# Assess the Level of Back Pain among LSCS Mothers

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## Abstract

**A. Introduction:** Almost all pregnant women complain about back pain after spinal anesthesia, which is the unique risk factor for back pain caused due to Cesarean birth. During the postnatal period, 68% of women are affected with back pain in 8 weeks and 60% in 8 months.

**B.** Aim: The aim of the study is to assess the level of back pain among lower segment cesarean section mothers.

**C. Methodology:** A cross-sectional research design was adopted with 30 samples. The samples which met the inclusion criteria were selected by a convenient sampling technique. Collected socio-demographic variables followed by assessing the level of back pain by using a numerical pain rating scale and multiplechoice questions were used to assess the back pain related to lower segment caesarean section. Collected data were analyzed by using descriptive and inferential statistics.

**D.** Result: Out of 30 samples, 6 (20%) had mild pain, 16(53%) of them had moderate pain, and 8(27%) of them had severe pain. The mean score of back pain level was 5.46 with a 2.37 standard deviation. The Chi-square test reveals that there is a significant association between age, education, occupation, type of family, income, residence, with the level of back pain at the level of  $P \le 0.05$ .

**E.** Conclusion: The study findings concluded that the mothers who delivered a baby by LSCS having back pain from mild intensity to severe from the time of delivery and lasting for years after delivery.

**Keywords:** *Back pain, LSCS mothers, spinal anesthesia, epidural anesthesia.* 

## I. INTRODUCTION

Childbirth is one of the most marvelous and memorable segments of a woman's life. It does not really matter if the child is the first, second, or third one. Each experience is unique and calls for a celebration. One of the most beautiful time periods during a women's life is the pregnancy period because her life will be satisfied by giving birth to her baby. For that, she will be ready to suffer all the pains, neither vaginal delivery nor cesarean section, with full happiness.

Lower Segment Caesarean section (LSCS) is a surgical intervention that is carried out under spinal or epidural anesthesia to ensure the safety of mother and child when vaginal delivery is not possible or when the doctor considers that the danger to the mother and baby would be greater with a vaginal delivery. The proportion of cesarean section to the total births is considered as one of the important indicators of emergency obstetric care (World Health Organization, 2009).In India, the rate of cesarean section delivery has increased from 3 percent to 10 percent between 1992-93 and 2005-06 (IIPS, 2007), which is lower compared to some developing nations like Brazil and China. But as India is the second-most populous country in the world, a small percentage increase affects a huge number of people. Based on DLHS-3 data, the cesarean section delivery rate in India is 9.2 percent. The proportion of women who have undergone cesarean deliveries is the highest in Kerala (31.8 percent), followed by Andhra Pradesh (29.3 percent) and Tamil Nadu (23.2 percent) and the lowest in Rajasthan and Jharkhand (4.2 percent in both the states).

Even though the labor event gives pleasure to the mother, it also gives severe pain. Among these, back pain is very common during pregnancy and postnatal periods and is a serious cause of morbidity. Postnatal is the period beginning immediately after the birth of a child and extending for about six weeks. Biologically, it is the time after birth, a time in which the mother's body, the major focus of postpartum care, is ensuring that the mother is healthy and capable of taking care of her newborn.

During the postnatal period, 68% of women are affected with back pain in 8 weeks and 60% in 8 months. Neither elective caesarian section increases the risk of postnatal back pain compared with spontaneous delivery. Anatomically, pain presents itself most commonly in the following areas: sacroiliac joints at the posterior superior iliac spine (42%), the groin areas (53%), coccyx (33%), pubic symphysis anteriorly (77%), and occasionally other areas of the pelvic and upper legs. Rarely does the pain occur below the knee? Pain tends to be influenced by posture and is associated with a waddling gait. Most of the time analgesic is given to the postnatal mothers in order to reduce the pain. The action of an analgesic is temporary, which helps to reduce pain for a very short period.

The primary causes of back pain among LSCS mothers are trauma to the skin, muscles, ligaments, or Nerves of the back due to the insertion of a spinal needle. The second cause is known as a post-dural puncture headache, in which a gradual leak of cerebrospinal fluid results in headache and neck pain that worsens when the mother sits or stands and resolves when she lies flat. A surprisingly high number of clients attending pain clinics in Scotland and North England attributed their pain to a surgical event (Iohom& Shorten, 2003). Many numbers of women with back pain after LSCS even after 6 or 7 years when they strain Sudden lower back pain years after epidural or spinal anesthesia is more likely to be caused by a recent injury, heavy lifting, poor posture or positioning (such as during sleep or while carrying a backpack), or stress on the bones or muscles.

Majorly, almost pregnant women complain about back pain after spinal anesthesia, which is the unique risk factor for back pain caused due to Cesarean birth. In a 2009 study published in the journal Anesthesia and Critical Care, the back pain risk approaches 40 percent. Women face severe lower back pain during their recovery mode from cesarean section, which radiates from the upper buttocks, the crest of the hips, and the sacrum. It is seen mostly in housewives who deal with lifting and bending in their daily Description of chronic pain following cesarean section was addressed by only one study, reporting a prevalence of 12% at a mean follow-up time of 10.2 months after surgery (Jensen, Kehlet, Nikolajsen, &Sørensen, 2004). While lower back pain is very common, delayed pain from complications of epidural or spinal anesthesia is quite rare, especially after years without any problems.

Dr.ShemilaAbbasi et al. (2O14) had conducted a study that shows that The prevalence of low back pain experienced after delivery in epidural analgesia versus non-epidural analgesia groups was 40.9% versus 40% on day one and 32.2% versus 35.2% after 1 week. However, after one and 3rd months follow-up, backache prevalence was less in epidural analgesia group (unadjusted odds ratio [OR]: 0.63; 95% confidence interval [CI]: 0.39-0.99) and (unadjusted OR: 0.32; 95% CI: 0.15-0.69) respectively. The adjusted odds ratio was 0.59 in 1st month and 0.25 in 3rd month. There was no significant difference between the two groups in pain scores.

Russell et al., in their study, have reported nearly the same incidence of back pain three years later (18% vs. 12%) at a follow-up of 1 year. Butler and Fuller reported 7.5% back pain lasting for more than 2 weeks following epidural analgesia for labor which is 2 times higher than back pain reported in our study. The most frequent concern of patients receiving epidural analgesia for labor pain relief is post-partum back pain. This survey was designed to assess the prevalence of post-partum backache with and without epidural analgesia among post-partum women. Moschini et al. compared complications among three groups and found no significant difference in localized and diffuse back pain after epidural analgesia, spinal-epidural analgesia, and no analgesia.

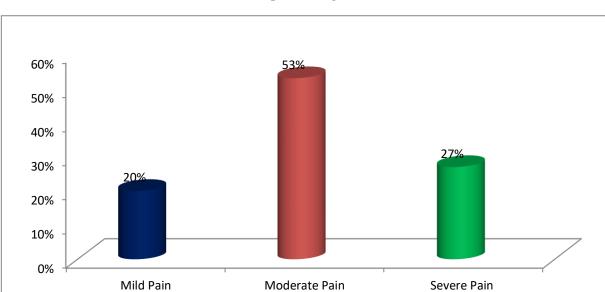
During community and clinical posting and also in personal experience, the investigator comes across many mothers who delivered a baby by LSCS and had back pain with mild intensity to severe intensity, which motivated the investigator to assess the level of back pain among mothers of LSCS.

# II. MATERIALS AND METHODS USED

The research approach used in the study was a quantitative approach by using a cross-sectional research design. After obtaining formal permission, the main study was conducted with 30 samples at Vellavedu. The samples which met the inclusion criteria were selected by a convenient sampling technique. Mothers who had any other surgery under spinal anesthesia and LSCS mothers with a previous history of back pain were excluded. Explained the study in detail and obtained informed consent from the mothers. Data were collected by interview method on one basis. Collected socio-demographic variables followed by assessing the level of back pain by using a numerical pain rating scale and multiple-choice questions were used to assess the back pain related to LSCS. Each sample took 15-20 minutes to complete the interview. Confidentiality was maintained throughout the procedure. Collected data were analyzed by using descriptive and inferential statistics.

# **III. RESULTS**

Out of 30 samples, 6 (20%) had mild pain, 16(53%) of them had moderate pain, and 8(27%) of them had severe pain. The mean score of back pain level was 5.46 with a 2.37 standard deviation.



# Level of Back pain among LSCS mothers

# Table I: Frequency & percentage distributions of back pain related to LSCS among LSCS mother

S.No				
	Factors related to back pain	Classification	Frequency	Percentage
1	Number of child birth	Primipara	14	47
		Multipara	16	53
2	LSCS done under	Spinal anesthesia	27	90
		General anesthesia	2	7
		Epidural anesthesia	1	3
3	Location of low back pain	At the middle of the back	2	7
		At the lumbar puncture site	19	63
		At the lower back	9	30
4	Low back pain initiates	At sitting position	14	47
		At lying down on my back	15	50
		At strain on back	1	3
5	The quality of low back pain is	Dull	10	33
		Sharp	9	30
		Pricking	11	37
		Unbearable	-	-
6	Radiation of low back pain	Radiating to right upper extremity	9	30
		Radiating to left upper extremity	2	40
		Radiating to both lower extremity	8	27
7	Low back pain aggravated by	Lifting heavy objects	17	57

		Climbing staircase	6	20
		While giving feeding	3	20
		Walking &standing for a while	3	10
8	Low back pain relieved by	Taking rest	18	60
		Back massage	2	7
		Exercise	1	3
		Analgesia	9	30
9	Duration of back pain	Continuous pain	8	27
		Intermittent pain	22	73
		Whenever do strain on the back	-	-
		General anesthesia	2	7
		Epidural anesthesia	1	3
		At lying down on my back	15	50
		A strain on the back	1	3

Table I Shows that regarding the Number of childbirth, 16(53%) of them were multipara, and only 14(47%) were primipara mothers. With regarding, LSCS done under anesthesia, 27(90%) were under spinal anesthesia, and 1(3%) of them were under epidural anesthesia. Regarding the location of back pain19(63%) were at the lumber puncture site, and 2(7%) had pain in the middle of the back. Regarding back pain initiates, 15(50%) had during lying down position, and only one (3%) had pain during strain on the back. Regarding the quality of back pain, 10(33%) had dull pain, and only 9(30%) had sharp back pain. Regarding radiation of back pain, 12(40%) had pain radiating to the left upper extremity and 8(27%) radiating to both lower extremities. Regarding back pain aggravated by, 17(57%) had pain while lifting heavy objects, and only 3(10%) had back pain while giving feeding. Regarding low back pain relieved by, 18(60%) of them were taking rest, and only 1(3%) had low back pain while doing massage. With regards to the duration of low back pain, 22(73%) had intermittent back pain, and 8(27%) had continuous back pain.

The Chi-square test reveals that there is a significant association between the ages, education, Occupation, type of family, income, residence with the level of back pain at the level of  $P \le 0.05$ .

#### **IV. CONCLUSION**

The study findings concluded that the mothers who delivered a baby by LSCS having back pain from mild intensity to severe from the time of delivery and lasting for years after delivery, and it is associated with various factors. Identify the factors which aggravate the back pain can be eliminated, thereby reducing the back pain, which will promote the wellbeing of the mother and child.

### V. RECOMMENDATIONS

- A similar study can be undertaken on a larger scale.
- A similar study can be undertaken between rural and urban LSCS mothers.
- An intervention study can be done with clove oil massage for back pain
- An intervention study can be done with mustard oil massage for back pain

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