

Observation on the Clinical Effect of Primiparous Women with Delivery Ball and Free Posture

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Abstract

With the rapid development of film and television dramas, most of the scenes of giving birth in film and television dramas are female dystocia, and the pain is unbearable, which makes many primiparas more and more fearful of childbirth. According to a survey, more and more primiparas have great fear and pressure on the matter of childbirth, which has led to more and more primiparas to choose abdominal delivery. However, abdominal delivery is very traumatic and postpartum. The shortcomings of difficult to restore body. Therefore, how to reduce the pain of the primipara during childbirth, reduce the anxiety of the primipara, and reduce the abdominal delivery are major issues facing many gynecologists. The delivery ball is a new type of delivery method. The delivery ball can relieve the pain during delivery by the delivery ball. The delivery ball can also be used as a means of exercise during pregnancy and before delivery. Based on this, this article proposes a way for primiparous women to use the delivery ball and free body position to help the primipara during delivery and discuss the clinical effect of using delivery ball and free body to assist delivery. This article selects 40 primiparas who came to our hospital for delivery from June 2018 to June 2020, 20 primiparas with delivery ball and free position assisted delivery were used as the experimental group, and 20 primiparas delivered with free position as control group. After childbirth, the degree of pain and anxiety were evaluated by simulation scoring method, and the pain degree, anxiety degree and the amount of bleeding during childbirth were compared in the two groups. The results of the experiment showed that in terms of pain, the primiparas in the experimental group who used the delivery ball with free position delivery had lower scores during delivery than the primiparas in the control group who delivered only the free position. In terms of anxiety, most primipara showed mild anxiety. The primiparas in the experimental group had less blood loss during delivery than in the control group, and the delivery time was shorter.

Keywords: First-time Pregnant Women, Delivery Ball, Free Position, Help Midwifery

1. Introduction

Everyone knows what is meant by "maternity". Maternity refers to a woman who has just given birth or just finished giving birth. Maternity can be divided into "primiparous women" and "menstrual women." Women who give birth for a second time, pregnant women who have not undergone miscarriage or induction of labor after 28 weeks, are also often referred to as women who have had a normal delivery [1]. The primipara may experience emotional tension before giving birth and fear the excessive performance of pain. Such excessively strong mental stimulation will increase the sensitivity of women and increase the pain

during labor. In fact, women do not have to worry too much before giving birth. Although they suffer pain during childbirth and may have unexpected risks, with the development of modern medicine, risk factors have been minimized. Modern medical technology has greatly improved the safety of childbirth. At the end of the childbirth, the pain will immediately "dissipate". Of course, in order to reduce the pain of childbirth and reduce the occurrence of accidents, pregnant women should do prenatal check-ups and carefully conduct pregnancy check-ups throughout the pregnancy to ensure a smooth delivery to the greatest extent. When the primipara is approaching the delivery period, she should not panic or make herself too tired, she must always maintain a good mood, carefully prepare, and have enough physical strength to welcome the arrival of childbirth [2].

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Delivery ball is a kind of rubber ball, which is similar to yoga ball. You can feel the elasticity by pressing hard. Delivery ball is a new way of midwifery. The specific operation is to reduce labor pain and promote delivery through the movement of delivery ball of maternal body. Some hospitals in some countries allow women to choose to bring delivery ball, however, few hospitals in China allow pregnant women to use delivery ball [3]. Therefore, for Chinese women, the use of childbirth ball can only be used as a means of pregnancy or prenatal exercise [4]. During childbirth, pregnant women can use the movement of the ball to relieve pain. Part of the pain that pregnant women feel during childbirth is caused by bone swelling, but the delivery ball can help pregnant women relax the pelvis and expand the pelvic space. So that pregnant women in the process of childbirth less pain. Secondly, the delivery ball can also promote uterine dilatation, because women can relax their body and muscles by changing their movements when they are on the delivery ball, which will also distract the attention of pregnant women, so that pregnant women will be less nervous during delivery, which is more conducive to uterine expansion and reduce the time of first delivery. Finally, delivery ball has the function of relieving low back pain. Many women reflect that their low back pain is caused by uterine contraction. In fact, catching the ball can reduce the burden on the back and relieve the discomfort of the waist during the delivery of the ball [5]. In addition, the process of moving the ball during delivery is a new experience for pregnant women. As a result, they are distracted by their own behavior on the delivery ball and ignore the pain. Once they are distracted, they will not feel pain. Pregnant women will feel more comfortable and relaxed when using delivery ball. However, we should also pay attention not only to exercise alone, but also to have a professional escort. Although this action is slow and gentle, with high safety factor, accidents may occur at any time. Therefore, it is suggested that pregnant women should carry out this exercise in the company of their family members or professionals, so as not to make themselves feel too tired, sweating in order to exercise too much. If they feel uncomfortable during the exercise, they should stop and rest in time.

Free body position refers to the position of delivery, squatting, standing, lying down, eating, drinking water and listening to music [6]. Mothers can eat and drink immediately after delivery without intravenous medication. In many people's

traditional concept, supine delivery is natural, but not every puerperium is suitable for supine delivery. The traditional supine position has some disadvantages: supine position often makes sacrococcygeal joint difficult to expand, resulting in pelvic outlet contraction; uterus oppresses pelvic artery and vein, resulting in reduced placental blood flow, affecting the fetus. However, this delivery position is opposite to the physiologically unfavorable position. Abdominal muscles are not easy to exert force during supine position delivery, and gravity effect will affect the smooth progress of delivery [7]. Free position refers to the mode of delivery in any position except supine position. The advantages of free position delivery are various. Fetal pelvis and maternal pelvis can adapt to each other, make it easier to approach pelvis and accelerate uterine dilatation [8]. In addition, a significant benefit of free position delivery is that it reduces the risk of infant hypoxia. Because if the pregnant woman is in the supine position, the fetus and uterus will compress the abdominal aorta and inferior vena cava in late pregnancy, resulting in reduced cardiac blood flow, resulting in supine hypotension syndrome of pregnant women, resulting in reduced oxygen supply to the fetus. If delivered in a free position, the uterus puts less pressure on the mother's blood vessels and the baby gets more oxygen. There are many kinds of free posture, such as sitting posture, exerting downward force such as defecation, which can help squeeze fetus more effectively and relax perineum. Standing position can relieve back pain and is the best position for back massage. Hand knee position can help relieve low back pain, prevent fetal umbilical cord, help fetus rotate occipital posterior position, also can make pelvis shake, eliminate hemorrhoid pressure, reduce the impulse of preterm birth defense, slow down the gravity effect in the second stage of labor is too fast. Squatting position is helpful to relieve low back pain, has gravity effect, increases the width of pelvic outlet, increases fetal rotation and descent during dystocia, allows free alternate weight-bearing, so that the upper body is pressed on the uterine floor as much as possible. Of course, the hospital should analyze the physical conditions of pregnant women to find the most suitable mode of free position delivery for pregnant women. Midwifery is to help the child born, is in the process of vaginal delivery, medical staff to take appropriate measures to help the fetus smoothly through the maternal birth canal. In the process of midwifery, midwives need to closely observe the progress of

maternal labor process, as well as maternal vital signs, fetal safety in uterine cavity and maternal psychological changes, so as to grasp the progress of maternal labor process and fetal heart rate changes at any time and guide maternal reasonable rest and activities. When the cervix is fully opened, it is necessary to guide the lying-in women to hold their breath properly, encourage them to eat properly and preserve their physical strength during the process of labor. When it is found that the fetus is difficult to deliver, timely measures should be taken [9].

Previous studies have adopted free-position assisted delivery by primiparas, allowing the fetus to adapt to the maternal pelvis during delivery, accelerating the expansion of the uterus, and ensuring the safety and efficiency of delivery, but the free-position delivery did not reduce The fear of the first childbirth, the primipara still chooses C-section. With the continuous development of modern medical technology, medical knowledge has gradually penetrated into all aspects of our lives. Combining the delivery ball with free-position delivery to help primiparas deliver is a very popular trend in modern medical research. At present, there is no research on primipara's use of delivery ball with free position to give birth. Based on this, this article proposes the method of combining delivery ball with free position to help mothers deliver. The delivery ball can help women who choose free position to give birth to distract and reduce the delivery process. Reduce the incidence of infant distress, reduce the fear of childbirth, and increase the pregnancy rate of primipara.

2. Theoretical Basis and Core Concepts

2.1 Introduction to Delivery Ball

The delivery ball is also called ball delivery. This delivery method refers to the use of a large, soft, and elastic ball to move the pregnant woman's body to reduce pain and discomfort [10]. Under normal circumstances, mothers can choose a more comfortable delivery posture, and the baby can squat or rotate in a better posture, which can effectively relieve labor pain and shorten the delivery time. However, there are not many hospitals that deliver births using balls. Childbirth ball pitching is a kind of big rubber ball. It is very comfortable for women to sit on it, just like sitting on a soft sofa [11].

2.2 Advantages of Delivery Ball

This new way of delivery can improve women's breathing, make the ligaments of pelvic muscles

sharper, after the exercise of delivery ball, it can be said that pregnant women are stronger and more flexible, can withstand the great challenges of childbirth, and prepare for delivery. In the early stage of childbirth, women's body will have enough endurance, flexibility and flexibility to deliver smoothly. The advantages of delivery ball mainly include the following aspects [12].

Pain relief: this method can relax the pelvis and help the baby's head drop. Once the baby successfully falls off, it will rotate naturally and flexibly, effectively accelerating the delivery process. During the second stage of delivery, if the woman continues to squat on the ball, the pelvic space is further expanded to reduce the pain during delivery.

Reduce back pain: many women experience low back pain during childbirth. With the delivery ball, pregnant women can constantly change their posture, adjust their swinging pelvis, and relieve discomfort in their lower back and lower back.

Enlarged uterus: the delivery ball makes women feel more comfortable and helps to relax the muscles of the whole body. Under the influence of this atmosphere, the uterine mouth is more likely to expand.

Avoid muscle tension: mothers who give birth in the delivery bed usually hold the same posture all the time, which can lead to muscle tension and make delivery more difficult. Through the delivery ball, women can adjust and choose the best delivery position, maintain a good delivery position, so as to avoid muscle tension and make delivery easier.

Distraction: repeated pain caused by uterine contraction makes the puerperal women particularly sensitive. The use of delivery ball can distract women's attention and reduce the pain of uterine contraction. Through the delivery ball, women can control the whole process of childbirth through continuous self-regulation and autonomy.

Postpartum recovery: different from the traditional mode of delivery, ball delivery does not inhibit the vagina, postpartum recovery is faster. In addition, this mode of delivery can also maintain the elasticity of the abdomen, thighs and buttocks, making it easier to restore a slim figure after delivery.

Economic and interesting: Although this mode of delivery is novel, the cost is not high, it is very economical, and the operation process is interesting and safe, which is loved and concerned by many women.

2.3 Specific Steps of Delivery

The contractions begin to move. When

pregnant women have regular labor pain and contractions, they can choose to ride on the delivery ball during the interval of delivery, follow the ball back and forth, and complete the labor process with the help of medical personnel, which can relax pelvic floor muscles and relieve perineal neuralgia.

Multiple cooperation for delivery. When the delivery officially begins, the puerperal women should adjust the posture, breathe reasonably, use strength scientifically, cooperate with and accept the help of midwives, and finally deliver smoothly [13].

2.4 Precautions for Ball Delivery

Lying in women need to maintain physical and mental relaxation: primiparas should not be tired of thinking but should be spiritual happiness. If the brain bears too much pressure, it will interfere with the normal contraction of the uterus, and even reduce appetite, making women more tired, not conducive to childbirth. Therefore, primipara must relax themselves, and it is recommended that the puerperal women take a deep breath to reduce contractions. When contractions begin, take a deep breath and exhale slowly, which helps relieve tension and pain.

Frequent urination: if the bladder is over inflated, it prevents the normal contraction of the uterus and the steady descent of the fetus. Therefore, wear puerperal women should drink normal water as usual, urinate every three hours.

Choose the best position for delivery: primiparas can choose the most suitable and comfortable position for delivery, unless the doctor does not allow or does not require a fixed position. As long as it can relieve labor pain, it is the best delivery position.

Supplement water and nutrition: before labor, it is suggested that primiparas eat higher calorie food and drink more soup to make them energetic and deliver smoothly. Pay attention to rest and proper activity. You can take a break between childbirth to maintain physical strength. Don't get tired of the birth ball, don't be afraid of it, and don't fidget. As long as the physical conditions permit and accompanied by medical staff, the delivery ball can promote uterine contraction, help the baby to land smoothly, and accelerate the delivery process [14].

2.5 Evaluation Factors for Free-position Delivery

Free-position delivery requires a quiet environment, which is in line with the sound control standards of the delivery room in general

hospitals. The light requirement of the delivery room is dim and gentle lighting. The primipara must have a good attitude and the family around him should provide care and support to the primipara, the puerperal women must carry out free-body delivery activities before delivery and evaluate whether the fetal heart rate is right before delivery, etc. [15].

2.6 Steps for Free Body Delivery

Before giving birth, place some thick mats on the ground, similar to yoga mats. In the delivery room of the general ward, when lying on the back, you need to stretch out 2-3 cm. The upper body of the mother can sit upright on the heel, can be raised to the head of the bed, or laid flat. The mother breathes when approaching the crown. The delivery personnel need to receive the delivery face-on, or they can choose to sit down. The perineum is mainly for cleaning. Iodophor cannot enter the vagina. Finally, a drape is prepared. The drape is mainly for newborns. According to the requirements of the World Health Organization for clean delivery, newborns must be born on a clean surface.

In the process of delivery, there are some steps about how to exert force for the parturient: First, when the parturient is in a free position, unlike the traditional supine position, the parturient can control the force by themselves. If the fetal head is pulled out, the parturient You can rely on instinct and force without guidance; if the mother is not well controlled and yells, the midwife can give guidance to the primipara. At the beginning of the contraction, instruct the primipara to breathe in first, not holding the breath, abdominal bulging. At the beginning, count 1-7 seven numbers, then exhale slowly, send FFF..., practice moaning, ha... don't scream.

2.7 Advantages of Free Position Midwifery

At present, the trend of international midwifery is to return to the natural "humanized delivery", that is, pregnant women and their fetuses are in good health. During the delivery process, pregnant women choose their own comfortable posture (such as squatting position, standing position, kneeling position, prone position, etc.) according to the professional guidance of midwives. Midwives cooperate with the maternal position to welcome the birth of the baby. Since the mother is not passively lying in the delivery bed, her activities can be more perfectly adapted to the rotation of the fetus, so free position delivery can better relieve pain, reduce

maternal tension, fear and uneasiness, promote natural delivery and effectively reduce the cesarean section rate [16].

2.8 Precautions for Free Position Midwifery

The scope of application of free position midwifery should be the fetal head in the process of examination, fetal heart sound is normal, usually pay attention to the safety and comfort of pregnant women, avoid unsafe factors in the environment, and closely observe the progress of labor and the change of fetal heart rate. If fetal heart rate is abnormal, it is necessary to monitor fetal heart rate. Statistical data on adverse events of mothers and infants caused by abdominal pressure and related factors show that the method of delivering fetus by abdominal pressure is firmly rejected during delivery.

Using free position midwifery, doctors will inform the pregnant women of the risk of free position midwifery before delivery. For example, squatting may be more conducive to fetal delivery, but it may damage the sphincter. After sphincter dehiscence, fecal incontinence, and then suture recovery is a relatively long process, requiring 7 days to prohibit defecation, which is very painful. In the case of relatively good medical conditions, pregnant women can choose whether to accept the risk.

3. Experimental Analysis and Methods

3.1 Experimental Objects and Standards

In this paper, 40 primiparas who came to our hospital from June 2018 to June 2020 were selected. All primiparas were divided into two groups according to different delivery methods: the experimental group and the control group. The experimental group adopted delivery ball combined with free position midwifery, and the number of primiparas was 20. The control group was only delivered in free position, and the number of primiparas was also 20. After the approval of the hospital ethics committee, all patients and their families agreed to this investigation and signed the relevant consent. At the same time, all patients' personal privacy information was desensitized before data analysis. There was no significant difference in gender, age and weight between the two groups ($P > 0.05$).

Selection criteria: all the 40 primiparas were primiparas, which met the definition standard of primipara. The fetal head position was positive, and the fetal heart sound was normal. The gestational weeks were 37-41 weeks, and the age were 22-31 years old. The intervention of

midwifery nurses were good.

Exclusion criteria: Patients with pregnancy complications or complications; patients with high-risk factors during pregnancy; patients with limbs unable to move autonomously; patients with artificial rupture of membrane or injection of oxytocin; patients with vulvar diseases; patients with severe infection of reproductive tract and patients with communication and communication barriers.

3.2 Control Group Study Method

First of all, all midwives and nurses in the control group were trained in the knowledge of free position, and only those who got better midwives in the simulation test could participate in the experiment. The midwives and nurses respectively gave guidance to 20 primiparas in free position midwifery. Before giving birth, midwives and nurses should inform the lying-in women and their families of the methods and functions of free position midwifery. Mothers can choose their favorite posture and can also freely alternate activities.

The control group with free position midwifery was given routine nursing care before delivery, and the delivery began when the uterine mouth width was about 3cm. In the process of delivery, choose the free position delivery guided by the delivery doctor or nurse before delivery. The primipara can choose the most suitable way for delivery and the least harm to herself. In the process of delivery, midwives and nurses should accompany the primipara all the time. At the same time, the family of the puerperal women should also accompany the midwifery doctors and nurses until the end of delivery.

3.3 Research Methods of Experimental Group

First of all, all midwives and nurses in the experimental group were trained on the knowledge of delivery ball combined with free position midwifery, and only those who got better midwives in the simulation test could participate in the experiment. The midwifery doctors and nurses respectively gave guidance to 20 primipara with midwifery ball and free position midwifery. Before delivery, midwives and nurses should tell primiparas and their families about the use and function of delivery balls and tell primiparas and their families that they can choose their favorite actions on the delivery ball.

If the primipara is sitting in the delivery ball, the midwife and nurse guide her to separate her legs so that they are shoulder width apart. The

spine must remain upright, arms naturally droop, placed on both sides of the body, so that pregnant women can use the strength of psoas muscles to swing left and right. In addition, midwives need to fix the ball on the handle of the chair to help lying mothers grasp the handle and rest. If there is no fixed thing to bind the delivery ball, the delivery ball must be taken care of by special personnel to prevent the maternal from falling the delivery ball. If the primipara chooses a standing position, midwives and nurses should know that the delivery ball is placed on the bed, then the delivery ball is placed in front of the chest, body forward, head on the ball, and hands around the delivery ball. Because semi supine or supine position will aggravate scoliosis, if the spine is "C" shaped, it is helpful to deliver the fetus. If the primipara chooses the kneeling position, the cushion prepared in advance should be placed under the mother's knee, guide the puerperal women to hold the ball in both hands, lean forward slightly, and put her head on the delivery ball. If primiparas choose a comprehensive posture, and squat, sit and kneel together in time, midwives and nurses should guide primiparas to choose a comfortable position and not always use one posture. The use of delivery ball should be determined according to the needs and weight of primipara. Midwives and nurses should pay special attention to their actions during delivery to ensure the safety of primipara and fetus.

3.4 Experimental Observation Indexes

After delivery, the pain and anxiety of the experimental group and the observation group were evaluated by visual analog score. The pain range was 0-10 points, including 0 points for no pain, 1-3 points for mild pain, 4-6 points for

moderate pain, and 7-10 points for severe pain. The higher the score, the higher the pain degree of the method, and the lower the score, the lower the pain degree of the method. The degree of anxiety also ranged from 0 to 10, including 0 for no anxiety, 1-3 for mild anxiety, 4-6 for moderate anxiety, and 7-10 for severe anxiety. The higher the score was, the more anxious the primipara was in the process of delivery, and the lower the score was, the opposite was true. Then the average scores of the two groups were statistically analyzed, and the average scores of the two groups of primiparas on the evaluation of the two delivery methods were statistically analyzed. Finally, the time of delivery and the amount of bleeding of primipara in the two groups were compared.

3.5 Statistical Methods

The experimental data were analyzed by spss22.0 statistical software. The results of the experiment were compared according to the number of primiparas. The number of primiparas was represented by N, the average was represented by \bar{X} , and the percentage was expressed by%. $P < 0.05$ was considered to be statistically significant.

4. Experimental Results and Analysis

The data used in this experiment are 40 primiparas who came to our hospital for delivery from June 2018 to June 2020. The 40 primiparas were divided into two groups, the experimental group and the control group. The number of people in each group was 20. First, 40 primiparas were scored for pain during childbirth, and then the scores of the two groups were compared and the scores of the two groups were observed.

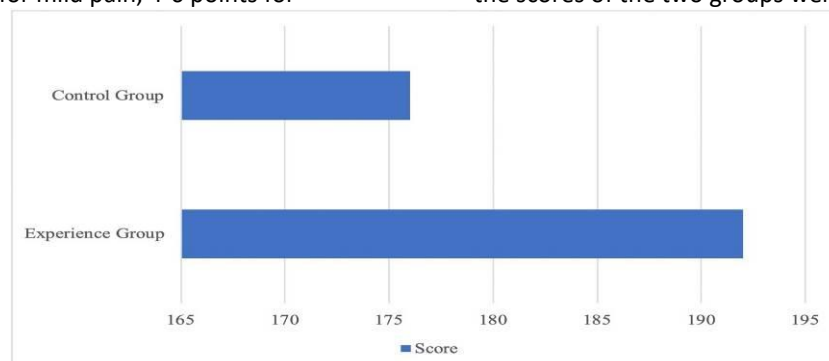


Figure 1. Score of Pain Degree in Both Groups

From the data in Figure 1, it can be seen that regarding the pain during childbirth, the total score of the primiparas in the control group who used the free position to assist the delivery was 192 points, which were scored from 14 to 10. 4

primiparous women scored 9 points and 2 primiparous women scored 8 points. Similarly, in the experimental group, the primiparas who used the delivery ball and free position assisted delivery scored 176 points after the delivery. Among them,

10 primiparas scored 10 points, 3 primiparas scored 9 points, and 4 primiparas scored 9 points. It scored 8 points and 3 primiparas scored 7

points. This experiment shows that the use of delivery ball and free position assisted delivery can reduce the pain of primipara during delivery.

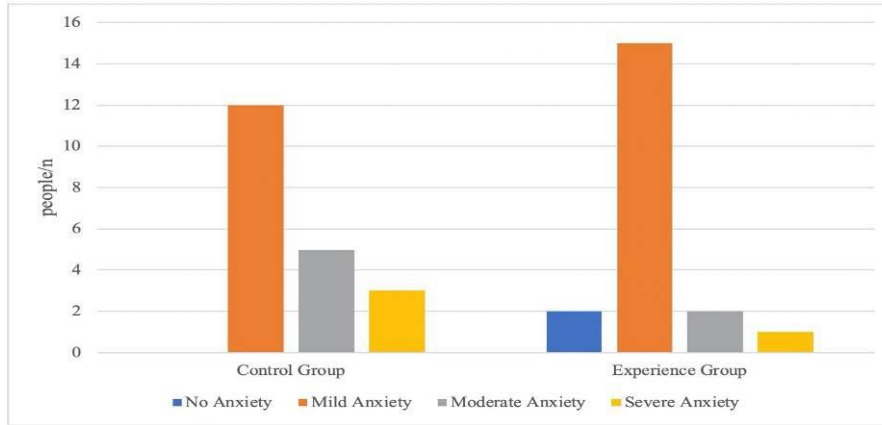


Figure 2. Anxiety Degree of Primipara in the Two Groups During Childbirth

It can be seen from the data in Figure 2 that during the delivery process, among the primiparas in the control group who used free position to assist in delivery, 3 people felt severe anxiety, accounting for 15% of the total number in the control group, and 5 people felt severe anxiety, Accounting for 25% of the total number of people in the control group, 12 people feel mild anxiety, accounting for 60% of the total number of people in the control group, no one in the control group feels no anxiety. In the experimental group, the primiparas who used the delivery ball and free-position assisted delivery showed that 1 person felt severe anxiety, accounting for 5% of the total number of the experimental group, and 2 people felt moderate anxiety, accounting for the experimental group 10% of the total number of people, 15 people feel mild anxiety, accounting for 75% of the total number of people in the

experimental group, 2 people feel no anxiety, accounting for 10% of the total number of people in the experimental group. According to the data above, it can be seen that primiparas who feel mild anxiety account for the largest number of the total. After questioning, it is found that the doctors and nurses who gave birth before delivery have taught them the process of delivery and done well. In addition to psychological development, the midwife doctors and nurses accompany them throughout the process, and they have been teaching primiparas how to find the most suitable way to give birth, so that primiparas feel a lot less anxious during delivery. Regardless of whether it is the control group or the experimental group, the proportion of people without anxiety is the least in this group. The main reason is that the childbirth process is really painful and the delivery time is relatively long. Anxiety will appear less often.

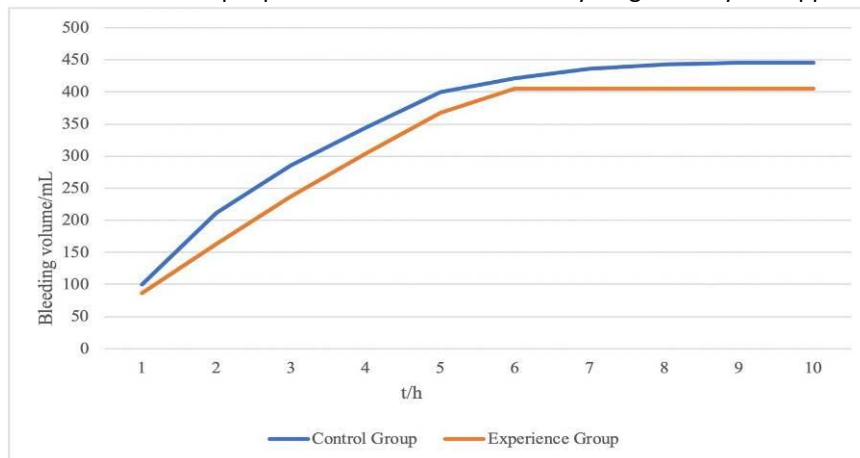


Figure 3. The Bleeding Volume of Primipara in the Two Groups

It can be seen from the data in Figure 3 that as time increases, the amount of bleeding increases, but after delivery, the amount of bleeding also ends. In the control group, the average delivery

time was 8 hours, while in the experimental group, the average delivery time was 6 hours. In the control group, the bleeding volume of the primipara after two hours was 211mL, and the

bleeding volume of the primipara after the delivery was 445mL. In the primipara who used the delivery ball and free-position delivery, the bleeding volume after two hours was 163mL, which was 48mL less than that in the control group. After the delivery, the bleeding volume of

the primipara was 205mL. It can be seen from the data in Figure 3 that during the delivery process, the primiparas in the experimental group who used the delivery ball and free position to assist in delivery had less bleeding than the primiparas in the control group who used the free position to assist in delivery.

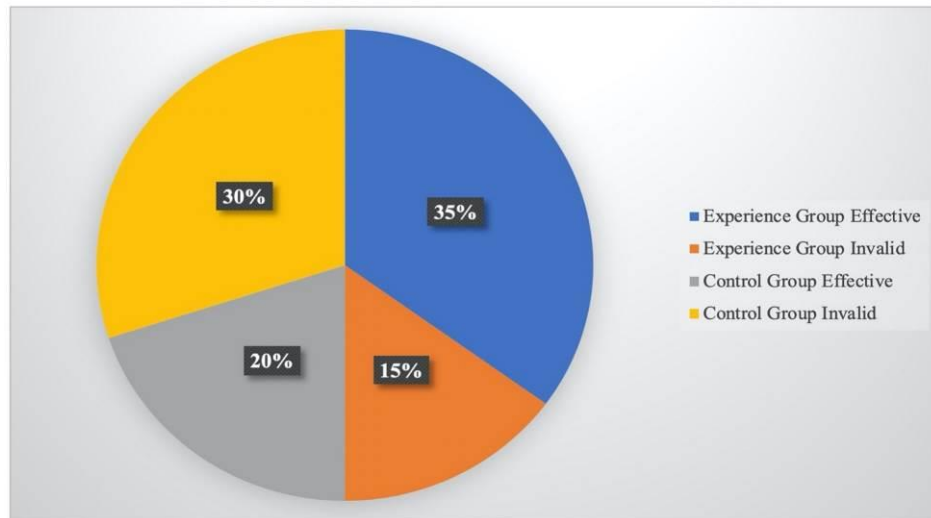


Figure 4. The Rate of Effective Treatment in Both Groups

In the data in Figure 4, the data on the left is the data in the control group, and the data on the right is the data in the experimental group. In the control group, 40% of the experimental methods are considered effective and 60% are invalid. In the experimental group, the proportion of the number of people who thought that the delivery ball combined with the free position to assist delivery was useful was 35%, and the proportion of people who thought it was not useful was 15%. Comparing the ratio between the experimental group and the control group, the proportion of people in the experimental group who think it is useful is 5% more than that in the control group, which shows that the effect of using delivery ball with free position to assist delivery is better than free position delivery.

5. Study Implications

With the continuous development of modern medical technology, medical knowledge has gradually penetrated into all aspects of our lives. Combining the delivery ball with free-position delivery to help primiparas deliver is a very popular trend in modern medical research. At present, there is no research on primipara's use of delivery ball with free position to give birth. Based on this, this article proposes the method of combining delivery ball with free position to help mothers deliver. The delivery ball can help women who choose free position to give birth to distract

and reduce the delivery process. Reduce the incidence of infant distress, reduce the fear of childbirth, and increase the pregnancy rate of primipara.

6. Study Limitations

Due to lack of childbirth experience, primiparas are more likely to have emotions or psychology, such as tension and fear. The strong contraction reaction further affects the normal delivery of primiparas, but vaginal delivery can reduce the harm of mother and baby to the smallest. In recent years, in order to promote vaginal delivery of puerperal women, with the development of modern economy and medical progress, more and more hospitals have advocated the use of free-position assisted delivery methods, but free-position assisted delivery did not reduce the fear of primiparas.

7. CONCLUSIONS

Psychological. Based on this, this article uses the method of delivery ball and free posture to assist delivery. The delivery ball allows the mother to do a variety of movements on the delivery ball and helps the primipara to distract during the delivery process. The surface of soft delivery ball can also support the puerperal women's genitals and waist and relieve the anxiety and pain of the primipara. In this experiment, during the delivery process, in terms of pain, the primiparas in the

experimental group who used the delivery ball and free-position assisted delivery were much relieved than those in the control group who only used the free-position assisted delivery. On the one hand, the primiparas in the experimental group were also much better than the primiparas in the control group. More primiparous women are in mild anxiety. The average time of delivery of primiparas in the experimental group was also shorter than that of the control group, and the amount of bleeding during delivery was always lower than that of the control group, and after delivery, the amount of bleeding of the primiparas in the experimental group was also lower than that of the control group. The conclusion of this article shows that the delivery ball combined with free-position assisted delivery is better than the free-position assisted delivery. The delivery ball combined with free position assisted delivery can minimize the damage of both the mother and the baby and can be applied to clinical trials.

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