



COMPARATIVE STUDY TO IDENTIFY THE INDICATIONS OF CAESAREAN SECTION AMONG PRIMI AND MULTI PARA POSTNATAL MOTHERS

MRS. BLESSY LITTLE CHRISTY.P M.SC (Nursing), Assistant Professor,

PROF. ELIZEBETH RANI.V M.SC (Nursing), Ph.D. Scholar

VHS – M.A. Chidambaram College & School of Nursing, Chennai, TamilNadu, India.
The Tamil Nadu Dr. M.G.R. Medical University

Abstract: Caesarean section is an operative procedure whereby the foetuses delivered through an incision made in the lower segment of an abdomen through a Trans -peritoneal approach. It is the method barely practiced in the present-day obstetrics for saving the lives of women and their new-born. The aim of this study is to determine the indications of caesarean section among postnatal mothers at the selected setting, Chennai. **Objectives:** 1. To identify the indications of caesarean section among primi and multi para postnatal mothers. 2. To associate the demographic variables of primi para caesarean section mothers with multi para postnatal mothers. 3. To associate the indications & non indications of caesarean section with primi and multi para postnatal mothers. **Materials and Methods:** A quantitative non-experimental comparative analysis style was used to identify the indications of caesarean section. 200 individuals were chosen through the non-probability purposive sampling technique and data was collected using a structured questionnaire. **Result:** The leading indications of primi and multi para CS were previous caesarean section 35 (17.5%), Malpresentation 34 (17%), CPD 26 (13.0%), failed acceleration 19 (9.5%), placenta praevia 16 (8%), foetal distress 15 (7.5%) and MAS 10 (5%) and the least indication were cord around the neck and post-dated pregnancy 1 (0.5%) respectively. With regard to demographic variables, there was a statistically significant association between age in years and type of caesarean section at $p < 0.05$ level. **Conclusion:** The predominant cause for caesarean sections is previous LSCS irrespective of second normal pregnancy. On that account, it is mandatory to gauge the antenatal mothers at the initial check-up and recommence at the intranatal level to stave off from any unforeseen emergencies.

Keywords: - *Indications, Caesarean section, Primi para, Multi para, Postnatal mothers*

Introduction

Caesarean delivery (C-section) is a surgery through an incision done in the mother's abdomen and uterus, after 28 weeks of pregnancy for saving the lives of women and their new-borns from pregnancy and childbirth related complications. Over time, it has been observed that caesarean delivery is a far-reaching maternal health concern and the percentage of C-section deliveries in private hospitals has been increasing more in public facilities.

The factors for rising incidence of caesarean delivery out turns in threatened scar rupture, caesarean delivery on maternal request, foetal distress, vaginal breech delivery, manipulative vaginal delivery (rotational forceps), failure of induction, and Increased number of women with age >30 years and associated medical complications

In the course of former decade there has been bifold – tripartite arise occurrence from the earliest rate of about 10%. Although the rate of caesarean section differs across the world, from urban to rural, socio-economic status to health care access for the public.

According to the new research, World Health Organization (WHO), caesarean section rate rises globally, now accounting for more than 1 in 5 (21%) of all childbirths. The digits will be escalating in the forthcoming decade, about (29%) of all births are bound by 2030.

In 2019-20, corporate institution spotted Caesarean-sections to be 34.2%, which surges to 35.95% in 2020-21 and subsequently to 37.95 in 2021-22. The investigations imply on condition that, it drifts, by 2030 to the inflated rates (63%) in Eastern Asia, Western Asia (50%), Latin America and the Caribbean will be (54%), Australia and New Zealand is (45%) Northern Africa (48%) Southern Europe (47%). Comparatively, at the same time, public facilities saw 14.1 per cent, 13.96 per cent, and 15.48 per cent of C-sections occur. One of the compelling reasons for the fatten rate of C-sections is the increase in the institutional births and an increasing drift of maternal request.

However, C-sections is performed, the dominant part of indications results in absolute and relative. An absolute indication flaunts where the vaginal delivery is not possible. They were cephalo pelvic disproportion, placenta praevia, anatomical default of vagina like atresia, stenosis, dystocia, malposition's & mal presentation, cervical or uterine carcinoma. Also relative indications exposes possible vaginal delivery such as Non-reassuring FHR, scar dehiscence, Bad obstetric history with fetal loss, Hypertensive disorders like Severe preeclampsia, (b) eclampsia— with anti-seizure drugs, diabetes uncontrolled, heart disease.

Notably, there were dearth of studies dealing with understanding the indications and causes of C-section deliveries varies from time to time across the globe and becoming a public health issue in today's time. Apart from other health sector policies, perceptions, practices, and cultural norms, women-centered aspect spares various emergency indications of caesarean delivery, which need to be addressed highly and focus only on woman's safe delivery and healthy child birth. Besides, there was an equal percentage of c-section crop up with the natural delivery in the small PHC setup, UPHC and with the midget level crossed at the district level hospitals in Chennai Corporation, TamilNadu. On that account, we have conducted this study to identify the indications and determinants of caesarean section among postnatal mothers in the selected setting.

STATEMENT OF THE PROBLEM

A Comparative study to identify the indications of caesarean section among primi and multi para postnatal mothers.

OBJECTIVES

1. To identify the indications of caesarean section among primi and multi para postnatal mothers.
2. To associate the demographic variables of primi para caesarean section mothers with multi para postnatal mothers.
3. To associate the indications & non indications of caesarean section with primi and multi para postnatal mothers.

ASSUMPTION

- Identifying the indications of caesarean section give some information of repeat indicators.
- Postnatal mothers have different assumptions concerning caesarean interferences.
- Information concerning the factors of caesarean section varies from a patient history.

METHODOLOGY

A quantitative non-experimental comparative analysis style was used to identify the indications of caesarean section. The study was conducted among two hundred postnatal mothers who underwent caesarean section. A non-probability purposive sampling technique was utilized to choose the samples. The demographic variable was collected employing a structured form. The sample size of 200 primi and multi para mothers, who had caesarean section, was selected from the postnatal ward. Data was collected using a structured questionnaire included socio demographic variables like age, education, occupation, residence,

religion, type of family, parity, gestational age, type of caesarean section and the second section includes the obstetric and non-obstetric factors of caesarean delivery.

DATA ANALYSIS

This study utilized primarily descriptive and inferential statistics for information analysis. Descriptive analysis was applied to tabulate the frequency and percentage of demographic variables. A chi-square test was used to associate the indications of caesarean section with the demographic variables and the indications & non indications of caesarean section with primi and multi para postnatal mothers.

RESULT & DISCUSSION

Section A

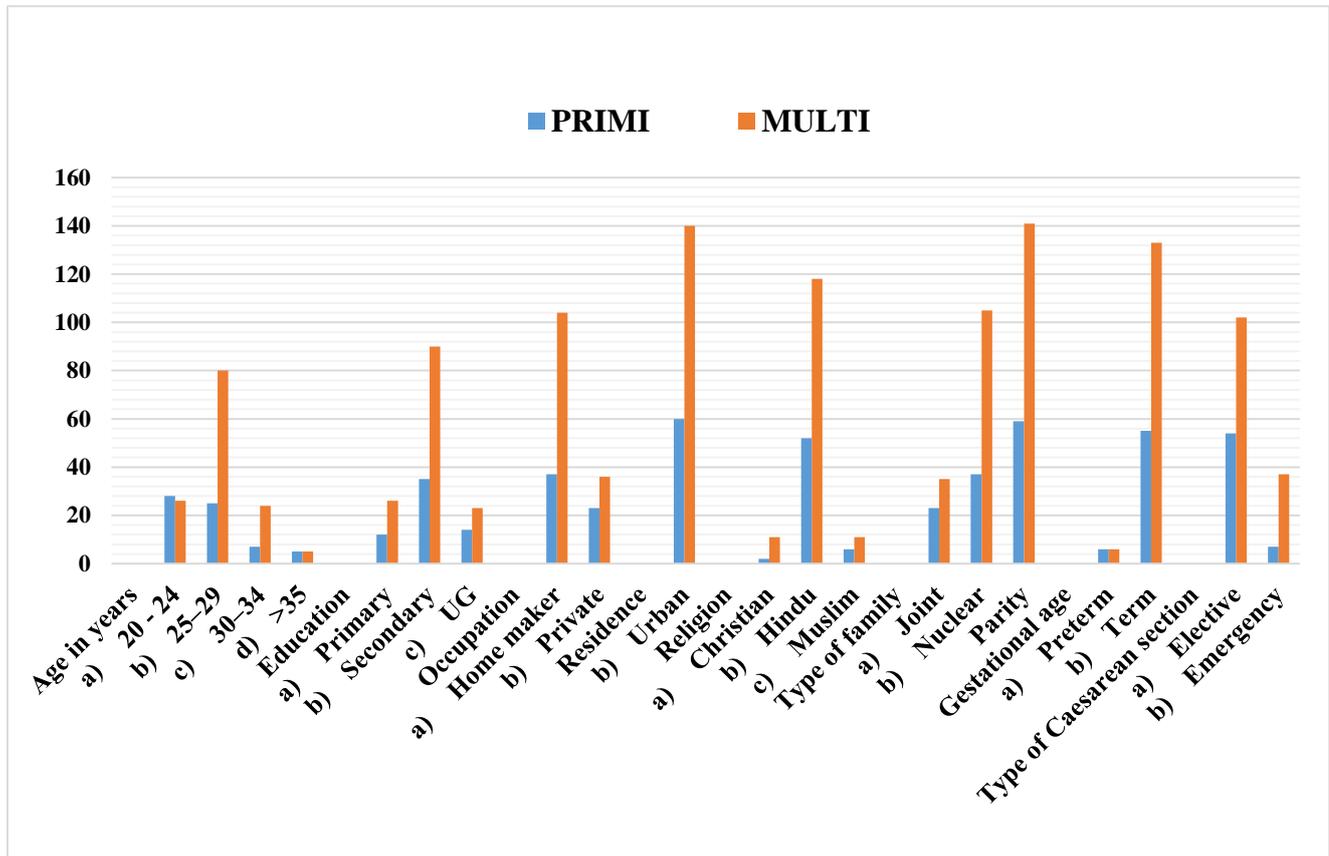
Table 1: Frequency and percentage distribution of the samples based on the demographic variables such as age, education occupation, residence, religion, type of family, parity, gestational age, and type of caesarean section

n = 200

No	Demographic Variables	PRIMI	MULTI	Frequency	Percentage (%)
1.	Age in years				
	a) 20 – 24	28	26	54	27.0
	b) 25–29	25	80	105	52.5
	c) 30–34	7	24	31	15.5
	d) >35	5	5	10	5.0
2.	Education				
	a) Primary	12	26	38	19.0
	b) Secondary	35	90	125	62.5
	c) UG	14	23	37	18.5
3.	Occupation				
	a) Home maker	37	104	141	70.5
	b) Private	23	36	59	29.5
4.	Residence				
	a) Rural	-	-	-	-
	b) Urban	60	140	200	100
5.	Religion				
	a) Christian	2	11	13	6.5
	b) Hindu	52	118	170	85.0
	c) Muslim	6	11	17	8.5
6.	Type of family				
	a) Joint	23	35	58	29.0
	b) Nuclear	37	105	142	71.0
7.	Parity	59	141	200	100.0
9.	Gestational age				
	a) Preterm	6	6	12	6.0
	b) Term	55	133	188	94.0
10.	Type of Caesarean section				
	a) Elective	54	102	156	78.0
	b) Emergency	7	37	44	22.0

Table 1: The findings related to the demographic variables showed that the majority (52.5%) of the samples were from the age group of 25- 29 years, 62.5% of the samples were completed secondary education, 70.5% were house wives, 100% of the samples were urban residential, 85% of the samples were belong to Hindu religion, 71% were belong to nuclear family, 100% of the samples were primi & multipara, majority 95.4% of the samples gestational age is term, whereas 78% of the samples underwent elective caesarean section.

Figure 1: Frequency and percentage distribution of the samples based on the demographic variables



SECTION B

TABLE 2: Frequency and percentage distribution of the indications of caesarean section with the primi and multi para postnatal mother.

n = 200

S.NO	INDICATIONS	PRIMI	MULTI	FREQUENCY	PERCENTAGE (%)
1.	Cephalo Pelvic disproportion	6	20	26	13.0
2.	Cord around the neck	-	1	1	0.5
3.	Eldely primi	4	4	8	4.0
4.	Failed Acceleration	-	19	19	9.5
5.	Fetal Distress	6	9	15	7.5
6.	Gestational Diabetes Mellitus	1	3	4	2.0
7.	Intra Uterine Growth Retardation	2	3	5	2.5
8.	Malpresentation	19	15	34	17.0
9.	Meconium Aspiration	5	5	10	5.0

	syndrome				
10.	Oligo hydramnios	3	4	7	3.5
11.	Polyhydramnios	1	3	4	2.0
12.	Placenta praevia	4	12	16	8.0
13.	Post-dated Pregnancy	1	-	1	0.5
14.	Pre-Rupture of membrane	-	4	4	2.0
15.	Pregnancy Induced Hypertension	-	6	6	3.0
16.	Previous LSCS	5	30	35	17.5
17.	Rh incompatibility	-	3	3	1.5
18.	Thyroid Disease	2	-	2	1.0

Table 2: The leading indications of primi and multi para CS were previous caesarean section 35 (17.5%), Malpresentation 34 (17%), CPD 26 (13.0%), failed acceleration 19 (9.5%), placenta praevia 16 (8%), foetal distress 15 (7.5%) and MAS 10 (5%) and the least indication were cord around the neck and post-dated pregnancy 1 (0.5%) respectively.

Figure 2: Frequency and percentage distribution of the indications of caesarean section with the primi para postnatal mother.

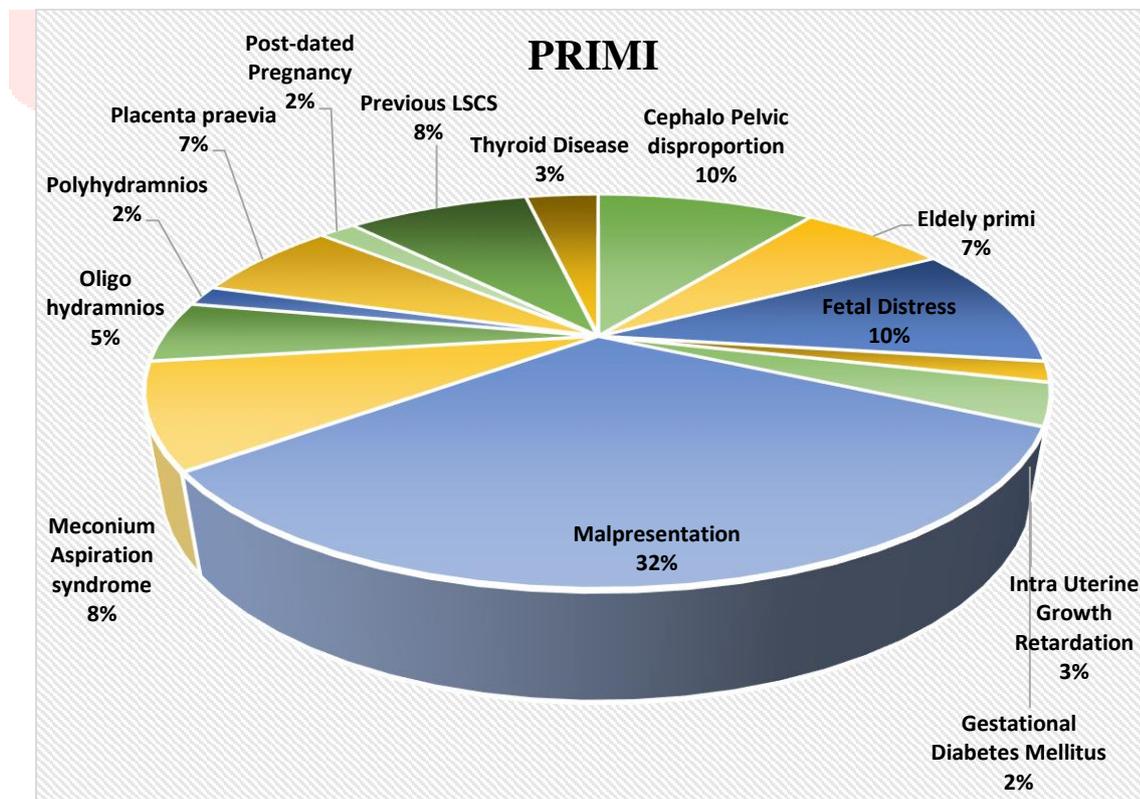
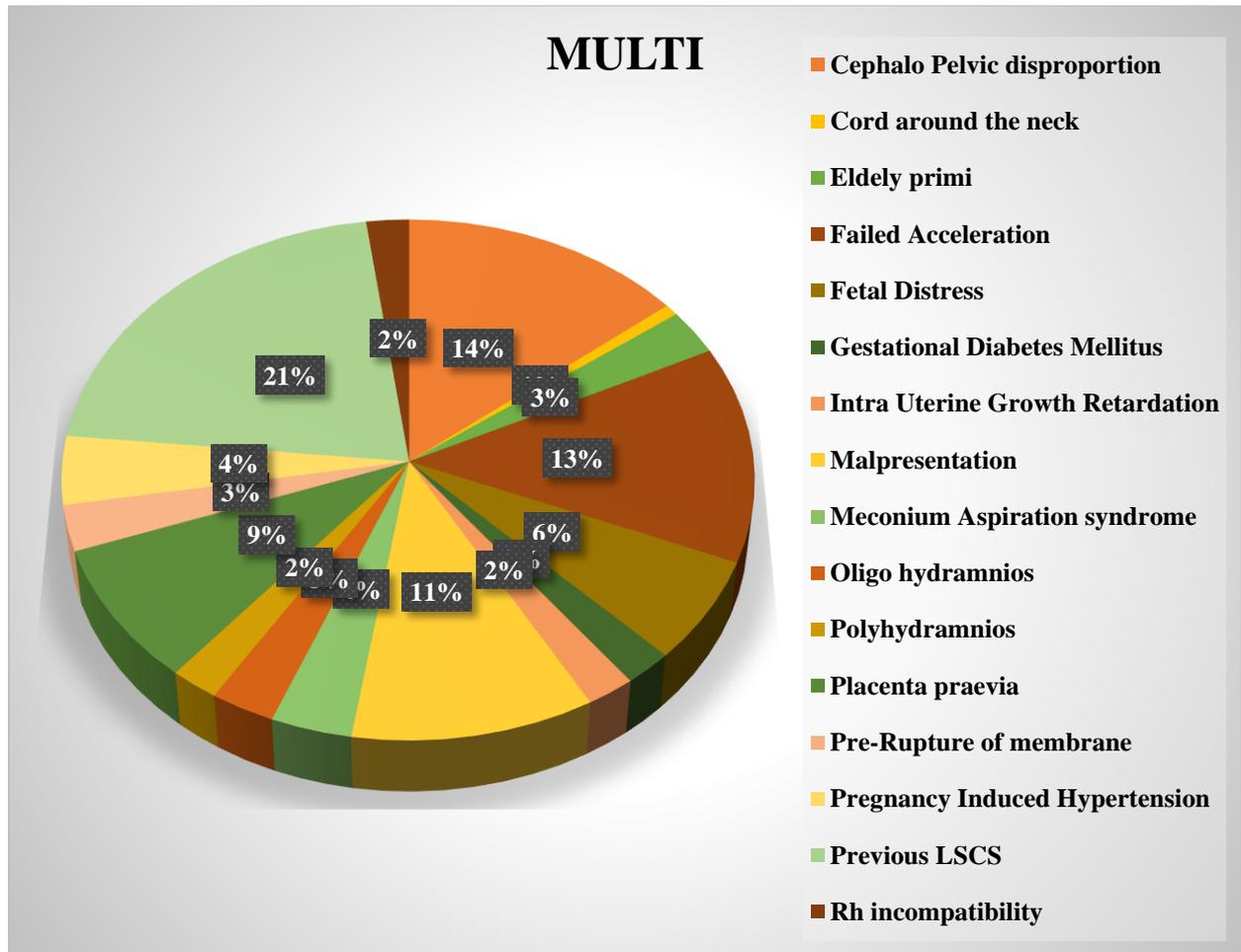


Figure 3: Frequency and percentage distribution of the indications of caesarean section with the multi para postnatal mother.



Section C

Table 3.1: Associate the indications of caesarean section with the demographic variables such as age, education occupation, religion, type of family, parity, gestational age, and type of caesarean section.
n=200

No	Demographic Variables	PRIMI	MULTI	Chi square (χ^2)
1.	Age in years			$\chi^2 = 15.6196$ df = 3 p = .001357* S
	a) 20 - 24	28	26	
	b) 25–29	25	80	
	c) 30–34	7	24	
	d) >35	5	5	
2.	Education			$\chi^2 = 1.3293$ df = 2 p = .514463. NS
	a) Primary	12	26	
	b) Secondary	35	90	
	c) UG	14	23	
3.	Occupation			$\chi^2 = 3.2158$ df = 2 p = .200306 NS
	a) Home maker	37	104	
	b) Private	23	36	
4.	Religion			$\chi^2 = 1.5772.$ df = 2
	a) Christian	2	11	
	b) Hindu	52	118	

	c) Muslim	6	11	p = .45447 NS
5.	Type of family			$\chi^2 = 3.6264$ df = 1 p = .056871 NS
	a) Joint	23	35	
	b) Nuclear	37	105	
6.	Gestational age			$\chi^2 = 2.29$ df = 1 p = .130209 NS
	a) Preterm	6	6	
	b) Term	55	133	
7.	Type of Caesarean section			$\chi^2 = 5.6655$ df = 1 p = .017302* S
	a) Elective	54	102	
	b) Emergency	7	37	

*P< 0.05, **p< 0.01, p<0.001, S – significant, NS – Non - significant

Table 3: With regard to demographic variables, there was a statistically significant association between age in years and type of caesarean section at **p<0.05 level**.

Table 3.2: Associate the indications of caesarean section with the primi and multi para postnatal mother.

n=200

S.NO	INDICATION	PRIMI	MULTI	Chi square (χ^2)
1.	Cephalo Pelvic disproportion	6	20	$\chi^2 = 0.5928$ df = 1 p = .441327 NS
	Other than Cephalo Pelvic disproportion	53	121	
2.	Elderly primi	4	4	$\chi^2 = 1.6839$ df = 1 p = .194408 NS
	Other than Elderly primi	55	137	
3.	Fetal Distress	6	9	$\chi^2 = 0.8596$ df = 1 p = .353839 NS
	Other than Fetal Distress	53	132	
4.	Gestational Diabetes Mellitus	1	3	$\chi^2 = 0.0397$ df = 1 p = .841986 NS
	Other than Gestational Diabetes Mellitus	58	138	
5.	Intra Uterine Growth Retardation	2	3	$\chi^2 = 0.2719$ df = 1 p = .602092 NS
	Other than Intra Uterine Growth Retardation	57	138	
6.	Malpresentation	19	15	$\chi^2 = 13.7093$ df = 1 p = .000213 S
	Other than Malpresentation	40	126	
7.	Meconium Aspiration syndrome	5	5	$\chi^2 = 2.127$ df = 1 p = .144721 NS
	Other than Meconium Aspiration syndrome	54	136	

8.	Oligo hydramnios	3	4	$\chi^2 = 0.6223$ df = 1 p = .430201 NS
	Other than Oligo hydramnios	56	137	
9.	Polyhydramnios	1	3	$\chi^2 = 0.0397$ df = 1 p = .841986 NS
	Other than Polyhydramnios	58	138	
10.	Placenta praevia	4	12	$\chi^2 = 0.1693$ df = 1 p = .680704 NS
	Other than Placenta praevia	55	129	
11.	Previous LSCS	5	30	$\chi^2 = 4.7218$ df = 1 p = .029783 S
	Other than Previous LSCS	54	111	

*P< 0.05, **p< 0.01, p<0.001, S – significant, NS – Non - significant

Table 3.2: With regard to indications of caesarean section, there was a statistically significant association found were malpresentation and previous LSCS at **p<0.05 level**.

CONFLICT OF INTEREST

The authors have no conflict of interest to declare.

ETHICAL CONCERNS

Informed Consent was obtained from the participants and also the confidentiality and privacy of the samples were maintained throughout the study.

CONCLUSION

The predominant cause for caesarean sections is previous LSCS irrespective of second normal pregnancy. There are other obstetric and non-obstetric factors which were the secondary factors that periodically end up with maternal and fetal morbidity in many cases. Hitherto formulated guidelines for caesarean section were employed at institutional levels to avert from high maternal mortality rates. Therefore, it is mandatory to gauge the antenatal mothers at the initial check-up and recommence at the intranatal level to stave off any unforeseen emergencies.

REFERENCES

1. Jacob Annamma. (2008). A comprehensive textbook of midwifery. 2nd edition. Jaypee publishers. Bengaluru, India.
2. Dewhurst's. (2012). Textbook of Obstetrics & Gynecology. 8th edition. John Wiley and Sons, Ltd. London, UK.
3. Dutta. D. C. (2015). Textbook of Gynecology. 6th edition. Hirlal Konars publishers. Kolkata, New India.
4. Elmar P. Sakala. Obstetrics & Gynecology. (2005). 2nd edition. Williams & Wilkins publishers. California.
5. Mussarat N, Qurashi S, Roohi M. (2013). Lower segment cesarean section (LSCS); indications and complications at teaching hospital, Faisalabad. Professional Med J, 20(6): 916–923.
6. Cunningham F, Leveno K, Bloom S, Hauth J, Rouse D, Spong C. (2005). Williams Obstetrics 25th ed New York, NY, USA: McGraw-Hill
7. Häger RM, Daltveit AK, Hofoss D, et al. (2004). Complications of cesarean deliveries: rates and risk factors. Am J Obstet Gynecol, 190(2):428–434.
8. Sethi P, Vijaylaxmi S, Shailaja G, Bodhare T, Devi S. A study of primary cesarean section in multigravidae. Perspectives in medical research 2014; 2:3-7.
9. Betrán AP, Torloni MR, Zhang J-J, et al. (2016). WHO statement on caesarean section rates. BJOG, 123(5):667–670.
10. Villar J, Valladares E, Wojdyla D, Zavaleta N, Carroli G, Velazco A, Caesarean delivery rates and pregnancy outcomes: the 2005 WHO global survey on maternal and perinatal health in Latin America. Lancet 2006, 367:1819–1829.
11. Dr. G .Partha Saradhi Reddy, Dr.S.Venkata Ramana, Dr. Salma Bhanu. Clinical Study of Primary Caesarean Section in Multiparous Women. Indian Journal Of Research 2015;4(10):
12. Monitta Moni et al A study on obstetric profile of mothers undergoing primary caesarean section and their neonatal outcome in a tertiary care centre, South Kerala. International Journal of Biomedical and Advance Research 2015; 6(12): 835-838.