



“TO ASSESS THE EFFECTIVENESS OF YOGA THERAPY ON LOW BACK PAIN AMONG POSTNATAL MOTHERS WHO UNDERWENT LOWER SEGMENT CAESAREAN SECTION IN SELECTED MATERNITY HOSPITAL AT SELECTED CITY”.

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ABSTRACT **INTRODUCTION:** “The only thing more expensive than education is ignorance”. Low back pain is the most common cause of pain in the United States resulting in substantial morbidity, disability, and cost to society. An estimated 5% to 10% of US adults experience chronic low back pain (LBP). Individuals from low-income minority backgrounds with LBP may be disproportionately affected due to disparities in access to treatment. For example, minorities have less access to analgesic prescriptions, surgery, and intensive rehabilitation. Many LBP patients seek relief using complementary therapies such as yoga. Yoga originated over 2000 years ago in India as a system of physical, moral, and spiritual practices. Hatha yoga is one branch of yoga consisting of physical postures (*asanas*), breathing techniques (*pranayama*), and meditation. Although yoga use by adults in the United States increased to more than 6% in 2007, it is less common among minorities and individuals with lower incomes or education. Several studies of yoga for LBP in predominantly white middle-class populations suggest it may be effective for reducing pain and improving function.

Materials and Methods: Quantitative research approach & True Experimental pre-test & post-test control group design was used. Sample was 60 postnatal LSCS mothers from selected maternity hospitals. Were selected by using simple random sampling technique. Level of LBP was measure by giving yoga therapy followed that LBP level was measure with the help of low back pain scale & a findings was recorded and the result were evaluated through OSWESTRY LBP scale. The data was analysed using chi-square test.

Result: control group out of 30 samples, 0(0%) of having mild pain, 19(63.33%) of having moderate pain, 11(36.67%) of having severe pain. In experimental group out of 30 samples 15(50.00%) of having mild pain, 15(50.00%) of having moderate pain and 0(0.00%) of having severe pain. Finding also suggested that there was a significant association between LBP & demographic variables. (P value 0.01).

Conclusion: yoga therapy is effectiveness on low back pain for postnatal LSCS mothers.

KEYWORDS : Yoga Therapy, Low Back Pain, Postnatal LSCS Mothers.

INTRODUCTION:

Childbirth is one of the most marvelous and memorable segment in a woman's life. It does not really matter if the child is the first, second or the 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 caesarean section with full happiness. Lower Segment Caesarean section (LSCS) is a surgical intervention which is carried out under spinal or epidural anesthesia to ensure safety of mother and child when vaginal delivery is not possible or when the doctor consider that the danger to the mother and baby would be greater with a vaginal delivery. Proportion of caesarean section to the total births is considered as one of the important indicators of emergency obstetric care (World Health Organization, 2009)¹.

In India the rate of caesarean section delivery has increased from 3 per cent 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 caesarean section delivery rate in India is 9.2 per cent. the proportion of women who have undergone caesarean deliveries is the highest in Kerala (31.8 per cent) followed by Andhra Pradesh (29.3 per cent) and Tamil Nadu (23.2 per cent) and the lowest in Rajasthan and Jharkhand (4.2 per cent in both the states). Even though the labor event gives pleasure for the mother it also gives severe pain. Among this, back pain is very common during pregnancy and postnatal period, and is a serious cause of morbidity¹.

According to researcher **Karen (2011)** yoga, stretching may ease lower back pain. a senior investigator at Group Health Research Institute in Seattle, says in a news release. "We expected back pain to ease more with yoga than with stretching, so our findings surprised us," Sherman says. "The most straightforward interpretation of our findings would be that yoga's benefits on back function and symptoms were largely physical, due to the stretching and strengthening of muscles"².

Post lower segment caesarean section (LSCS) backache is one of the commonest complaints in women. The incidence of LSCS are

markedly rising mainly due to modern life style like high stress full jobs, working and traveling for several hours, lack of exercise, delayed marriages. During the last decade there has been two to three fold rises in the incidence from the initial rate of about %. Spinal anaesthesia is preferred for its safety³.

OBJECTIVES:

1. To assess the low back pain level among the postnatal mothers underwent lower segment caesarean section before yoga therapy.
2. To assess the low back pain level among the postnatal mothers underwent lower segment caesarean section after yoga therapy.
3. To determine the effectiveness of yoga therapy on low back pain among the postnatal mothers underwent lower segment caesarean section by comparing control and experimental group.
4. To find out association between low back pain among the postnatal mothers underwent lower segment caesarean section before yoga therapy with selected demographic variables.

MATERIALS AND METHODS:

Quantitative research approach & True Experimental pre-test & post-test control group design was used. Sample was 60 postnatal LSCS mothers from selected maternity hospitals. Were selected by using simple random sampling method. Development of data collection instrument. A OSWESTRY Low Back Pain Scale was used to measure the level of LBP the data collection & this was developed based on the objective of the study & review of literature. Structured questionnaire tool was used which consist 2 sections. Section-I Demographic Performa of postnatal LSCS mothers, section-II analysis of yoga therapy on LBP with the help of OSWESTRY Low Back Pain Scale. To check the level of severity of LBP as 0% to 40% mild low back pain, 41% to 80% moderate low back pain, 81% to 100% severe low back pain.

RESULT

1. To assess the low back pain level among the postnatal mothers underwent lower segment caesarean section before yoga therapy. Finding related to level of low back pain among postnatal LSCS mothers undergoing yoga therapy group. Shows that in control group, out of 30 samples, 0(0%) of having mild pain, 23(76.67%) were having moderate pain, 7(32.33%) having severe pain. In experimental group out of 30 samples 0(0%) of having mild pain, 19(63.33%) having moderate pain, 11(36.67%) having severe pain.

2. To assess the low back pain level among the postnatal mothers underwent lower segment caesarean section after yoga therapy.

There will be significance difference between after yoga therapy the level of low back pain among postnatal LSCS mothers by comparing experimental and control group. The mean score of experimental group 18.27 (5.06) which was less than the score of control group 38.77(2.81).

The computed't' value was greater than the table value. Therefore the H5 hypothesis was accepted. Hence it is concluded that yoga therapy is effective for reducing the low back pain. Findings related to level of low back pain among postnatal LSCS mothers undergoing yoga therapy group. Shows that data presented in shows the level of post-test of low back pain in control group out of 30 samples,0(0%) of having mild pain, 25(83.33%) of having moderate pain, 5(16.67%) of having severe pain. In experimental group, 15(50.00%) of having mild pain, 15(50.00%) of having moderate pain and 0(0.00%) of having severe pain.

3. To determine the effectiveness of yoga therapy on low back pain among the postnatal mothers underwent lower segment caesarean section by comparing control and experimental group.H₁;

There will be a significant difference between the before and after yoga therapy the level of low back pain among post natal LSCS mothers. The post- test mean score 18.26 (5.05) was less than the pretest mean score 40.2 (1.24) the calculated't' value was higher than the table value. **Therefore hypothesis H₂ was rejected and H₁ was accepted.** The findings suggest that there was significant reduction low back pain after giving yoga therapy. Findings related to level of low back pain among postnatal LSCS mothers undergoing yoga therapy group. Shows that the Pre-test out of 30 samples,0(0%) of having mild pain,19(63.33%) of having moderate pain. 11(36.67%) of having severe pain. In experimental group, 15(50.00%) of having mild pain, 15(50.00%) of having moderate pain and 0(0.00%) of having severe pain.

4. To find out association between low back pain among the postnatal mothers underwent lower segment caesarean section before yoga therapy with selected demographic

TABLE NO. 1 Association of low back pain with demographic variables

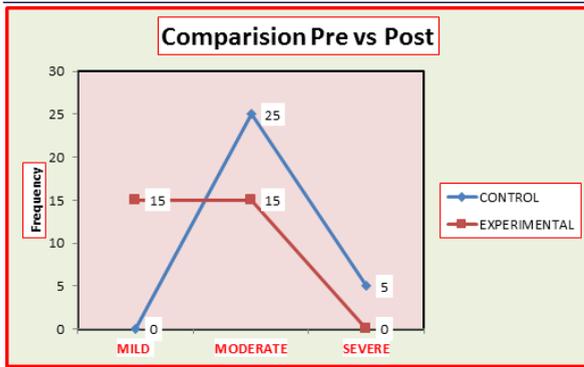
Sr. No.	VARIABLE		Pain			chi-square	d.f.	p value	significance
			Mild	Moderate	severe				
1	age	< 20	0	8	2	4.39	3	0.22	Not Significant
		20-25	0	14	9				
		26-30	0	8	4				
		> 30	0	6	9				
2	Education	No formal education	0	1	1	2.19	4	0.69	Not Significant
		Primary school	0	12	5				
		SecondarySchool	0	17	15				
		Higher Secondary	0	5	3				
		Graduate	0	1	0				
3	occupation	House wife	0	6	2	3.17	3	0.36	Not Significant
		Govt. employed	0	7	2				
		Non Govt.	0	15	11				
		Other	0	8	9				
4	family Income	< 5000	0	18	6	3.88	2	0.14	Not Significant
		5001-15000	0	11	10				
		15001 – 25000	0	6	5				
		Above Rs.25001	0	1	3				
5	duration of marital life	< 1	0	4	2	8.03	3	0.04	Significant
		2-3.	0	22	11				
		4-5.	0	7	2				
		> 5	0	3	9				
6	types of caesarean section	primary	0	16	6	2.34	1	0.12	Not Significant
		Repeat	0	20	18				
7	BMI	Under weight	0	2	2	6.52	2	0.03	Significant
		Healthy	0	24	8				
		Over weight	0	10	14				
8	source of health information	Mass media	0	6	8	6.17	4	0.18	Not Significant
		Relatives	0	6	8				
		Friends	0	6	8				
		Health Professionals	0	6	8				
		Others	0	6	8				

Association between the affective low back pain in postnatal LSCS mothers and demographic variables is calculated by using chi-square test. When chi-square calculated value is more than chi-square table value there is significant association present.the association between level of affective low back pain in postnatal LSCS mothers and demographic variables undergoing yoga therapy. Chi-square value was calculated to find out the association. The result shows that the

calculated value is less than (0.05 level) tabulated value for all the demographic variables. So there is no association between level of low back pain and any of the demographic variables. Finally, it can be concluded that there is significant association between demographic variables such as Duration of marital life and BMI with level of low back pain.

Effectiveness of Yoga Therapy on Experimental group
TABLE 2: Comparison of effectiveness of Yoga Therapy between pre-test and post-test among experimental group

EXPERIMENTAL	Pre test		Post test	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
MILD	0	0	15	50.00
MODERATE	25	63.33	15	50.00
SEVERE	5	36.67	0	0.00
TOTAL	30	100.00	30	100.00



Conclusion: The findings of the study concluded that Yoga Therapy is a non-pharmacological intervention which should be carried out independently in the field of nursing and yoga therapy is effectiveness on low back pain for postnatal LSCS mothers. The overall experience of conducting this study was enriching hence it gives an opportunity to the investigator to acquire new information as well as learning experience. The experience of the investigator during the study and the findings helped the investigator to give suggestions and the recommendations for further studies.

REFERENCES

1. Thenmozhi P. ,SSRG International Journal of Nursing and Health Science (SSRG-IJHS)- volume 2 Issue 2016 original Research Article.ISSN:2454-7484. Therapy on Chronic Low Back Pain. Published in final edited form as: www.internationaljournalsssrg.org.
2. Warner J. webMD health News.Yoga.stretching may ease lower back pain.Archives of internal medicine.oct,25,2011. <http://www.webmd.com/backpain/news/2011.1125/yogastretching-may-ease-lower-back-pain>.
3. Kamde R, Patil B, Conceptual study of yogasanas in management of post LSCS backache. International journal of Applied Ayurved Research ISSN:2347-6362. www.ijaar.in.
4. Abbassi S, Hamid H, Ahmed Z, & Fauzia Haq N. prevalence of low back pain experienced after delivery with & without epidural analgesia:2014 Mar-Apr; 58(2): 143- 148.doi:10.4103/0019-5049.130814.PMCID:PMC4050929.
5. Advantages of yoga [Internet].2016 [updated 2016; cited 2016 Jan 8]. Available from <http://www.aarogya.com/articles/yoga/advantages-a-disadvantages-of-yoga.html>.
6. Brar NK,Rawat HC.textbook of Advanced Nursing Practice. First edition.New Delhi India:Jaypee publication;2015.
7. Complementary Therapies in Clinical Practice, 17 (2011): 1-8. Journal homepage: www.elsevier.com/locate/ctcp.
8. Cramer ,Holger Msc; Lauche, Romy PhD, Haller H,Msc; Dobos, G, MD. A systematic review & meta-analysis of yoga for low back pain. Clinical Journal of pain. May 2013;vol.29-issue-p.450-460.doi:10.1097/AJP.0b013e31825e1492.
9. Douglas G. Chang, Jacquelyn A. Holt, Marisa Sklar, & Erik J. Groessl. Yoga as a treatment for chronic low back pain: A systematic review of the literature. Author manuscript, available in PMC 2016 may 24.
10. Dutta's D.C.Textbook of obstetrics. 8th Edition. New Delhi India: Jaypee publication; 2015.pp no.669-679.