

A CLINICAL STUDY OF PRIMARY LSCS IN MULTIPAROUS WOMEN:MATERNAL AND PERINATAL OUTCOME

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MATERIALS AND METHODS

Study design : A Prospective randomised Study

Study Duration : 2 year

Sample size : Minimum 100

Source of the data

This study conducted in Department of OBG, Government General Hospital, Anantapuramu, over period of 2 years .All consecutive patients presenting to the Department of OBG satisfying the inclusion criteria will be included in the study after obtaining informed consent

Inclusion Criteria

Multigravida with prior vaginal delivery

Term gestation

Multiple pregnancy

Exclusion Criteria

Primigravida

Previous cesarean delivery

Previous uterine surgery

Period of gestation less than 37 weeks

METHODOLOGY

This includes the patients reporting directly to the labour room in various stages of labour as well as who were admitted in the wards and taken up for elective lower segment caesarean section.

A thorough obstetrics history was obtained at the time of admission, including information on both the current pregnancy and prior pregnancies. The measurement of height and weight as well as the nutritional status were done. An abdominal examination was performed to determine the baby's estimated weight, presentation, and gestational period.

In order to determine Bishop's score, evaluate the sufficiency of the pelvis, check for membranes, and determine the colour of the liquid, a pervaginal examination was performed (in PROM cases).

Basic investigations like haemoglobin estimation, total leukocyte count, differential leukocytes, blood grouping and Rh typing, urine examination, viral screening, random blood sugar, Renal function test, liver function test, bleeding time, clotting time were done for each

case.

Ultrasonography was done for estimation of gestational age, location of placenta and AFI. Labour monitored by partogram and intrapartum CTG. Decision for mode of delivery was made based on evaluation of progress of labour, foetal indication and maternal indications. All intra operative details were recorded and complications were managed accurately. All the neonates were attended by the pediatrician. Maternal postoperative complications and newborn complications were monitored regularly till they were discharged from the wards. At the time of discharge, the patients were explained about the importance of spacing, contraception and immunization.

RESULTS

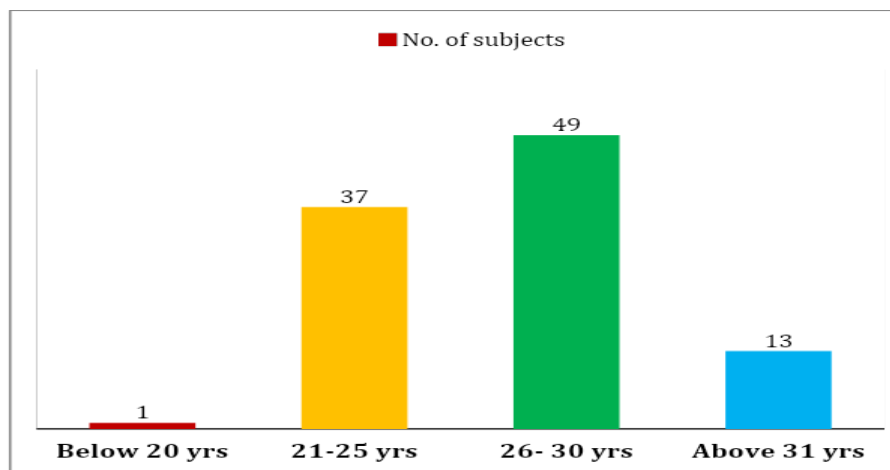
Age Distribution: Frequency Table

	Minimum	Maximum	Mean	S.D.
Age	20 yrs	40 yrs	27.05 yrs	3.46

Age group	No. of subjects (n = 100)	Percentage (%)
Below 20 yrs	1	1 %
21-25 yrs	37	37 %
26- 30 yrs	49	49 %
Above 31 yrs	13	13 %

The age group of 26 to 30 years accounts for the majority of women having primary caesarean sections (49%) followed by the age group of 21 to 25 years (37%), women over 31 years (13%) and the age group of less than 20 years (1%). The youngest mother in the current study was 20 years old, while the oldest was 44.

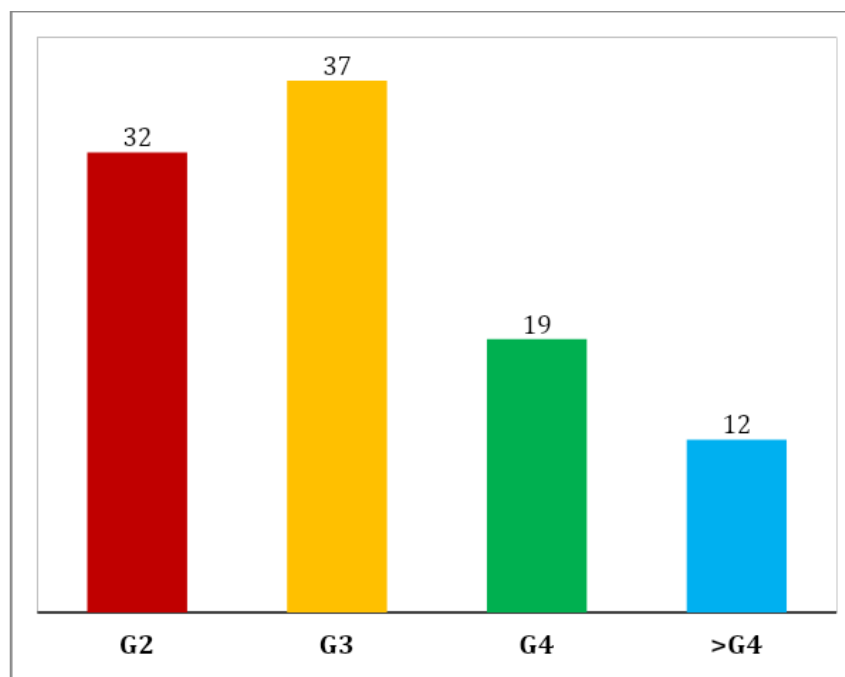
Age Distribution Bar chart



Gravida Distribution

Particulars	No. of subjects (n = 100)	Percentage (%)
G2	32	32
G3	37	37
G4	19	19
>G4	12	12

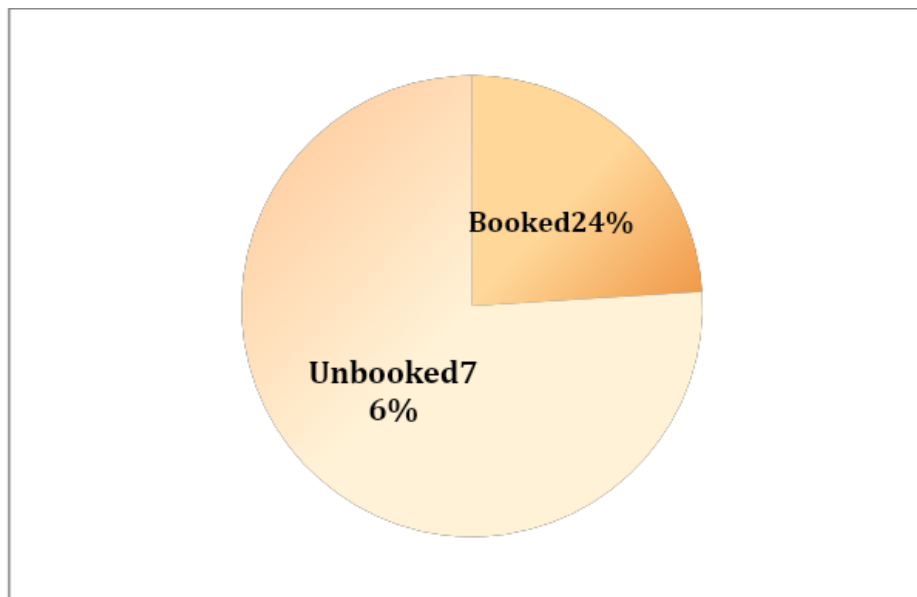
Among the patients undergoing caesarean section, maximum number were Gravida 3 accounts for 37%. number of Gravida 2 were 32%, number of Gravida 4 were 19% and least were Gravida 5 or more (12%).

Gravida Distribution Bar Chart

ANC Status

Particulars	No. of subjects (n = 100)	Percentage (%)
Booked	24	24
Unbooked	76	76

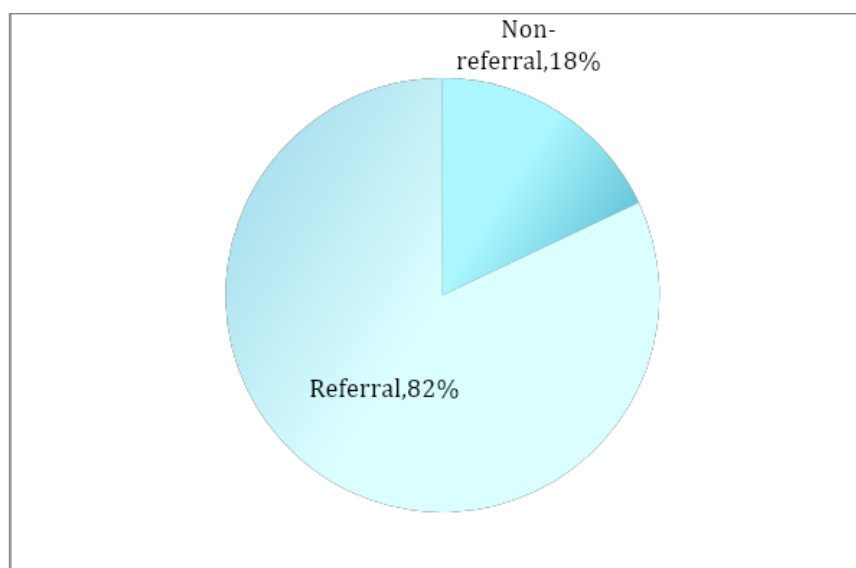
It was observed that the patients who were booked were 24% and the unbooked patients were 76%. This suggests that even multiparous patients do not go for regular antenatal visits.

ANC Status Pie Chart

Types of Cases Received

Case Type	No. of subjects (n = 100)	Percentage (%)
Non- referral	18	18
Referral	82	82

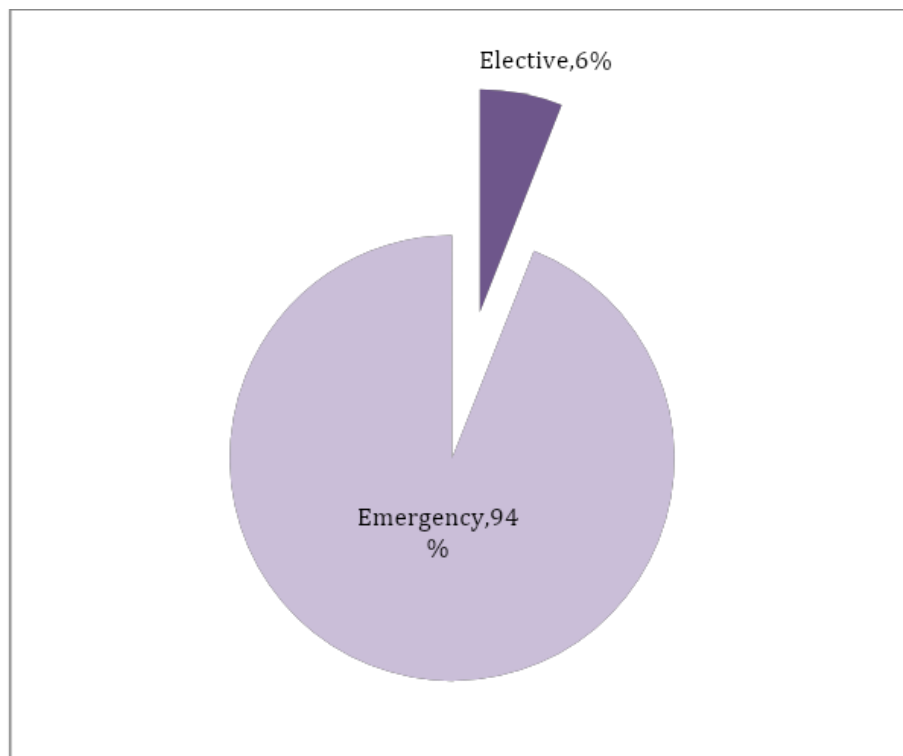
There were 82% of cases that were referred to us and only 18% of cases that we got directly.

Types of cases pie chart

Types of Operation

Types	No. of subjects (n = 100)	Percentage (%)
Elective	6	6
Emergency	94	94

98% of patients underwent an emergency caesarean section, while 2% of patients were chosen for an elective caesarean section.

Types of operation Pie-chart

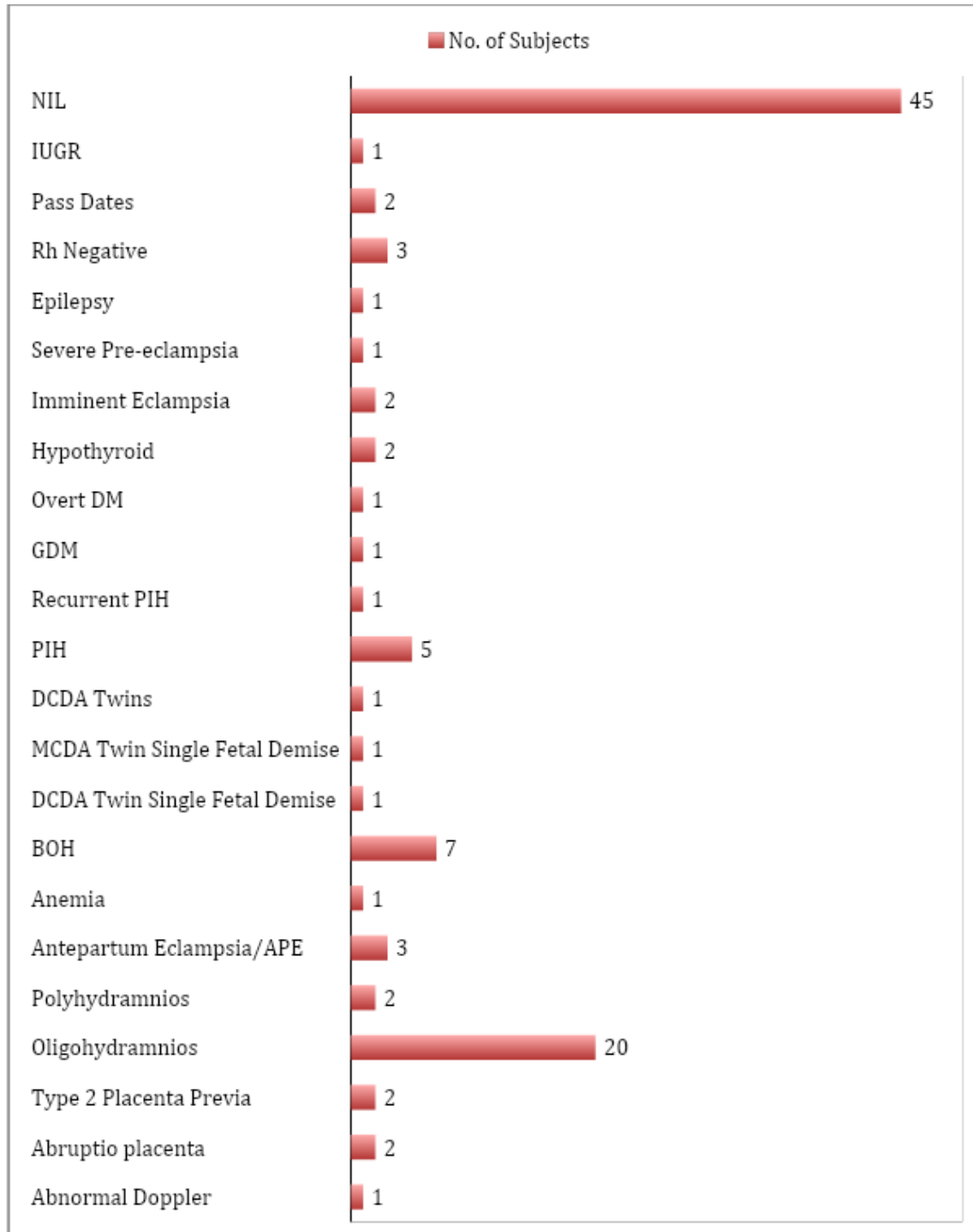
Antenatal Complications

Complications	No. of subjects	Percentage (%)
Abnormal Doppler	1	1
Abruptio placenta	2	2
Type 2 Placenta Previa	2	2
Oligohydramnios	20	20
Polyhydramnios	2	2
Antepartum Eclampsia/APE	3	3
Anemia	1	1
BOH	7	7
DCDA Twin Single Fetal Demise	1	1
MCDA Twin Single Fetal Demise	1	1
DCDA Twins	1	1
PIH	5	5
Recurrent PIH	1	1
GDM	1	1
Overt DM	1	1
Hypothyroid	2	2
Imminent Eclampsia	2	2
Severe Pre-eclampsia	1	1
Epilepsy	1	1
Rh Negative	3	3
Pass Dates	2	2
IUGR	1	1
NIL	45	45

Among the antenatal complications, maximum with medical disorders like gestational diabetes mellitus, gestational hypertension, anaemia complicating

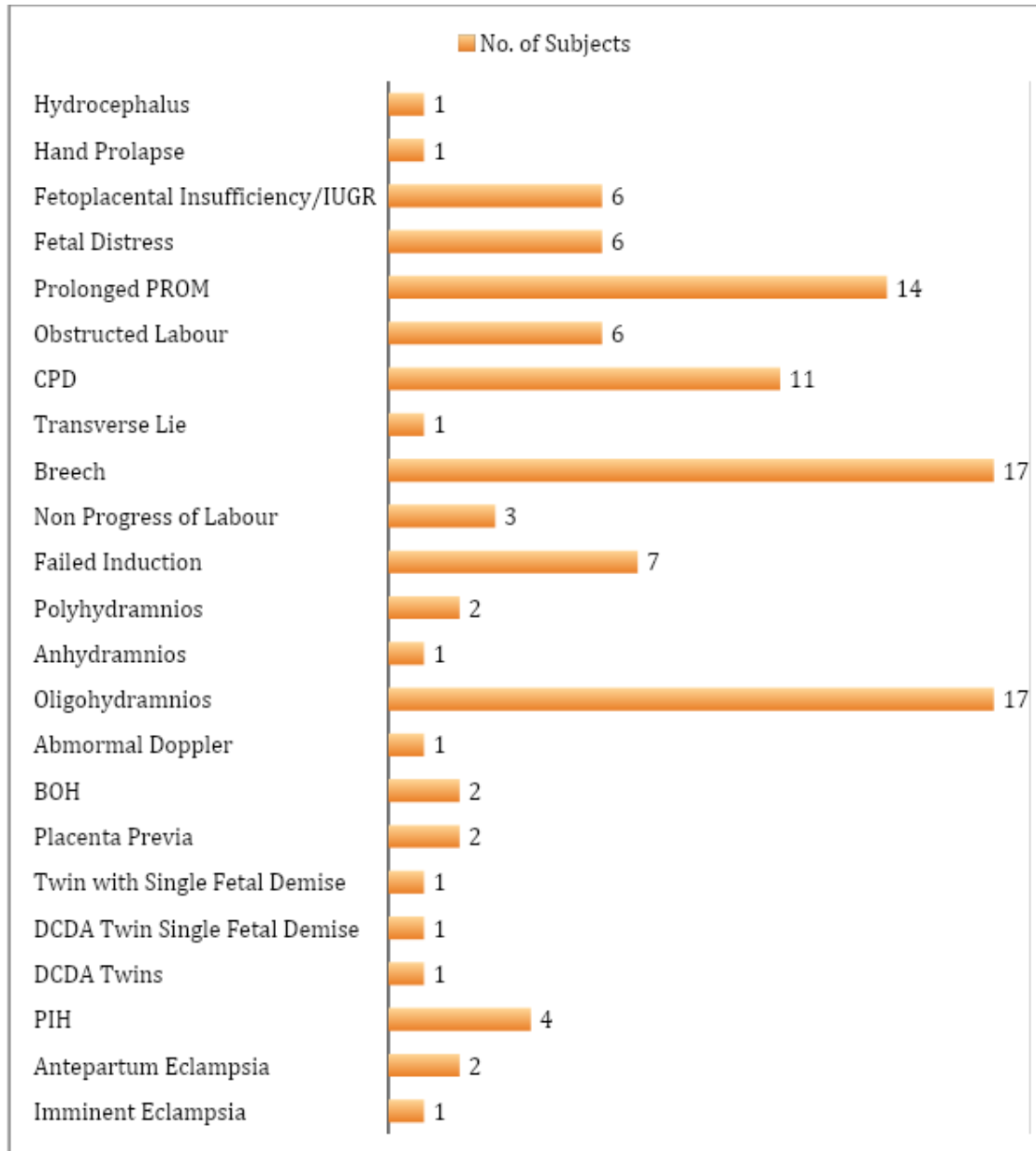
pregnancy, hypothyroidism were 18% those with Oligohydramnios 20%, postdatismwere 2%, RH Neg were 3%, BOH were 7%

Antenatal complications Bar Chart



Indications for cesarean section

Indication	No. of subjects	Percentage (%)
Imminent Eclampsia	1	1
Antepartum Eclampsia	2	2
PIH	4	4
DCDA Twins	1	1
DCDA Twin Single Fetal Demise	1	1
Twin with Single Fetal Demise	1	1
Placenta Previa	2	2
BOH	2	2
Abnormal Doppler	1	1
Oligohydramnios	17	17
Anhydramnios	1	1
Polyhydramnios	2	2
Failed Induction	7	7
Non Progress of Labour	3	3
Breech	17	17
Transverse Lie	1	1
CPD	11	11
Obstructed Labour	6	6
Prolonged PROM	14	14
Fetal Distress	6	6
Fetoplacental Insufficiency/IUGR	6	6
Hand Prolapse	1	1
Hydrocephalus	1	1

Indications for cesarean section bar chart

Oligohydramnios had the greatest incidence of caesarean sections among the multiparous women of 17%. Malpresentation, which occurs 17% more frequently than the other two, comes in second. Cephalopelvic disproportion (CPD) cases made up 11% of all cases, prolonged PROM cases made up 14%, failed induction cases made up 7%, medical disorders like GDM, gestational hypertension, and twin gestations with twin A noncephalic cases made up 4% each, obstructed labour

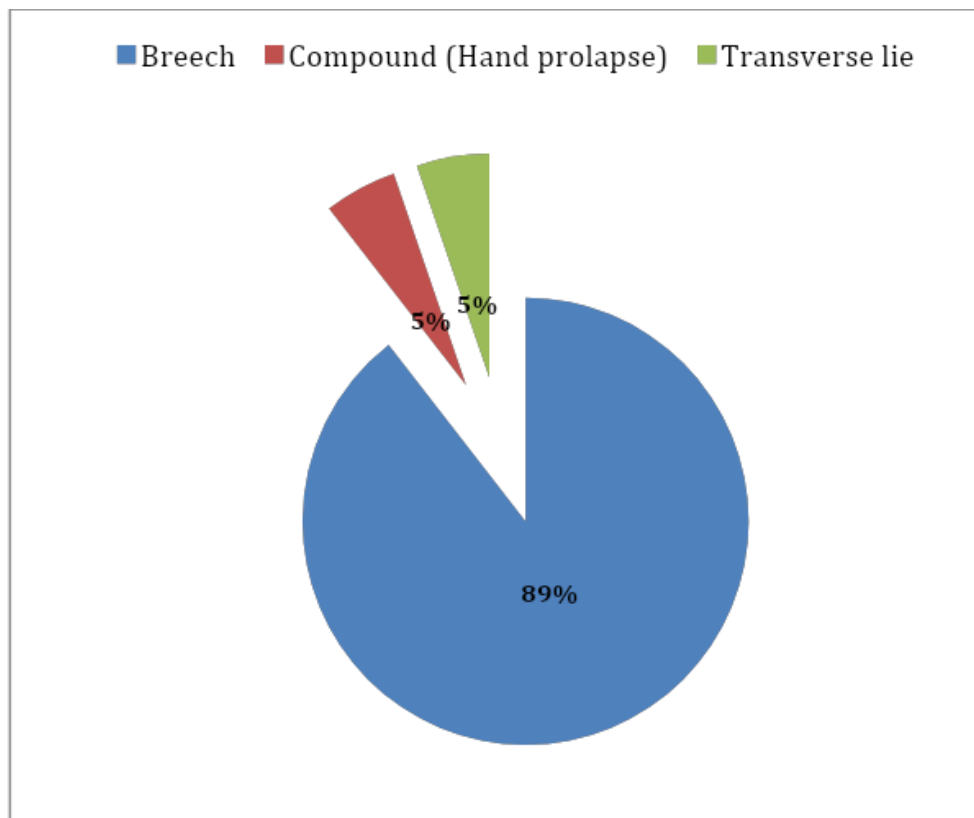
cases made up 6%, and BOH cases made up 2%, hand prolapse cases made up 1%, foetal alarm signal cases made up 4%, and APH cases made up 4%.

Malpresentations

Particulars	No. of Subjects	Percentage
Breech	17	89.50%
Compound (Hand prolapse)	1	5.26%
Transverse lie	1	5.26%
Total	19	100%

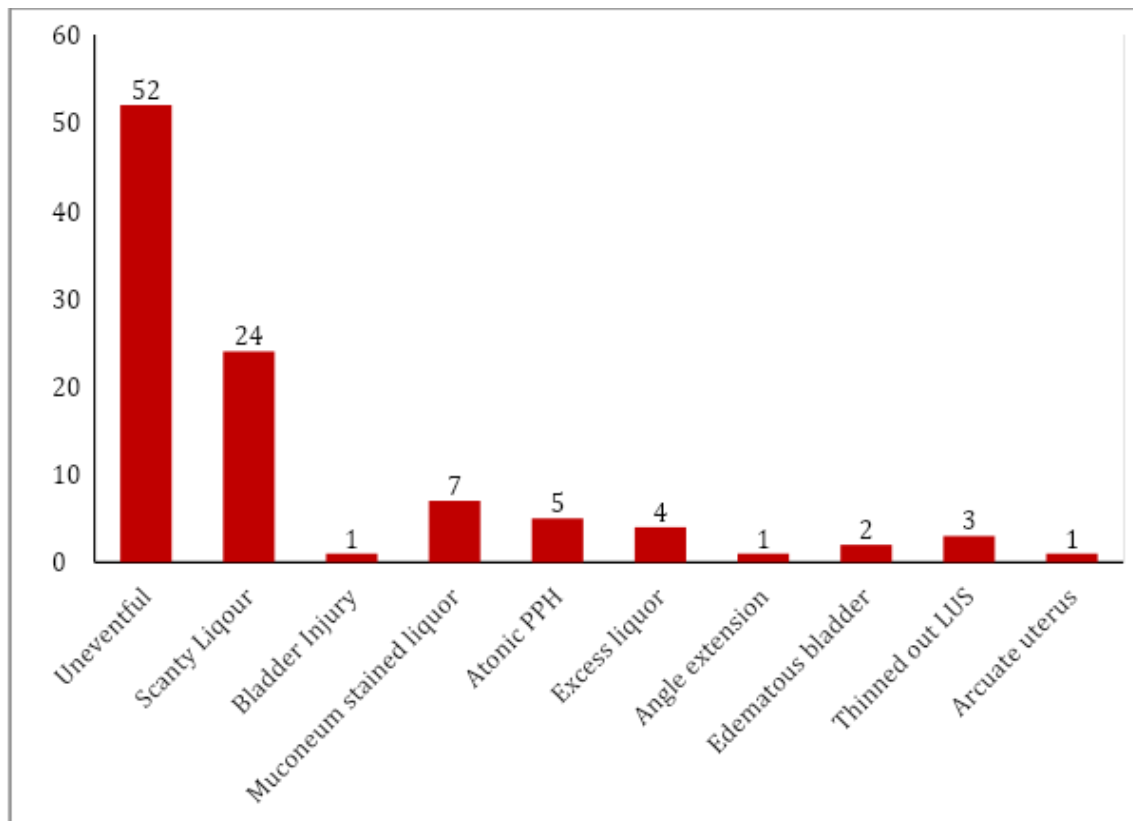
The most frequent malpresentation was breech presentation. There were 17 occurrences, with 2 transverse lie and 1 compound presentation [hand prolapse] following.

Malpresentation pie chart



Intraoperative findings

Complications	No. of subjects (n = 100)	Percentage (%)
Uneventful	52	52
Scanty Liquor	24	24
Bladder Injury	1	1
Muconeum stained liquor	7	7
Atonic PPH	5	5
Excess liquor	4	4
Angle extension	1	1
Edematous bladder	2	2
Thinned out LUS	3	3
Arcuate uterus	1	1

Intra-operative complications bar chart

In this study 11% patients had intraoperative complications. Among them the most common intraoperative complications were Postpartum Haemorrhage [PPH] were 5%. They were treated medically. And 1% of cases had extension of uterine incision. Thinned out lower

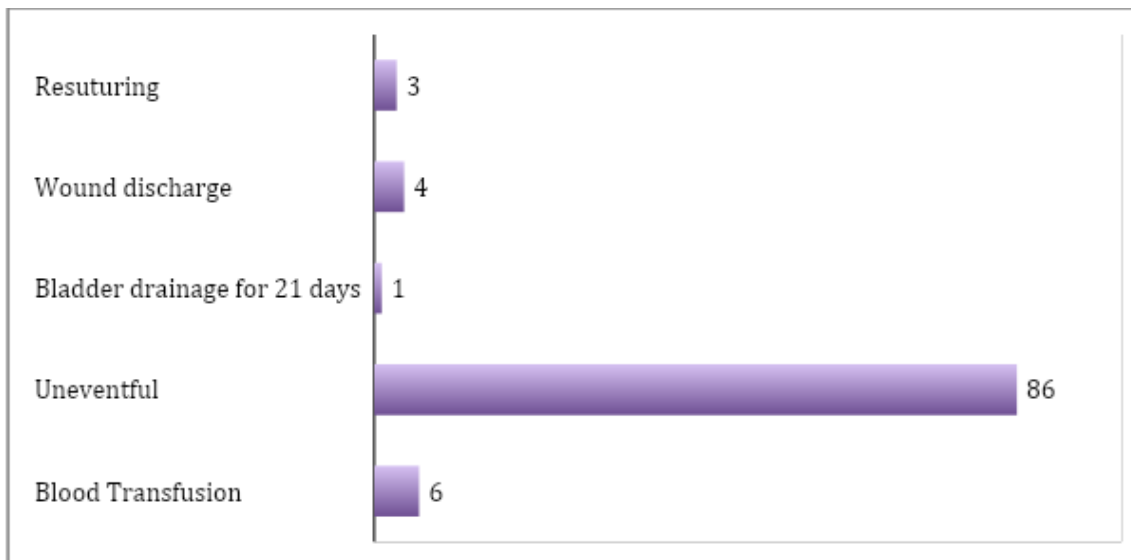
uterine segment noted in 3% of cases.

Post-operative morbidity

Particulars	No. of subjects	Percentage (%)
Blood Transfusion	6	6%
Uneventful	86	86%
Bladder drainage for 21 days	1	1%
Wound discharge	4	4%
Resuturing	3	3%
Total	100	100%

In this study, totally 14 cases reported postoperative complications. wound infection were noted in 4%, among those 3% of cases underwent secondary suturing. and blood transfusion done postoperatively in 6% of cases.86% of them were without anypostoperative morbidity.

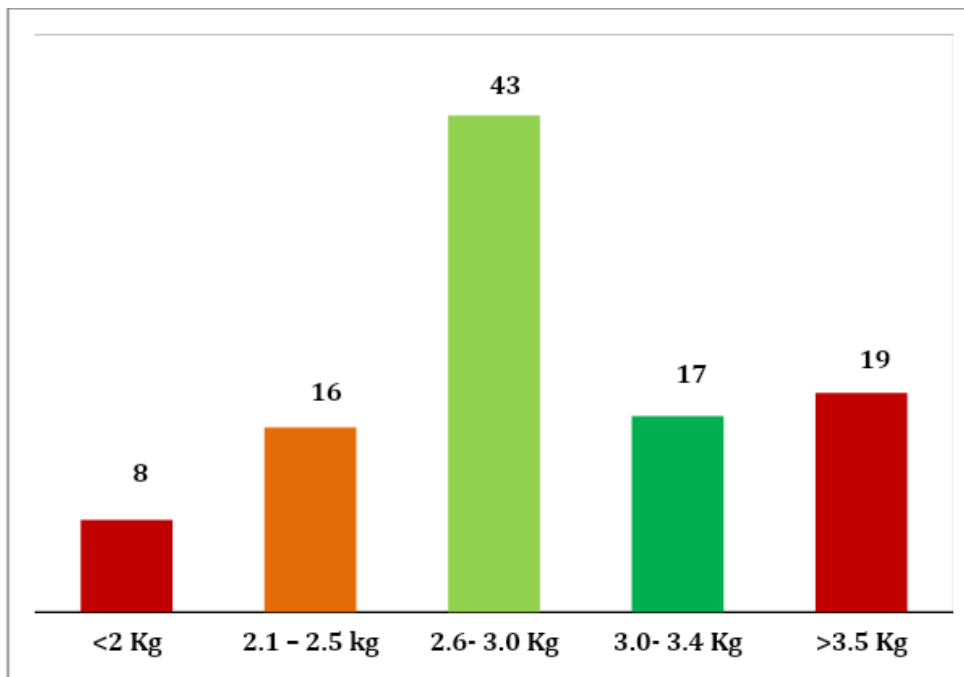
Post-operative morbidity bar chart



Birth Weight: Descriptive statistics

	Minimum	Maximum	Mean	S.D.
Birth Weight	1.75 kg	4 kg	2.97 kg	0.47

Birth weight (Kg)	No. of subjects	Percentage (%)
<2	8	7.77
2.1 – 2.5	16	15.53
2.6- 3.0	43	41.75
3.0- 3.4	17	16.50
>3.5	19	18.45
Total	103	100.00

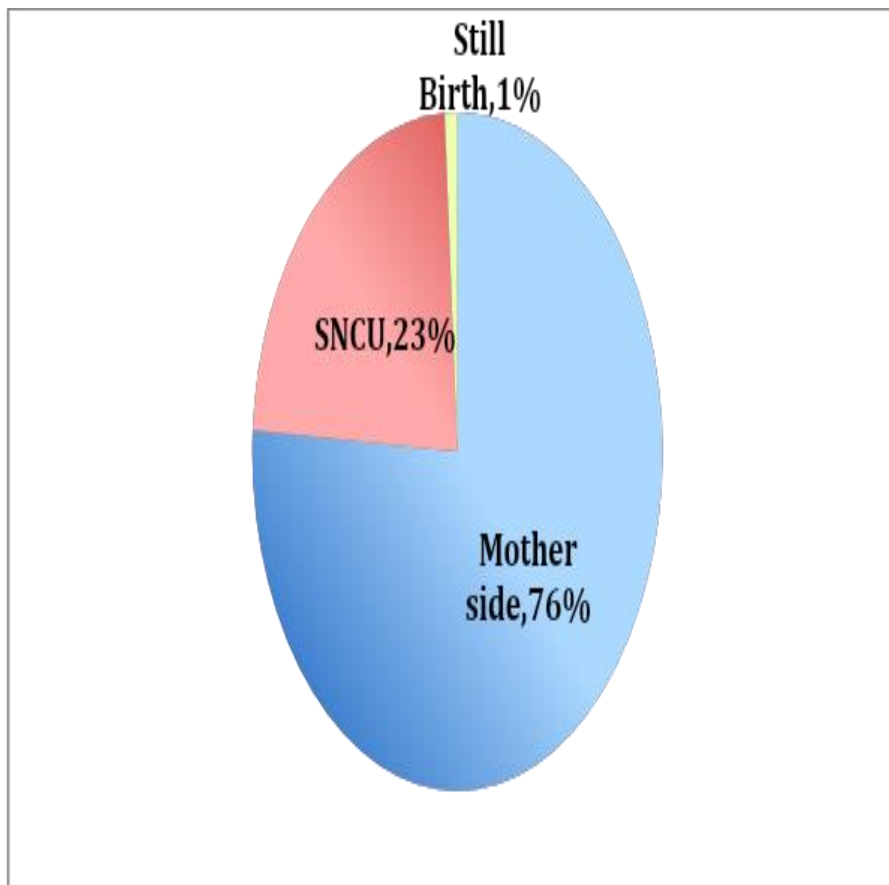
Birth weight Bar chart

The babies delivered by caesarean section in multiparous women were maximum birth weight between 2.6 – 3.0 kg (41.75%), followed by birth Weight > 3.5kgs (18.45%). The percentage of babies with birth weight between 2.1 to 2.5 kgs were 15.53% and those with less than 2kg were 7.77%.

Foetal Outcome

Foetal Outcome	No. of subjects (n = 100)	Percentage (%)
Mother side	76	76
SNCU	23	23
Still Birth	1	1

Among the foetus delivered through caesarean section, 23% of babies were admitted in NICU. The remaining 76% were without any perinatal morbidity., 1% of stillbirth.

Foetal outcome Pie-chart

DISCUSSION

This prospective study was conducted to examine 100 cases of multiparous women who underwent caesarean sections for the first time.

AGE-RELATED CASE DISTRIBUTION IN MULTIPARA:

49% of women who had their first caesarean section were between the ages of 26 and 30.

Most common age group of women undergoing cesarean section among different studies

Study	Most common age group	Percentage
Jyoti Rao et al	25 -29	41.5%
Partha Saradhi et al	25-29	45.18%
P.himabindhu et al	21-25	68.8%
Rural samal et al	21-30	83.8%
Sethi et al	25-29	41%
Present study	26-29	49%

CASES ARE DISTRIBUTED IN ACCORDANCE WITH REGISTRATION STATUS :

In this analysis of 100 cases, 24 patients had appointments and 76 had none.

Study	Booked	Unbooked
Jyoti Rao et al	27.9	72.9
Partha Saradhi et al	90.13	9.86
P.himabindhu et al	29	71
Rural samal et al	97.1	2.9
Sethi et al	38	62
Present study	24	76

MULTIPAROUS WOMEN: INDICATIONS FOR PRIMARY CAESAREAN SECTION

Oligohydramnios had the greatest incidence of caesarean sections among the various indications in multiparous women, occurring 17% of the time. Malpresentation, which occurs 17% more frequently than the other two, comes in second. Cephalopelvic disproportion (CPD) cases accounted for 11% of all cases, while prolonged PROM cases accounted for 14%, failed induction cases accounted for 7%, medical disorders such as GDM and gestational hypertension 7%, twin gestations 3%, obstructed labour 6%, and BOH cases 2%, hand prolapse 1%, and APH cases 4% each.

Indications for primary caesarean section in multiparous women compared to other studies

Indications	Present study	Himabindu	Desai et al	Jyothi rao Et al	Partha Saradhi	Samal Et al
Fetal distress	6	24.7	25.5	17	8.02	42.6
Malpresentation	17	19.3	17.4	33.5	30.7	26.4
CPD	11	3.2	19.7	18.5	10.3	14.7
APH	4	11.2	22.1	19.5	8.9	5.9
Non progress	3.1	8.6	4.6	-	8.25	-
Failed Induction	3.1	5.9	-	-	15.3	4.5
Oligohydramnios	17	-	-	-	-	-
PROM	14	-	-	-	-	-
Obstructed labour	6	3.2	-	18.5	5.04	-

TYPE OF CESAREAN SECTION

The number of patients who underwent Emergency Caesarean section were 98% and number of patients who were selected for Elective Caesarean section were 2%

Study	Emergency LSCS	Elective LSCS
Jyoti Rao et al	67.7	32.5
Partha Saradhi et al	89.44	10.56
P.himabindhu et al	78.5	21.5
Sethi et al	91	9
Present study	98	2

MATERNAL MORBIDITY

The caesarean section is a major surgical operation. Blood vessels, the bowel, the ureter, the bladder, as well as the cervix, the vagina, and broad ligaments, could all sustain damage.

Additionally, it raises the risk of diseases like urinary tract infections, pulmonary embolism, paralytic ileus, and postpartum haemorrhage. There was no maternal mortality in our study due to good preoperative, intraoperative, and postoperative care.

In this study, totally 14 cases reported postoperative complications. wound infections were noted in 4%, among those 3% of cases underwent secondary suturing. and blood transfusion done postoperatively in 6% of cases.86% of them were without any postoperative morbidity.

MATERNAL MORBIDITY AMONG VARIOUS STUDIES

Postoperative morbidity	Present study	Himabindu	Desai et al	Jyothi rao Et al	Sethi Et al
Wound infection	4	8.6	10.97	7.5	6
Blood transfusion	6	-	-	-	-
Pyrexia	-	18.5	11.63	3.5	5
Urinary tract infection	-	9.6	2.33	2	-
Paralytic ileus	-	7.5	13.95	-	1

NEONATAL MORBIDITY

Among fetuses delivered by cesarean section, 23 were admitted in NICU. 1 %stillbirth

Study	Percentage
Jyoti Rao et al	16.5
Partha Saradhi et al	11.5
P.himabindu	15
Sethi et al	17
Present study	23

SUMMARY

Over the course of two years, the study "Primary caesarean section in multiparous women" was carried out in the Department of OBG at the Government General Hospital in Anantapuram. This study, which involved 100 primary caesarean sections in multiparous women, was prospective and randomised.

The majority of the study's participants were between the ages of 26 and 30.

The majority of the patients were pregnant women in their third trimester, and

24% of them had appointments while 76% did not. 98% of patients underwent Emergency Caesarean section .

Malpresentations breech (17%), hypertensive disorders of pregnancy

(11%) anemia (1%), antepartum hemorrhage (4%), were the most common antenatal complications.

Oligohydramnios 17%, Fetal distress (28.8%), malpresentations (breech)

(17%), prolonged PROM 14%, cephalopelvic disproportion (11%), failed induction 7% were the most common indications for cesarean section.

Patients with postoperative maternal morbidity made up (14%). Among these, 6% of the patients required blood transfusions. The current study did not have any maternal mortality.

CONCLUSION

The challenge of multiparity populations is exacerbated by factors including poverty, ignorance, illiteracy, and a lack of familiarity with antenatal care and family planning options. In fact, multiparas are linked to high rates of mother and foetal morbidity even when they had previously given birth vaginally and may still need a caesarean section for safe delivery.

The need of adequate prenatal care and vigilant labour management is emphasised by this study. Negligence frequently calls for operational measures to ensure the welfare of both mother and child.

The patient and her loved ones experience a false sense of security because of a previous vaginal delivery. The occurrence of one or more vaginal deliveries in a multipara should be viewed as an encouraging historical event rather than diagnostic evidence for the present pregnancy's spontaneous delivery.

Despite making up a small portion of all deliveries, primary caesarean in pregnant women is not unusual. Maternal deaths can be eliminated with proper intrapartum and postpartum care. Therefore, the same care must be given to a multiparous woman in labour as to a primigravida.

Improved prenatal care in multipara with early detection of high-risk pregnancies, high-quality emergency obstetric care, the adoption of an integrated and composite approach to improve women's health, and finally, health education and counselling for the adoption of small family norms are some of the measures to be implemented for lowering maternal morbidity and mortality in multipara.

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