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Effects of Squatting Position in Second Stage of Labor on Its Duration in Active Phase Among Primigravida

Dr. Ms. Akshaya Kumar Akshayakumar

Student, Physiotherapy, Saveetha College Of Physiotherapy

ABSTRACT

Background: The labor process has been categorized as three different stages, with conventional management generated at each stage in order to handle problems and restrict the overall rise in mother and baby mortality rates. In the beginning, it appeared that remaining upright (or vertical) during labor and delivery was the most preferred position. **AIM**: The goal of this study is to find the effects of squatting position in second stage of labor on duration in active phase among primigravida. **METHOD**: Total of 10 participants were selected based on inclusion criteria. They have been allotted into two groups. Group A received squatting position and Group B received a conventional management. **RESULT:** Squats performed by Group A seemed to have significant variations in duration and pain while comparing with that of squats not executed by Group B **Conclusion:** This study discovered that an extended second stage of labor in the supine position promotes consequences such as a decline in fetal heart rate, blood pressure, dyspnea, and a lower APGAR score.

Keywords: Labor, Squatting, stages of labor, positions, anxiety, stress, primigravida

INTRODUCTION

Labor is an instinctive physiological process which includes a total of three phases. The second stage of labor commences with a completely dilated cervix and concludes with the birth of an infant. It is separated into two phases: the propulsive phase, when uterine contractions are at their strongest, and the expulsive phase, when the baby emerges from the delivery canal. [(1)].

During labor, the cervix dilates or widens and efface, or gradually thins, as recurrent contractions occur and the uterine smooth muscles relax. The five Ps—Passenger, Passage, Powers, Placenta, and Psychology—are correlated with birth and are present during labor.[(2)]

At the end of this procedure, the fetus and other traces of conception—the placenta and membranes—leave the uterus. Elevated prostaglandin synthesis, myometrial gap junctions, and OT receptor concentration in the myometrium have all been identified as labor onset stimuli. The most obvious sign that labor has started is pain. Non-sustained labor pain is a key indicator of anxiety and stress. An unexpected boost in catecholamine levels causes a mother with painful contractions to hyperventilate and her fetus to become hypoxic. Effective analgesia shields against obstacles and offers optimal results for both the mother and the fetus. Effective analgesia tends to be recommended in certain extreme situations, such as in women with heart problems and Grade II and Grade III dyspnea.[(3)]

Pain affects the autonomic and limbic centres of the hypothalamus, which improves the neuroendocrine system's ability to maintain healthy breathing and circulation. Furthermore, it generates psychodynamic reactions such as tension and anxiety, which can be harmful to both the mother and the fetus. Effective pain administration is the sole method to avoid or diminish these negative effects. (4)

Hyperventilation between contractions might end up in fetal hypoxemia as well as transient hypoxemia in the mother. Analgesic methods (such as systemic opioid analgesia) cause respiratory depression, which might worsen hyperventilation during childbirth. The mother's oxyhemoglobin degradation curve shifts to the left when she experiences hyperventilation, thereby lowers the amount of oxygen that passes the fetus. Acute respiratory alkalosis is the outcome. Stress and pain connected with labor also activate the sympathetic nervous system, which increases the concentrations of catecholamines in plasma(5).

Patients with anemia, heart disease, and pregnancy may experience possibly risky cardiac output if pain activates their sympathetic nervous system. Moreover, it lessens the intestine's propulsive movement, which may cause oliguria and ileus, as well as the stomach's evacuation, which may cause nausea and vomiting. despite the fact that the pituitary and placenta produce a substantial amount of β-endorphin in the blood, it is noticeably ineffective for effectively reducing pain. Though the pituitary and placenta synthesize a significant quantity of β-endorphin in the blood, it is notably inappropriate to efficiently mitigate pain. (6) The level of discomfort that each parturient experiences and the fears they have about vaginal delivery during labor vary widely. Parous mothers had a lower pain rating index (PRI) than nulliparous mothers. Furthermore, there is a significant distinction in the sensory quality of pain between parous and nulliparous women.

The maternal body's various organs undergo major physiological alterations throughout pregnancy so as to deal with the growing fetus needs for growth and metabolism. These include notable modifications to the respiratory, digestive, hematologic, renal, and cardiac systems. Though some might require a year to heal, the majority of these alterations go disappear in the weeks to months following birth (7) Major hemodynamic modifications include increased blood volume, decreased blood pressure and vascular resistance in the system, and increased cardiac output and heartbeat. Tubular function modification maintains a balance between increased renal blood flow and glomerular filtration rate. Hormones influence the tone of the lower esophageal sphincter, and uterine enlargement influences gastric transit time.(8) (Sanghavi and Rutherford, 2014) concluded that diaphragm elevation could affect pulmonary function. It is crucial to understand the expected changes, which are frequently referred to as "nature's stress test," in order to distinguish between normal and maladaptive pregnancy physiology. Abnormal pregnancy physiology caused by illnesses such as intrauterine growth restriction, gestational diabetes, and pre-eclampsia can cause significant morbidity and death in mothers and fetuses. L1-L10 nerves are stimulated within the first stage of labor, whereas S2-S4 nerves are also stimulated through the second stage. There are different options for healing that feeling of discomfort, which are typically split into two categories: medicational and non-medicational.·(9) Non-pharmacological pain therapies are now becoming increasingly popular as an alternative to drugs all over the world. Breathing exercises, relaxation activities, and stretching exercises are illustrations for these strategies. The skills known as Lamaze, Bradly, and Dicreed alleviate pregnant mothers' anxiety and anxiousness. TENS is unique technique to pain relief that works by triggering the skin's nerves to deliver messages to the affected area at the precise moment of contraction.

There is a spectrum of non-pharmacological techniques to pain management during labor in the field of obstetric care, providing women with a broad variety of options according to their preferences and

needs. Heat and cold treatments, for example, are extensively used. Warm compresses or the use of heating pads can help relax stiff muscles and relieve discomfort. Cold or ice packs, on the other hand, can produce a numbing effect, lowering inflammation and providing a sensation of relaxation. Contractions enhance longer, stronger, and more often on a consistent basis. Normal walking does not relieve the misery of labor contractions, which predominantly originate in the back and radiate to the abdomen. True labor is frequently characterized by show. Pinkish mucous or a bloody discharge will be visible. This mucus or discharge could be provoked by the mucous plug of the cervix. (10)

False labor. Braxton Hicks contractions are the term used to describe false labor contractions. They don't trigger dilatation of the cervical cavity and effacement to progress. They are an unpredictable event with no noticeable rise in frequency, duration, or power. The lower abdomen and groin are the most prevalent areas of painful sensations. Walking tends to be utilized as a method of relaxation. False contractions could start as early as three or four weeks before the pregnancy termination. To determine the difference between actual and false labor, look at contractions, show, the cervix, and fetal activity.

The labor sequence is broken down into three distinct phases, and conventional therapy has been improved at each to prevent complications and reduce overall maternal and infant death rates. Under realistic terms, the labor processes only go through one phase. Among the most common instances is the early stages of labor, wherein a woman's risk of dying from giving birth prematurely is higher because of various obstacles that continue to exist at the moment. Insufficient cervical dilatation during the active phases of labor and a latent phase lasting longer than eight hours are considered warning signs of prolonged first stage labor. In primigravidae, the beginning phase of labor extends approximately 13 hours. From the earliest phase of labor, three stages have been identified : During the Latent or Prodromal Phase (Early), the lady gets slow, persistent contractions that migrate from her lower back to the front of her abdomen. Between thirty and forty-five seconds pass, and the contractions become more intense as time passes. (11)

Contractions emerge every two to five minutes. There is additionally some cervical effacement. The dilation range is 0-3 cm. "Bloody show" tends to be prominent. The mother can sometimes walk, chat, and laugh during this time. Usually, it's a time to have some fun.(12)

Considering the circumstances exist prior to the commencement of actual labor, this phase is not eligible to be regarded as an aspect of the first stage of labor. True labor is gauged in centimetres. Longer, more forceful contractions last 45 to 60 seconds during the active or accelerated phase. The intervals vary from three to five minutes. There is a 4–7 cm dilation of the cervix. This is considered as the start of actual labor. The mother is receiving medical attention at the hospital right now. Nevertheless, she has a tendency to lose herself in her bodily experiences and to get separate from her environment. She needs company and support even if she is unable to move. The transient or transitional phase lasts for 60 to 90 seconds, during which time the contractions become more intense and precise.(13)

There are gaps of two to three minutes. There is an 8–10 cm dilation of the cervix. The first phase of work ends when that phase is done.

The second stage of labor in a primigravida takes about fifty minutes. Strong, recurring contractions that strain and burn the vagina are an indication of it. 60 to 90 seconds occur between contractions. (14)

These second-stage labor indicators are considered to be imminent or impending: (1) Probable symptoms include: (a) rising levels in bloody show. (b) Urge to bear down or have bowel movements (due to the descent of the presenting section). (c) The expansion of the perineum. (d) Stretching of the anal orifice. Warnings of impending doom. (a) Nausea and vomiting. (b) Nervousness and refusal to

collaborate. (b) Acute dissatisfaction complaints. (d) Requests for assistance. The ejection of the fetus and the highest dilation of the cervix of 10 cm, respectively, mark the beginning and completion to the 2nd stage of labor. The average duration of multipara varies broadly, with nullipara often lasting between 20 and 50 minutes.(15)

For both the mother and the fetus as well as the attending medical personnel, the critical phase is the second stage. There is a possibility that the woman and the fetus may have negative outcomes. This second stage of labor lasts longer than expected. An extended second stage of labor or pushes enhances the risk of postpartum hemorrhage, c- section, lacerations of third to fourth degree, low Apgar scores, and issues related with hypoxia in the newborn.(16)

The spontaneous delivery of the baby marks the second phase of labor, which is an essential phase of childbirth. If complications are not effectively addressed, they may result in fatal results for both the mother and the newborn.(17)

Complications for Mothers results in Hemorrhage that is Problems like uterine rupture or birth canal rips can cause excessive bleeding. Life-threatening conditions must be identified and intervened upon promptly. And can also lead to infection - During delivery, unobstructed routes raise a risk of infection. It is critical for providing antibiotics on time and to follow appropriate hygiene procedures.

Fetal Distress: Things like constriction of the umbilical cord might cause the infant to feel distressed. To identify early indicators of distress, fetal monitoring must be done continuously. Birth Trauma or Injuries: The birth canal can cause trauma or injuries. This covers harm to the shoulders, head, or nerves. In order to reduce these dangers, skilled medical help required.

The fetus experiences Asphyxia: A lack of oxygen can happen, which may cause brain damage. Constant observation and prompt intervention (emergency cesarean section, for example) are necessary to avoid problems from hypoxia, And Continuous Fetal Monitoring is required for Real-time information on the health of the fetus is obtained through routinely monitoring the baby's heart rate.(20)

Beginning at birth and continuing until the placenta is delivered, this is the third stage of labor. This is a crucial time since bleeding is likely to occur. The following elements are signs of placental separation: The uterus gets denser and more globular. b. The abdominal cavity is where the uterus rises. c. The umbilical cord protrudes from the vaginal entrance by at least three inches. d. a sudden spike in blood. (21)

Undoubtedly, the structure and dynamics of the pelvic area can affect labor progresses. Women who are primigravida, or first-time mothers, may find that labor takes longer than expected because of things like a constricted delivery canal. Cervical dilatation can be aided by a variety of labor positions.(22)

The position of the woman during labor has an important effect on the delivery process. The notion that delivering is a major difficult impact that is experienced by women. During childbirth, a pregnant woman might assume a variety of postures. These are known as birthing postures. Some positions can help with labor and delivery. It is not always required for a patient to be in the supine position when it is time to push; there are other acceptable birthing positions that can be used. Squatting birth has been suggested to have a range of advantages, despite the fact that the only randomized study comparing this method with a more conventional "sitting" second stage was unsatisfactory since the majority of the patients allocated to squat were unable to do so. (23)

There are an assortment of factors that have an impact on the maternal mortality rate, which may include bleeding (30.3%), hypertension (27.1%), infection (7.3%), protracted labor (1.8%), abortion (1.6%), and others (40.8%). In order to shorten the time, cause a lesser degree of discomfort, and diminish the rate of

maternal death during labor and delivery, it is not mandatory for women to undergo this procedure exclusively in the supine position. (24)

The benefits of upright positions should be revealed to women, AWHONN, in order to empower them to make decisions regarding what they do in position sensibly. AWHONN intends to enhance women's birthing circumstances by demonstrating the benefits of standing and preventing the supine position in order to encourage women to be independent and promote both newborn and mother outcome during labor and delivery.(25)

Listed below are some tactics for minimizing labor pain while seated: In all upright positions, sitting appears to release tension caused by the uterus' weight at the waist, which may help to relieve back pain. Second, a growing physique of evidence reveals that using a birth seat may make women feel more independent and engaged with the process, which may help them feel less awkward and hence endure fewer cramps throughout delivery. Third, short-term labor might be one reason of the decreased annoyance during labor.(26)

Changing postures while experiencing labor pain is one of the non-pharmacological techniques that has been recommended to lessen pain. The posture of the mother influences the size of the pelvis (the labor canal's diameters).(27) Mothers' pelvic proportions are influenced by their posture. Mothers' positions alter the spatial form of the pelvis, which optimizes the fetus's axis of attachment to the labor canal. In the second phase of labor, some patient seek for a non-lithotomy posture. The outcome findings of a meta-analysis and systematic review assessing any upright posture without an epidural revealed that blood loss increased but the second stage's overall duration was slightly reduced. Furthermore, less procedures (such as episiotomy and tool delivery) were applied.

As a non-medical therapy, maternal postures may accelerate labor, assisting in labor adjustment and neutralizing negative psychological impacts. This relies on distinct research-based hypotheses.(28)

Certain positions chosen for the mother during labor could speed up the second stage of labor perhaps lowering the likelihood of difficulties. Even when dealing with obstetric issues, certain maternal postures could potentially be performed. On the other side, women who adopt an uncomfortable posture may suffer from a variety of negative implications, such as increased blood loss and severe perineal injury or postpartum urine incontinence.

There is also an increased likelihood of difficulties for the pregnancy or newborn. initially it seemed that the most common position during labor and delivery tended to remain upright, or vertical.(29)

When a woman is squatting, her knees are bent slightly, but her feet still bear the majority of her weight at first. She might continue to sit or grasp on an object. Squatting is often considered as one of the most natural positions because it closely resembles how chimps and possibly many of us rest.(30)

The effects of gravity improved fetus alignment in the delivery canal, and an increase in pelvic outlet diameter are among the possible benefits of the squatting position. (30)

Since the supply of oxygen is not cut off in squat positions, the pressure on the inferior vena cava can be reduced, lowering the risk of fetal hypoxia.

Moreover, it can avoid delivery canal lacerations and providing a soothing environment for weary mothers. This position has the benefit of making the birth of the baby's head simpler. When labor proceeds slowly, this position is particularly helpful in lowering the lowest section of the fetus.(31)

1.1 BACKGROUND:

Three different stages have been identified in the labor process, and common management has been devised at each stage to address problems and limit the overall increase in the rates of death for both

mothers and newborns. Insufficient cervical dilatation during the active phases of labor and a latent phase lasting longer than eight hours are the markers of delayed first stage labor. until the cervix dilates to its greatest (10 cm), the second stage of labor begins, and it concludes until the fetus is evacuated.

A crucial factor influencing the delivery process is the woman's birth position. A woman's contentment with her laboring expertise and the medical treatment she receives is greatly influenced by her perspective of how difficult childbirth is typically. A easier birth may be possible with a few labor postures. Patients do not necessarily have to have been in the supine position when it comes time to push; they can be in any of several comfortable birthing positions.

At first, it appeared that staying upright (or vertical) during labor and delivery was the most common position. The mother should either be horizontal or upright (vertical) during the second stage of labor. Typically, horizontal poses need a lady to have her feet flat on the floor.

When a woman is squatting, her knees are bent slightly, but her feet still bear the majority of her weight at first. She might continue to sit or tug on an object. Squatting is frequently regarded as one of the most natural positions since it resembles how chimps and possibly many of us rest. The effects of gravity, improved fetus alignment in the birth canal, the release of the hormone oxytocin, which aids in enhancing uterine contractions, stretching of the pelvic floor muscles, an increase in the diameter of the pelvic outlet, and an increase in the effectiveness of uterine contractions are among the possible benefits of the squatting position.

1.2 STATEMENT OF THE PROBLEM: There are various studies of upright position for primigravida during labor. There is necessary to focus on pregnant women and child safety during labor. In this study, we have to evaluate *Effects of Squatting Position Second Stage of Labor on Its Duration in Active Phase Among Primigravida***.** The second stage of labor is very crucial and dangerous for both the mother and the child. To reduce the pain, duration and the Pelvic Floor Muscle stretch and to decrease the complications of both mother and fetus.

1.3 NEED FOR THE STUDY: This study aims to investigate the upright position for primigravida during second stage of labor. The main aim of this study is to decrease the pain, intensity and duration of the labor and to avoid the complications that may occur to both mother and fetus during childbirth.

1.4 AIM:

To find the effects of squatting position in second stage of labor on duration in active phase among primigravida

1.5 OBJECTIVES:

To determine the effects of squatting position in second stage of labor duration using timer during the active phase of second stage of labor among primigravida.

To determine the effects of squatting position on labor pain using NPRS during the active phase of second stage of labor among primigravida.

1.6 HYPOTHESIS:

- **Null-hypothesis**: There is no significant effect of squatting in second stage of labor in active phase among primigravida
- **Alternative-hypothesis**: There is a significant effect of squatting in second stage of labor in active phase among primigravida.

REVIEW OF LITERATURE:

Alessandra Familiar et,al (2023): Patients who were not in the supine posture or who were in different positions, such as squatting, fared remarkably well in the second stage of labor and reported less perinatal injuries and episiotomies, according to a paper summarizing the investigation's findings.
Jagriti Chauhan1 et al,.(2023): One comfort measure that is employed as a supporting method during childbirth is positioning. The study's findings show the strongly supported squatting position increases the APGAR score and reduces the length of the second stage of labour. Therefore, laboring women may utilise this posture as a technique in the second stage of labor.
Prasiddhi D. Satone , Surekha A. Tayade et al(2023): There is ample evidence to suggest that the mother ought to not be placed in a supine posture during the second stage of labor that has complications to both mother and fetus.
Prasiddhi D. Satone et,al(2022): The author determined that supine positions have been associated to a higher number of fetal heart rate abnormalities and a lower number of spontaneous vaginal births as compared to upright or side-lying positions.
Diyan Wahyuningsih et,al(2021): In the end, the study's author concluded that there is strong testimony that squatting during a primigravida active phase of the second stage shortens the time frame of labor
Fatima Dokmaka et al(2020): The research that is currently available supports the benefits of squatting during labor. As squatting has been shown to be beneficial, women need to be free to select the posture that suits them best.
Jing Huang et. Al(2019) : The author concluded that at the time the second stage of labor, vertical and horizontal postures would be more beneficial for improving mother and infant outcomes. However, women who giving delivery standing up—especially while crouching and sitting—discover that their labor lasts shorter..
David Desseauve , et al(2019): : Foot posture in the squatting birth position affects the pelvic orientation and lumbar curve biomechanically. In terms of squatting postures, flat feet on the ground are more similar to ideal delivery positions than tiptoes
JANESH K Gupta et al (2017) The study's findings suggest that women who have not undergone epidural anesthesia may benefit from upholding an upright posture in a number of ways, such as reduction in the duration of the second stage of labo r (primarily over primigravid women), a drop in the incidence of episiotomies, and assisted births.
MahboubehValian et,al(2016) This article encounters that the use of different delivery positions to minimise pain during the second stage of labor is investigated. Of the three alternative postures, the squatting position results in less discomfort than the other two groups.

CHAPTER III
METHODS

3.1 SUBJECTS: Pregnant women in second stage of labor
3.2 SAMPLING TECHNIQUE: convenient sampling
3.3 SAMPLE SIZE: 10.
3.4 SELECTION CRITERIA:
Inclusion criteria:

- Pregnant women during the second stage of labor
- Mothers who have not attended antenatal classes

- First pregnancy who were aged between 18 and 35 years old
- Gestational age >37 weeks
- In cephalic presentation with an estimated fetal weight and neonatal weight that were appropriate for the gestational age

Exclusion criteria:

- Gestational diabetes
- Pre eclampsia
- Tremors.
- Malpresentation.
- Endomorphic,
- Epidural anesthesia
- Placenta Previa
- Epilepsy

3.5 STUDY PROCEDURE A total of 10 participants are selected for the study based on inclusion and exclusion criteria

- The patients are educated about the advantages of squatting position and are asked to perform with their concern.
- In this procedure, the mother can perform either wall squat or they can perform supported squat.
- The patient is educated before 2 weeks of Estimated Due Date (EDD) about the squatting and breathing exercise to perform during the labor phase.
- Before performing squatting, the patient is asked to perform breathing exercise.
- Average time for performing squatting for about 10 seconds of hold and 2 seconds for relaxation.
- The angle for squatting is around 85-90 degrees if the patient can perform the procedure.
- Repetitions can be given for 10-15 times.
- If the patient feels uncomfortable while performing squatting, then the procedure is interrupted.
- The procedure can be continued once the patient feels better and is able to perform it.
  Observe the labor pain with the help of NPRS Scale
  During the procedure, record the reduced duration of labor timing, with the help of the timer.

3.6 OUTCOME MEASURES:

Pain : The NPRS is a segmented numeric version of the visual analog scale (**VAS**) in which a respondent selects a whole number (0–10 integers) that best reflects the intensity of pain.

Labor Duration: The timer is used to record how much duration has been reduced after giving the squatting position to the patient.

3.7 STATISTICAL PROCEDURE:

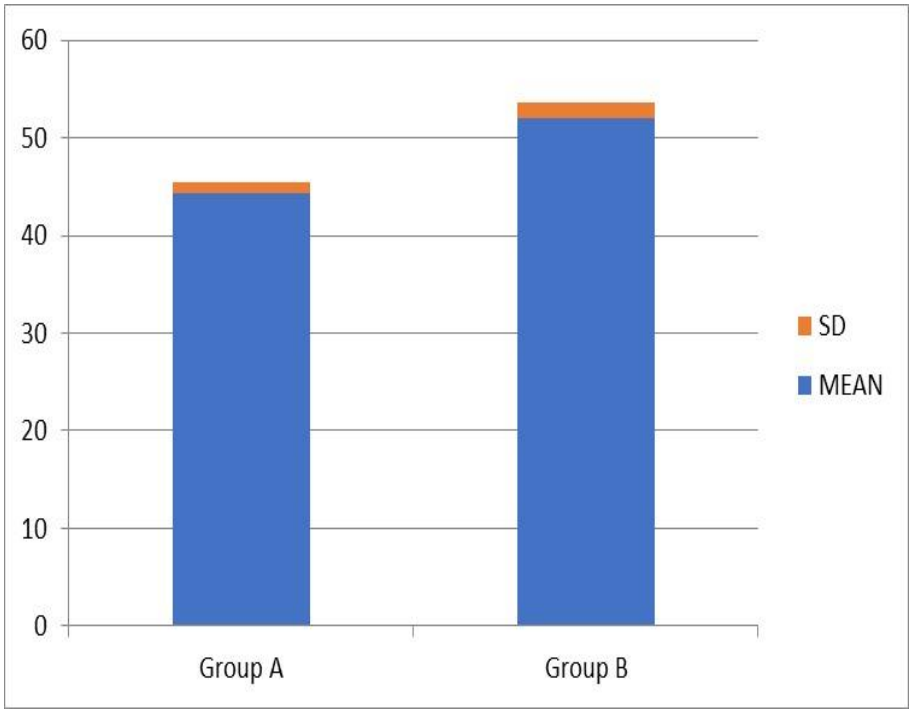
Using tabular and inferential statistics, the gathered data was evaluated. The mean and standard deviation (SD) were utilized for all parameters. The statistically significant differences between pre-test and post-test measures were examined using a paired t-test, the significance level of p value less than 0.0001 was determined to be extremely statistically significant.

CHAPTER IV

DATA ANALYSIS: Comparison of group A and group B Value. The mean value of the group A is 44.38 and the SD value is 1.021, Whereas the Group B mean value is 52, SD value is 1.581. t= 9.0535.

As a result, the findings are considered extremely statistically significant when the p-value is <0.0001.

Group	SD	MEAN	T VALUE
Group A	**1.021**	**44.38**	9.0535
Group B	**1.581**	**52**	



CHAPTER V
DISCUSSION:

The aim of this research is to detect the findings of upright position in second phase of labor so as to reduce the pain and time which ultimately leads to reduced negative outcomes and a reduced likelihood of fatality. Since the primigravida women does not experience any previous labor, their cervix will be stiff that results in a prolonged labor in active phase that can lead upt0 8 hours. (Diyan et al) Some women were encouraged to deliver in supine or half supine, sometimes upright position are also recommended during labor. The results shows that patient who had adopted upright position had decreased duration in the second phase of labor. The position they chosed had a decreased second and third phase of labor. The pain level measured by VAS was lower in the squat posture than in the supine position. It suggests that sitting not only reduces time but also reduces discomfort and improvements comfort. (Jagriti Chauhan and others) The labor process comprises three stages, and conventional therapy has been improved at each to avert complications and ameliorate a general increase in rates of mother and newborn death. In realistic terms, labor processes only go through one phase. One of the most common is the early stage of labor, when a woman is more likely to die from giving birth prematurely due to the several issues that are very common at this time. Prolonged first stage labor can be characterized by insufficient cervical dilatation during the active and latent phase that can lead to prolonged labor that can be approximately lasting for eight hours. The active phase of second stage can

be a crucial time in labor. As a result, every medical assistant in labor ward should be able to control and observe the delivery. To reduce the risk of dangerous situations for the mother and fetus during the delivery process, especially while entering the active phase of the second stage of labor, healthcare workers must be able to assess labor progress in relation to the descent of the fetal head and the progression of cervical dilation, which is greatly impacted by perfect contractions. Although there are physiological muscular contractions that generate discomfort, labor contractions are unique.

The second phase of labor (the cervix dilation stage) is marked by cervical effacement and dilatation, which advances from regular uterine contractions to complete dilation, and the woman has constant discomfort throughout this time. The second stage of labor for a primigravida will last for about 50 minutes.

It can be identified by strong, repetitive contractions that strain and burn the vagina. The contractions last 60 to 90 seconds. Prolonged supine positioned may restrict blood flow to the mother and baby to the point that the uterus's weight compresses major blood vessels, reducing blood flow. This diminished blood flow may have an unfavourable effect on the baby's oxygen supply, resulting in oscillations in the baby's heart rate. Physicians typically urge people undergoing labor to switch positions regularly in order to avoid these risks.

Epidural and lithotomic posture, for instance, may significantly raise the likelihood of necessitating an episiotomy. Although maternal position in the second stage of labor does not appear to have a significant effect on newborn outcomes, the Estimate Blood Loss (EBL) and length of fetal descent are significantly shorter in women who pushed in an alternate posture.(Alessandra and others)Participants in this research were kept in a squatting position and experienced less discomfort in the second stage of labor.

In this context, the level of pain in the second phase of labor was substantially lower in the squat posture than in supine. (Mehri et al).

According to the findings of this study, the supported squatting position diminishes the duration of the second phase of labor and thus there is an increase in APGAR score. As a result, this position can be adopted as an intervention during the second phase of labor among patients who are in the time of labor. (Jagriti Chauhanet al)

There are several advantages to upright position in women who do not get epidural anesthesia, including a small reduction in the time of the second phase of labor (mostly in the primigravid group), a reduction in episiotomy rates, and aided deliveries.

The purpose of this study is to assess the influence of upright versus supine position on the intensity of pain and duration of the active period of the first stage of labor in primigravida women in labor. Based on past research it was discovered that the upright position can cause efficient contractions, which additionally promote cervical dilation and the descent of the fetal head into the pelvic canal.

As consequently, labor discomfort can be alleviated. (Melsa Sagita Imaniar et al) The existing research indicates that squatting during childbirth is worthwhile. Women should be permitted to pick their preferred position because there is evidence for squatting. There is strong evidence that second-stage labor should not be done while the woman is in supine position (Fatima Dokmaka et al). Supine positions are associated with higher fetal heart rate anomalies and fewer spontaneous vaginal births than upright or side-lying positions. Squatting or sitting may be useful when the second stage is protracted or a speedy birth is required, whereas side-lying or hands-knee postures may assist prevent lacerations. (Prasiddhi D. Satone et al) One of the comfort measures utilised as a supporting method during labor is

positioning. According to the findings of this study, the supported squatting position reduces the duration of the second phase of labour and increases the APGAR score. As a result, this position can be employed as an intervention during the second phase of labor among moms who are giving birth.. **(**Jagriti Chauhan1 et al**,)**

The duration of the second phase of labor was slightly shorter in the squatting posture, but the difference was not statistically significant. It has been established that when squatting, the pelvic inlet may be closer to the ideal position, the pelvic diameter increases by roughly 3%, and the effects of gravity are further enhanced by pushing efforts. The strength of uterine contractions rises, and the placement of the fetus in the birth canal may improve, in addition to a better distribution of pressure on the perinatal area, an increase in an urge to push, a decrease in the likelihood of great vascular compression, and decreased fetal distress. (Mariaet al)

We spotted reduced pain using the NPRS scale and modest reduced duration using the Timer after executing squatting position in second stage of labor in active phase. The newborn has a positive APGAR score and there are less hurdles during the second phase of labor. The conclusion is the study shows that squatting during the second stage of labor reduces discomfort and duration while also enlarging pelvic canal.

LIMITATIONS AND RECOMMENDATIONS:

LIMITATIONS: There is no uniform duration for that position.

No specific Range of Motion is given.

The sample size is limited.

- Limited Research: While promising, the research on squatting benefits is still evolving, and more extensive studies are needed for definitive conclusions.
- Squatting may not be comfortable or feasible for all women, particularly those with certain medical conditions.
- Squatting for an extended period requires physical strength and endurance, which may not be achievable for all women.
- Societal norms and cultural expectations surrounding birthing positions may influence women's choices.

RECOMMENDATIONS:

Healthcare providers should engage in open conversations with primigravida, exploring their preferences, comfort levels, and medical conditions to determine the suitability of squatting. Proper guidance and assistance from trained professionals are crucial for ensuring a safe and effective squatting birth experience. Birthing facilities should be equipped with tools and space that cater to squatting positions, ensuring comfort and safety for mothers.

CHAPTER VI

CONCLUSION

The available research suggests that squatting during the second stage of labor may have several benefits for primigravida including shortening the duration, reducing pain, and potentially improving comfort and fetal outcomes. However, it's important to acknowledge individual preferences, the evolving nature of research, and the need for skilled support. Ultimately, the decision to squat during labor should be

made by the woman, in consultation with her healthcare provider, after considering all factors and ensuring a safe and comfortable birth experience.

CHAPTER VII
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