the following three solutions: atropine 100 µg intrathecal and saline intravenous; physiological Intrathecal saline and atropine 100µg intravenous injection; saline only intrathecal and intravenous injection. Mahshid Ghasemi examined the incidence and severity of PONV, pain grading, and the need for analgesics[3].

This article first summarizes the relevant definitions and theories of cesarean section, and based on the relevant knowledge of cesarean section, selects the degree of postoperative pain, milking time, milk output, exhaust time, and uterine recovery as indicators In order to ensure the accuracy of the experiment, a control group experiment was set up for research. In this article, when selecting the research object, all the women were selected as the research object, and other characteristics were not statistically different.

## 2. Calculate the Basic Theoretical Knowledge of Cesarean Section Based on Smart Fog

### 2.1. Overview of Cesarean Section

#### (1) Definition of cesarean section

Cesarean section refers to the operation of removing the embryo through cesarean section and uterine incision after reaching 28 weeks or more [4-5]. This operation is the most common operation in the field of obstetrics, and plays a key role in pregnancy complications and reducing maternal and infant mortality. In addition, with the improvement of medical technology, the related medical conditions have been continuously improved, the safety of caesarean section has been improved, and the number of caesarean sections in countries around the world has also increased. The statistics on the proportions of domestic cesarean section and natural childbirth in July 2019, as shown in Figure 1:

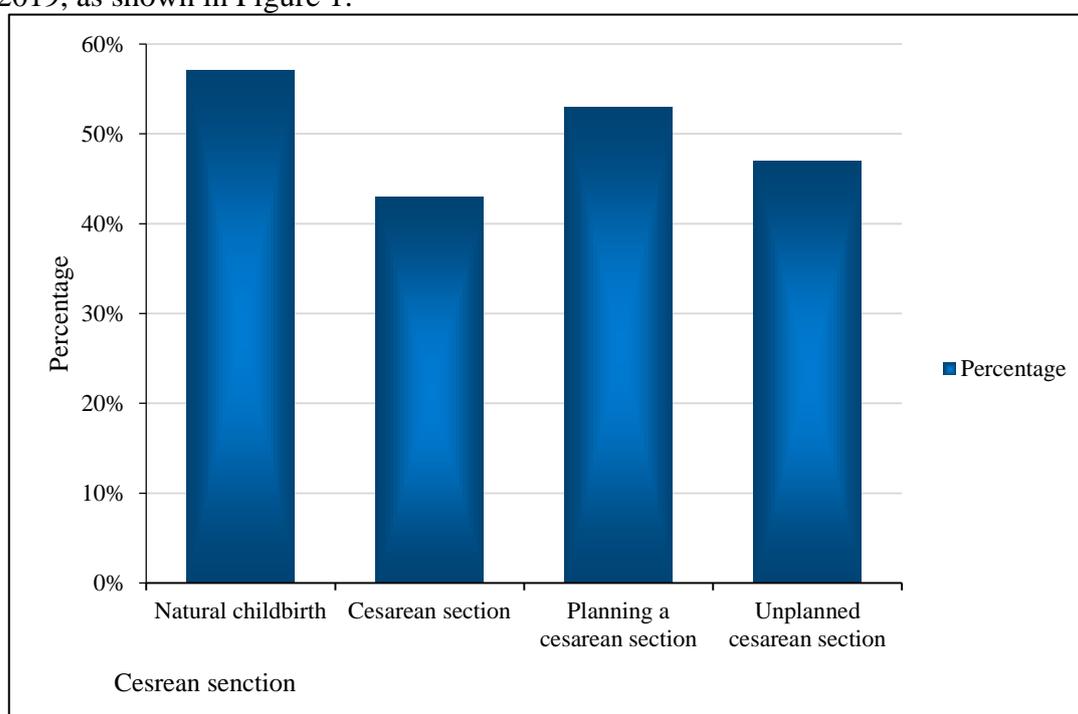


Figure 1. Domestic statistics of cesarean section and natural delivery in July 2009

#### (2) The significance of cesarean section

Cesarean section is an important intervention in the field of obstetrics [6]. Due to the development of anesthesia, blood transfusion, infusion, hydro-electric balance knowledge and infection control measures, cesarean section has become an effective way to solve dystocia and some obstetric complications, can save the lives of mothers and babies, but the existing The argument is that cesarean section is a surgical method after all, and vaginal delivery is more normal, so vaginal delivery is advocated.

#### (3) Reasons for increased cesarean section rate

The growth rate of cesarean section in China is mainly concentrated in hospitals in big cities. How high is the rate of cesarean section? The rate of cesarean section is even more than 50%. So, why the rate of cesarean section in the big city hospitals is so high? That is because, in the obstetrics and gynecology department of these hospitals, many high-risk pregnant women are referred to hospital and their infants are

monitored The equipment is safe and it is easier to find abnormal conditions [7]. In addition, pain is an unbearable thing for everyone. Nowadays, the pain of vaginal delivery has not been resolved, so many people will choose cesarean section. An important factor.

(4) Complications after cesarean section

1) Recent complications to the mother

The incidence of hypotension syndrome in the supine position has increased.

Increased incidence of postpartum hemorrhage;

Increased puerperal disease rate;

Increased puerperal infection;

Increased surgical damage;

Increased incidence of hysterectomy during perinatal period;

Increased postpartum pain;

Increased venous thrombosis of the pelvis and lower extremities;

2) Recent complications for newborns

Pulmonary hyaline membrane disease (RDS) is twice as much as vaginal delivery;

Persistent pulmonary hypertension (PPH) increases;

Increased iatrogenic preterm birth;

Newborn jaundice increases:

The incidence of neonatal injury reported by foreign sources is 2% -6%.

3) Long-term complications to the mother

Chronic pelvic pain,

Pelvic adhesions;

Pelvic and abdominal endometriosis

Ectopic pregnancy with uterine incision;

Uterine rupture may occur again during pregnancy:

Abnormal placental position is prone to occur during pregnancy again

For the impact on fertility, the probability of secondary infertility and miscarriage increased significantly.

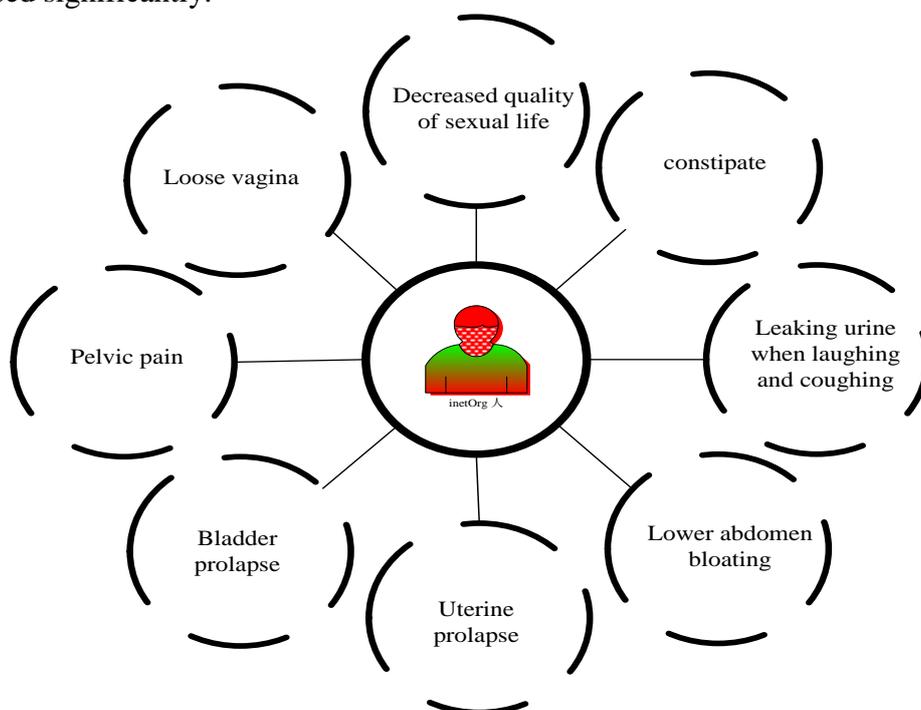


Figure 2. Long-term complications of the mother

As shown in Figure 2, whether it is a vaginal delivery or a cesarean delivery, the pelvic floor muscles of varying degrees can not be avoided during pregnancy. A large number of domestic and foreign research data show that at least 30% of women will develop pelvic floor dysfunction after delivery. If rehabilitation is not performed in time, a series of severe symptoms will appear as the age increases and the two children are pregnant and delivered.

4) Long-term impact on newborns:

The incidence of allergic asthma is three times that of vaginal delivery.

## 2.2. The Effect Of Analgesia After Cesarean Section

(1) The mechanism of postoperative pain: peripheral sensitization and central sensitization.

The current view on pain is that pain is caused by trauma, resulting in peripheral sensitization and central sensitization. The principle of regional sensitivity may be particularly related to the following changes in regional nerves: damaged nerve fibers are constantly being ectopically discharged; the second messenger ion channels related to potassium, sodium, chlorine, calcium, etc., especially those related to the umbilical cord. Changes in ion channels, such as  $\text{Na}_v1.8$ ,  $\text{Ca}_v2.2$ , and  $\text{C1}$  channels. The central sensitivity mechanism may be mainly related to the following changes: peripheral nerve stimulation is introduced into the spinal cord, N-methyl-D-aspartate (NMDA) receptors are activated, nerve calcium intake is increased, and spinal cord stimulates nerves. In order to avoid the formation of acute pain into chronic pain or neuropathic pain, it can be achieved by preventing regional sensitivity. Existing animal experiments have shown that effective methods to suppress local and central sensitivity include local anesthesia penetration, peripheral nerve block, intraocular anesthesia, etc. Drugs include anticonvulsants, central nervous system analgesics, and NMDA receptor antagonists.

(2) Causes of pain after cesarean section

Postoperative pain is a kind of sensation after injury to the body (tissue damage) caused by surgical injury, including a series of unpleasant sensations in physiology, psychology and behavior. The pain after cesarean section is firstly the incision pain caused by surgical trauma. The incision pain is somatic pain and the positioning is clear. The stimulation of the surgical incision can directly trigger an inflammatory reaction, resulting in a large amount of inflammatory mediators released. Inflammatory mediators can directly cause pain; they can also cause vasodilation, tissue edema, increase the sensitivity of effector receptors, decrease the pain threshold, and hypersensitize the nervous system, which can lead to increased pain, hyperalgesia, and even persistent pain. The second is postpartum contraction of uterine contraction. The uterine contraction pain is visceral pain, intermittent paroxysmal colic, which occurs mostly within 48 hours after delivery. It is due to the severe pain caused by early postpartum uterine tonic contraction and muscle fiber ischemia hypoxia. In clinical practice, oxytocin injection is routinely used after cesarean section to reduce postpartum hemorrhage and promote uterine contraction, oxytocin aggravates uterine contraction pain. Breastfeeding after childbirth will also increase uterine contraction pain; again after the operation is completed, or during the examination, pressing the bottom of the uterus to expel the pain caused by blood in the uterine cavity; finally, after the mother returns to the ward, because the woman is out of bed, Breastfeeding, or incision caused by a large cough, pain, etc. The purpose of analgesia after cesarean section is to effectively suppress incision pain and uterine contraction pain, and to

minimize adverse reactions.

### (3) Significance of analgesia after cesarean section

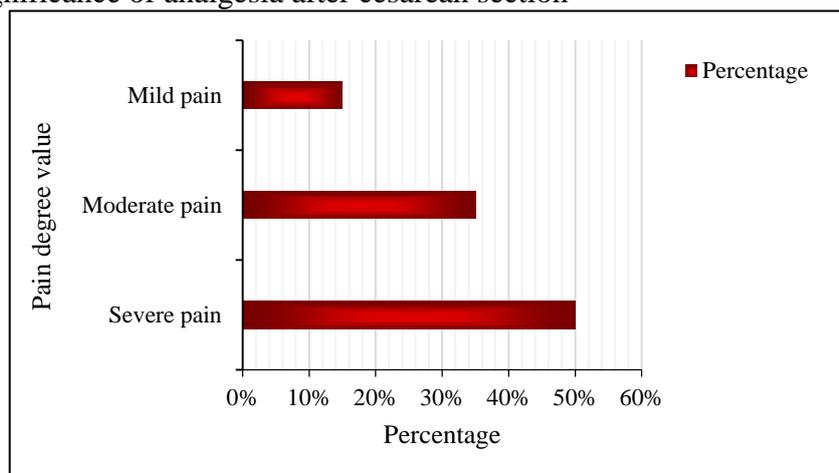


Figure 3. Survey chart of the proportion of pain degree

As shown in Figure 3, most pregnant women feel unbearable for the pain during childbirth, and 20% of them feel extremely severe pain.

Pain stimulation after cesarean section increases the body's stress, metabolism, and oxygen consumption. After surgery, pain stimulation stimulates the sympathetic nervous system, the release of catecholamines increases, the secretion of prolactin is inhibited, and the amount of milk secretion decreases. At the same time, it will also weaken the contractility of the uterus, and postpartum hemorrhage is easy to occur. Pain can also cause anxiety, insomnia, and even affect the mood and rest of the mother. It may even be related to the postpartum depression of the mother, plus the personal subjective factors of the mother, including mental state, personality, fatigue, weak will, and Factors such as the influence of the surrounding environment can also lead to increased pain, which delays the postoperative rehabilitation of the mother, which is contrary to the concept of accelerated postoperative rehabilitation. Good analgesia after cesarean section is not only helpful for the early feeding of newborns comfortably, the number of breastfeeding is also increased, but also can increase the secretion of serum prolactin, which helps early lactation and early milking time. Good analgesia, early maternal postpartum bed-out activities, is conducive to reduce the formation of postpartum thrombosis, promote early exhaust gas intake, accelerate early lactation, and can also prevent intestinal adhesions.

### (4) The development of analgesia after cesarean section

The analgesic methods after cesarean section are:

1) Preventive administration of analgesic drugs, this method has delayed analgesia, insufficient analgesia, requires repeated injections, prone to addiction, etc., causing great pain to the mother.

2) Incision medicine, opioid and NSAIDs incision infusion, incision medicine may become a diversified analgesic option in addition to systemic medicine, and the side effects of the drug are fewer, but the biggest worry is whether it affects wound healing.

3) Non-drug, electrical stimulation, acupuncture. These methods have not been widely used in clinic due to the limitation of conditions.

4) TAP block, which can provide good abdominal wall analgesia, but the disadvantage is that it is only effective for somatic pain, but not for visceral pain. The effective time of bicaïne TAP block is within 12 hours. The pain after cesarean

section is mainly caused by incision pain and uterine contraction pain, and the pain is more obvious within 48 hours. This method cannot satisfy the analgesia requirement after cesarean section.

5) Systemic medication, patient-controlled intravenous analgesia (PCIA), this method is most commonly used. The drugs currently used in obstetrics are mainly opioid analgesics, NSAIDs and antiemetic drugs. Background dose plus loading dose generally lasts about 48 hours. At present, there is no consensus on which medicine to use, resulting in uneven quality of postoperative analgesia, and some analgesia is insufficient, additional analgesic drugs are needed; some sedation is excessive, and the maternal is lethargic, causing the maternal to not breastfeed as soon as possible.

6) Intraspinal opioid analgesia (PCEA), compared with intravenous opioids, intraspinal administration can better relieve postoperative pain. However, the application of high-dose opioids can produce side effects such as nausea and vomiting, itching of the skin, urinary retention, prolonged exhaust time, and even respiratory depression.

### 2.3. The Impact of Postoperative Rehabilitation of Obstetrics and Gynecology

#### (1) The physiological process of uterine rehabilitation

Uterine rehabilitation refers to the process in which the uterus gradually returns to a non-pregnant state after the placenta is delivered. The main changes are uterine muscle fiber retraction and endometrial regeneration [8].

##### 1) Uterine muscle fiber contraction

The advancement of modern medicine has brought many new ideas. Modern medicine believes that the contraction of the uterus is not a decrease in the number of muscle cells, but the atrophy of muscle cells, which is mainly manifested as a significant reduction in the length and volume of muscle cells, and excessive precipitation of cellulose and itself. After dissolution, it is converted into amino acids under the action of lysosomal enzymes, enters the circulatory system and is excreted from the kidneys. When the uterine muscle fibers continue to contract, the weight and volume of the uterus will change [9]. In normal childbirth, after the placenta comes out, the size of the uterus is generally 17 cm × 12 cm × 8 cm. However, with the contraction of uterine muscle fibers, the volume and weight of the uterus will also change. When the delivery is completed and the placenta is expelled, the uterus gradually shrinks to the size of the uterus at the 12th week of pregnancy within 1 week after delivery. It can be buckled above the pubic symphysis during physical examination. Ten days after delivery, the uterus will slowly fall back to the pelvis. The size is generally about 6 weeks after the baby is born, at which time the uterus will return to the size of an unpregnant. In this process, the weight of the uterus is also decreasing. Generally, it is gradually reduced from 1000g at birth to 500g after 1 week, and then from 500g to 2 weeks after birth. It is 300 grams. It usually takes 6 weeks to return to a normal weight of 50-60g.

##### 2) Endometrial regeneration

After the placenta and embryonic membrane were separated from the sponge layer, due to the infiltration of white blood cells, the remaining ten layers were divided into two layers. The surface layer was degraded, necrotic, and discharged together with lochia. About 3 weeks after delivery, the new endometrial layer is renewed, and the entire new endometrium of the uterus is slowly repaired. In addition to the placenta attachment position, the surface of the uterine cavity is repaired by the new endometrium. [10].

### 3) Changes in uterine blood vessels

Immediately after delivery of the placenta, the attachment surface of the placenta shrinks to the size of the palm of the hand, and the area is only half of the original, resulting in narrowing of the compression of the open spiral artery and sinus. Thrombus formation can occur within a few hours, and the amount of bleeding gradually decreases until it stops. The large vessels that increase in pregnancy during the non-placental place undergo glassy changes and gradually absorb [11]. If the placenta attachment surface is repaired by the neointimal, thrombosis occurs due to poor recovery, which can lead to late postpartum hemorrhage.

What happens to the placenta after delivery? In general, the attachment surface of the placenta immediately shrinks to the size of the palm of the hand, and the area is only half of the original. This change will produce a series of changes, resulting in narrowing of the compression of the open spiral artery and sinus, in addition, there may be thrombosis, Thrombosis can occur within a few hours and will gradually decrease with the amount of bleeding until it stops . If the attachment surface of the placenta is repaired by the neointimal, thrombosis occurs due to poor recovery, which may lead to slow postpartum hemorrhage, which leads to late postpartum hemorrhage.

### 4) Changes in the lower uterus and cervix

We know that after the placenta is delivered, some changes will occur in the lower uterus and the cervix. Here, we will explain in detail. The first change is that the cervix will become soft and become purple-red, and the outer opening of the cervix will be ring-shaped like a cuff, and these changes are not going away at all. In the 2-3 days after delivery, the palace mouth can still accommodate 2 fingers. This process will not last very long. The cervical ostium will be closed after about 1 week, and the cervical canal will form. At this time, it is difficult to pass 1 finger. As time passes, the cervix will return to its normal shape 4 weeks after delivery. We all know that mild lacerations often occur in the delivery of the external cervix, and these things will change the external cervix of the primipartum from a prenatal round (unproductive type) to a post-natal one shape transverse split (productive type) Then, the muscle fibers in the lower part of the uterus will shrink after delivery, and gradually return to the uterine neck during non-pregnancy.

### (2) Clinical manifestations related to puerperium and uterine rejuvenation

#### 1) The bottom of the palace drops

After the placenta is delivered, the uterus is round and hard, and the bottom of the uterus is under the umbilicus. On the first day after delivery, the cervical ostium rose to the level of the sciatic spine, causing the uterine floor to rise slightly to the flat navel. Thereafter, it fell 1-2cm daily, and the uterus contracted and fell into the pelvic cavity on the 10th postpartum. You can't reach the bottom of the palace above the joint.

#### 2) Postpartum contractions

In the early puerperium, contraction of uterine muscle fibers causes paroxysmal pain in the lower abdomen, called postpartum contraction. It usually appears 1-2 days after delivery, and disappears naturally after 2-3 days. Breastfeeding will increase the reflex oxytocin increase, which may lead to increased pain [12].

#### (3) Poor pathological manifestations of uterine rejuvenation

Some factors that cause uterine rejuvenation during the puerperium are called incomplete uterine rejuvenation and poor uterine rejuvenation. The causes are tissue residues, placental polyps, uterine fibroids, uterine malformations, cesarean section, and intrauterine infections.

### 3. Uterine Birth based on Comprehensive Nursing

#### 3.1. Research Object

This article selects 78 women from a women's and children's hospital from December 2018 to December 2019 for cesarean section as the research object. Of these 78 women, aged 22-38 years, are all primiparas. Divided into two groups, the experimental group and the control group, 39 people in each group, in order to ensure the accuracy of the experiment, the experimental group and the control group selected in this article, their age and parity data are not much different, there is no Statistically significant ( $P > 0.05$ ).

*Table 1. Changes in hospital delivery in the past 5 years*

Years	Number of deliveries	Number of births	Uterus yield
2010	983	329	33.5%
2011	997	351	35.2%
2012	1005	421	41.9%
2013	1096	484	44.2%
2014	1149	538	46.8%
Total	5320	2123	40.6%

As shown in Table 1, the number of uterine births in this women's and children's hospital has shown a certain growth pattern with the passage of time. It can be seen that the number of people who choose uterine births will still increase in the future.

*Table 2. The composition of the indications for uterine birth in women's and children's hospitals in the past 5 years*

Indications for uterine birth	Year 2010	Year 2011	Year 2012	Year 2013	Year 2014
Has a history of uterine birth	53 (16.1)	66 (18.8)	69(16.4)	52(10.7)	108(20.1)
Fetal distress	99 (30.1)	100 (28.5)	44(10.5)	92(19.0)	64(11.9)
Breech position	38 (11.6)	37 (10.5)	62(14.7)	65(13.4)	45(8.4)
Symptoms of pregnancy	12 (3.6)	8 (22.8)	53(12.6)	14(2.9)	23(4.3)
Dystocia	113 (34.3)	119 (33.9)	120 (28.5)	123(25.4)	118(21.9)
Social factors	8 (2.4)	14 (4.0)	55 (13.1)	127 (26.2)	165 (30.7)
Other	6 (1.8)	7 (2.0)	18 (4.3)	11 (2.3)	15 (27.9)

As shown in Table 2, in the past five years, the most important component of the indications for uterine birth was dystocia. The social factors for choosing uterine birth have increased significantly in the past few years, and it has risen to 7% in 2014.

#### 3.2. Method

The control group received general postpartum care, and the control group received routine nursing intervention. The experimental group adopted comprehensive nursing intervention, the specific methods are as follows:

(1) Psychological intervention

Some women do not know much about cesarean section, which will cause psychological fear and affect the mood swings of the women. The emotional instability of the women may lead to postpartum hemorrhage. Therefore, psychological intervention should be included in comprehensive nursing interventions. Doctors and nurses should actively communicate with the mother, explain the knowledge about cesarean section, and conduct psychological counseling in a timely manner, patiently answer the doubts of the mother, ease the pressure on the mother, keep the mother's good attitude, and actively cooperate with the nursing work, conducive to early recovery.

(2) Preoperative care

From the night before the operation to the day before the operation, fasting and water are prohibited, drugs are prohibited, and smoking is prohibited. Before the operation, understand the patient's past disease history and recent treatment, improve the blood routine, coagulation time, platelets and other tests. Give intravenous drip of octreotide 0.3mg plus 0.9% sodium chloride solution 250ml, continue intravenous drip, reduce maternal portal pressure.

(3) Urination and incision care

After the operation, the nurse should encourage the mother to solve the urination problem on her own, and recommend that she get out of bed as soon as possible to promote postoperative recovery. At the same time, the sterile operation should be strictly performed to prevent infection during dressing change; pay attention to instruct patients to adopt reasonable coughing and turning methods to prevent the incision from cracking. Pay close attention to the time and nature of the patient's incision pain. When abnormalities are found, they should be dealt with in time and detailed records should be carefully made.

After the operation, the nurse should encourage the mother to resolve the urination problem on her own, and advise her to get out of bed as soon as possible to promote postoperative recovery. At the same time, strict aseptic surgery is used to prevent infection during dressing change, and attention should be given to instructing patients to take reasonable coughing and turning methods to prevent the incision from cracking. Pay special attention to the time and nature of the patient's incision pain, which should be dealt with in a timely manner and carefully recorded in detail.

(4) Nursing of breast and vulva

Before feeding the newborn, wash the nipples and breasts with a soft towel dipped in hot water. Stimulate lactation and milk production through continuous absorption. At the same time, instruct to take the correct breastfeeding posture and keep the vagina clean, clean the vagina with iodine solution 0.05% daily, rub it 1-2 times a day, and change the perineal pad frequently.

(5) Pain care

Let the mother choose a comfortable position. When you get out of bed for the first time, raise the head of the bed by about 45 °, first lie on the side and then sit down, and get out of the bed slowly; ask the mother to hold the incision through the hand or pillow when coughing or deep breath. To avoid the pain caused by pulling the knife edge; tell the mother to read magazines or listen to music to distract her and reduce the pain.

Let mom choose a comfortable position. When the mother gets out of bed for the first time, raise the head of the bed about 45 °, lie on the side first, then sit down and get out of the bed slowly. When coughing or breathing deeply, let the mother hold the incision with her hand or pillow to avoid the pain caused by the knife edge, tell her

mother to read magazines or listen to music to distract her and reduce pain.

### 3.3. Observation Indicators

#### (1) Evaluation of pain level

The visual analog scale (VAS) was used to evaluate the postoperative pain level of women, 0 means no pain, 10 means the most painful, 1-3 points are mild pain, 4-6 points are moderate pain, 7-10 points are severe pain .

#### (2) Lactation function and exhaust time

The lactation function and exhaust time of the two groups of women were compared to analyze the postoperative recovery of the two groups of women.

#### (3) The uterine recovery

The analysis of the uterine rejuvenation of the two groups of maternal women shows the recovery of the women.

1) The height of the uterine fundus: The ward was checked by the same doctor at the same time every morning after the operation, and the maternal was ordered to lie on the bed after urination and defecation. The distance of the highest point cm.

2) Falling height of uterine fundus: daily drop height cm = height of uterine fundus cm the day before-height of uterine fundus cm on that day.

### 3.4. Statistical Analysis

The database entry and statistical analysis are implemented on the SPSS19.0 software package. Measurement data were tested by t test, comparison before and after treatment within the group was by paired t test, comparison between groups was by independent sample t test, count data was by X2 test, and grade data was analyzed by Ridit. The measurement data related to repeated measurement adopts the analysis of variance of the repeated measurement design data.

## 4. Experimental Analysis of Uterine Birth Based on Comprehensive Nursing

### 4.1. Assessment of Pain Level

The degree of pain is the most intuitive indicator of maternal postoperative conditions. The postoperative pain degree of two groups of women was evaluated and analyzed. The results are shown in Figure 4.

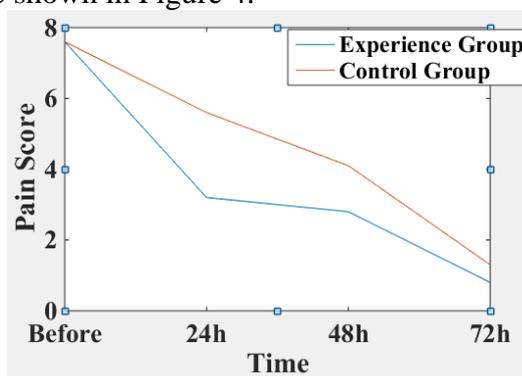


Figure 4. Analysis of pain assessment

It can be seen from Figure 4 that the initial pain of the two groups of women before the intervention after the operation is roughly the same, and there is no statistical

significance. However, after the intervention, the degree of pain in the experimental group was significantly reduced, and the pain level decreased rapidly within 24 hours after. In addition, the pain level still showed a downward trend at a later time. In contrast, the decrease in maternal pain in the control group was relatively stable, far less than that in the experimental group.

Table 3. Pain scores of the two groups of women before and after nursing

Group	Number of cases	Before care	After care	
			24h	48h
Test group	39	7.45 ±1.44	3.23 ±1.38	1.59 ±0.41
Control group	39	7.46 ±1.46	6.12 ±1.57	3.27 ±0.48

As shown in Table 3, the difference between the two groups of parturients before nursing and within 48h after nursing, the experimental group has a significant change in scores during 48h, indicating that the pain scores of the parturients in the observation group have been significantly reduced after nursing.

#### 4.2. Analysis of Lactation Function and Exhaust Time

Lactation is a natural physiological phenomenon after mother's delivery, milk is a healthy natural food for newborns. Modern medicine believes that every aspect of milk secretion can be affected by external factors. Rehabilitation situation, this article compares the lactation function and exhaust time of the two groups of maternal, the results are shown in Figure 5.

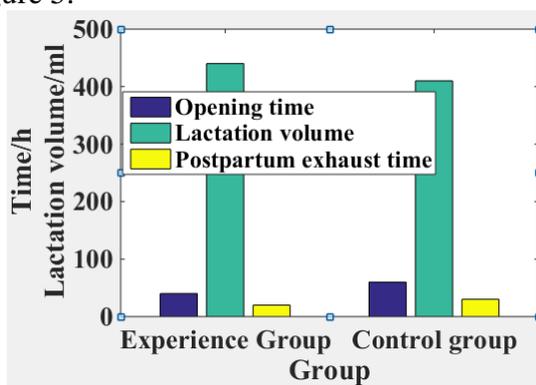


Figure 5. Lactation function and exhaust time analysis

It can be seen from Figure 5 that the lactation function and exhaust time of the two groups of cesarean delivery women are very different. The average lactation volume of the parturient was 425ml, the average lactation volume of the control group was 368ml, the average exhaust time of the experimental group was 25h, and the control group was 36h.

Table 4. Comparison of postoperative rehabilitation of the two groups of parturients

Group	Number of cases	First anal exhaust time	Time to get out of bed for the first time	Hospital stay
Test group	39	19.32 ±3.51	28.98 ±1.01	5.3 ±1.4
Control group	39	27.12 ±3.87	33.86 ±2.13	9.7 ±1.6

As shown in Table 4, it can be seen that the first time to exhaust, the time to get out of bed, and the average length of hospital stay in the experimental group were

significantly lower than those in the control group. The difference between the two groups was statistically significant,  $p > 0.05$ .

### 4.3. Analysis of Uterine Recovery

(1) Analysis of the height of the uterine floor at each period after delivery

The height of the maternal floor was measured at the same time as the postpartum period, the first day, the second day, the third day, the fourth day, and the fifth day. The results are shown in Table 5 and Figure 6.

Table 5. Analysis of the height of the uterine floor in the two groups of women ( $\bar{x} \pm s$ ) cm

Group	At the time of postpartum	1 day after delivery	2 day after delivery	3 day after delivery	4 day after delivery	5 day after delivery
Experience group	18.59±1.23	17.26±1.06	17.26±1.02	14.23±1.16	14.23±1.14	11.21±0.86
Control group	18.53±1.25	17.63±1.30	17.63±1.14	17.63±1.22	17.63±1.39	12.93±1.35

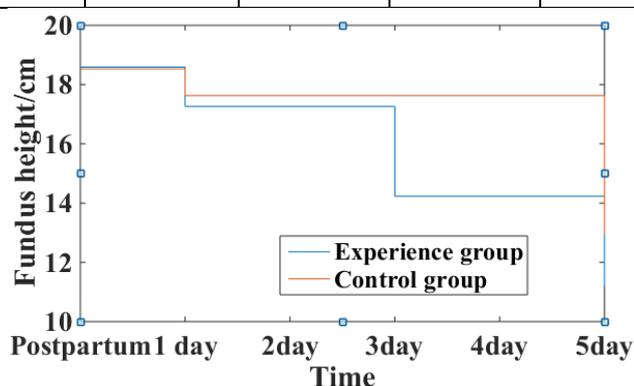


Figure 6. Comparative analysis of the height of the fundus of the two groups

It can be seen from Table 1 and Figure 6 that at the time of postpartum, there was no statistically significant difference on the first day of postpartum, and the difference in palace height between the two groups since the second day after birth was statistically significant; Compared with the fifth day of the treatment group,  $p = 0.027$ ,  $p < 0.05$ , the rest were  $p < 0.01$ ; the third day of the control group compared with the second day  $p = 0.016$ ,  $p < 0.05$ , the rest were  $p < 0.01$ .

(2) Comparison of the daily height of uterine floor decline between the two groups of women

The height of the maternal floor was measured at the same time as the postpartum period, the first day, the second day, the third day, the fourth day, and the fifth day. The results are shown in Table 6 and Figure 7.

Table 6. Comparison of the degree of decline of the fundus in different periods between the two groups ( $\bar{x} \pm s$ ) cm

Group	At the time of postpartum	1 day after delivery	2 day after delivery	3 day after delivery	4 day after delivery	5 day after delivery
Experience group	0.38±0.93	1.46±0.75	1.46±0.52	1.46±0.42	1.46±0.32	1.35±0.36
Control group	0.18±0.62	0.89±0.47	0.99±0.57	1.21±0.46	1.32±0.49	1.15±0.35

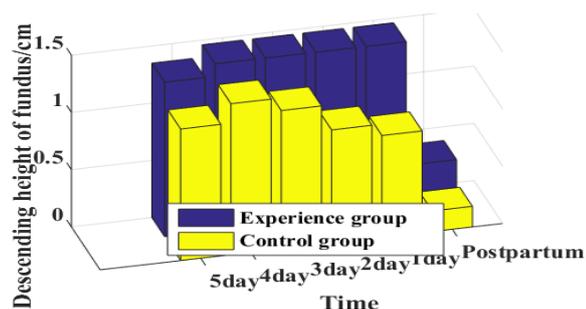


Figure 7. Comparative analysis of the degree of decline of the fundus in different periods between the two groups

It can be seen from Table 2 and Figure 7 that at the time of postpartum,  $P > 0.05$ , the difference was not statistically significant; from the first postpartum day to the fourth postpartum day,  $p < 0.01$ , the fifth day postpartum,  $p < 0.05$ , the differences were statistically significant Significance; for the pairwise comparison of the degree of decline in the uterine fundus of the same group at different time periods, the treatment group compared the fourth day with the fifth day after delivery,  $p = 0.007$ ,  $p < 0.05$ , the difference was statistically significant, and the rest were  $p > 0.05$  Compared with the third day after delivery, the control group had  $p = 0.016$ ,  $p < 0.05$ , the difference was statistically significant, and the rest were  $p > 0.05$ .

## 5. Conclusion

Cesarean section is currently a commonly used clinical delivery method. When the mother has complications and complications of pregnancy, pelvic abnormalities, soft birth canal abnormalities, placental abnormalities, such as placenta previa, placental abruption, etc., or the fetus has had Cesarean section is usually recommended for large, abnormal fetal position, abnormal umbilical cord, and fetal hypoxia. With the development of society, the concept of high-quality nursing has been put forward by people, bringing a new direction for the development of nursing. To this end, this article presents a study of the effect of comprehensive nursing intervention on postpartum rehabilitation of cesarean section.

This article studies by setting up a control group experiment. This article selects several indicators of maternal rehabilitation for analysis and research. In terms of the degree of pain, the research in this paper shows that the maternal women in the experimental group who use comprehensive nursing intervention have a significant decrease in the degree of pain with time. Compared with the control group, the decrease in pain level is more obvious. In addition, the experimental group Milking time, exhaust time, and lactation volume are all superior to the control group. It can be seen that the effect of comprehensive nursing intervention on postpartum rehabilitation of cesarean section is positive.

In addition, the study in this paper found that the treatment group showed a fast first and then a slow process on the daily decline of the fundus. From the first day after delivery to the fourth day after delivery, the treatment group had a smooth and rapid decline in the fundus, On the fifth day after delivery, the decline of the uterine fundus slowed ( $p < 0.05$  within the group). The control group showed a slow-to-fast decline of the uterine fundus, with a more obvious increase from the third day after delivery ( $p < 0.05$  within the group). Although there was a downward trend from the fifth day after delivery, there was no difference Statistical significance (comparison

within group  $p > 0.05$ ), it can be seen that the effect of comprehensive nursing intervention on postpartum rehabilitation of cesarean section is positive.

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