A CROSS SECTIONAL STUDY OF SEVERE PRE ECLAMPSIA AND HELLP SYNDROME IN A TERTIARY CARE HOSPITAL IN BELAGAVI

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LIST OF ABBREVIATIONS USED

ACOG	-	American College of Obstetricians and Gyanecologists
ALAT	-	Alanine aminotransferase
ALT	-	Alanine transaminase
AST	-	Asparate aminotransferase
BP	-	Blood pressure
CNS	-	Central nervous system
CP	-	Cerebral palsy
CPD	-	Cephalopelvic disproportion
CT	-	Computed tomography
cumm	-	Cubic millimeter
DIC	-	Disseminated intravascular coagulation
ESRD	-	End-stage renal disease
FD	-	Fetal distress
FDP	-	Fibrin degradation products
FOGSI	-	Federation of Obstetrics & Gynaecological Societies of India
g	-	grams
g/L	-	Grams per litre
GDM	-	Gestational diabetes mellitus
gm	-	Gram
GST	-	Glutathione
HELLP	-	Haemolysis elevated liver enzymes low platelets
hrs	-	Hours
HUS	-	Hemolytic uremic syndrome
ICOG	-	Indian College of Gynaecologists
ie,	-	That is,
ISSHP	-	International Society for the Study of Hypertension in Pregnancy
ITP	-	Immune thrombocytopenic purpura
IU/L	-	International units per litre
IUD	-	Intra uterine death
IUD	-	Intra uterine death
IUGR	-	Intrauterine growth retardation

IVH	-	Intraventricular haemorrhage
JNC	-	Joint National Committee
Kg	-	Kilogram
LBW	-	Low birth weight
LDH	-	Lactate dehydrogenase
LDH	-	Lactate dehydrogenase
LFT	-	Liver function test
LSCS	-	Lower segment caesarean section
MAHA	-	Microangiopathic haemolytic anaemia
mg/24 hr	-	Milligrams per 24 hours
mg/dL	-	Milli grams per deciliter
mg/L	-	Micro grams per liter
min	-	Minute
mm Hg	-	Millimeters of mercury
mm	-	Millimeter
MRI	-	Magnetic resonance imaging
MSL	-	Meconium stain liquor
n	-	Total number
NEC	-	Necrotizing enterocolitis
NER	-	National Eclampsia Registry
NHBPEP	-	National High Blood Pressure Education Programme
NICE	-	National institute of health and clinical excellence
NICU	-	Neonatal intensive care unit
OE	-	On examination
OICU	-	Obstetric Intensive Care Unit
p	-	Probability value
PIERS	-	Preeclampsia integrated estimate of risk study
PIH	-	Pregnancy-induced hypertension
PLTs	-	Platelets
PRES	-	Posterior Reversible Encephalopathy Syndrome
RCOG	-	Royal College of Obstetricians and Gynecologists
RDS	-	Respiratory distress syndrome
SBP	-	Systolic blood pressure
SD	-	Standard deviation

SD	-	Standard deviation
sFlt-1	-	Fms-like tyrosine kinase 1
SGA	-	Small for gestational age
SGOT	-	Serum glutamic oxaloacetic transaminase
SGPT	-	Serum glutamic pyruvic transaminase
SOGC	-	Society of Obstetricians and Gynecologists of Canada
SPE	-	Severe preeclampsia
TNFα	-	Tumour necrosis factor alpha
TTP	-	Thrombotic thrombocytopenia purpura
U/L	-	Units per liter
UK	-	United Kingdom
USG	-	Ultrasound
VEGF	-	Vascular endothelial growth factor
vs	-	Versus
µg/ml	-	Micro grams per milli liter
µL	-	Micro liter
µmol/l	-	Micro mole per litre

ABSTRACT

Background and objectives

Pre-eclampsia still remains a significant public health problem in both developed and developing countries and an important cause of maternal and perinatal morbidity and mortality globally. This study was aimed to find out the incidence of severe pre eclampsia and HELLP syndrome, and to evaluate the maternal morbidity and mortality in women with pregnancy complicated by severe pre eclampsia.

Methodology

This cross sectional study was conducted in the Department of obstetrics and gynaecology, KLES Dr. Prabhakar Kore Hospital and Medical Research Centre, Belagavi for the period of one year from January 2016 to December 2016. During the study period there were 6236 number deliveries. Among them 597 women (9.57%) developed preeclampsia. Further 350 women had severe preclampsia. Out of which 312 women who satisfied selection criteria were selected for study.

Results

The incidence of severe preeclampsia after excluding was medical disorders like chronic hypertension, renal disease and epilepsy and gestational age of <24 weeks was 5%. The most common age group was 21 to 25 years (39.10%) and the mean age was 26.18±4.45 years. 24.68% of the women were induced for labour and the most common indication for the induction of labour was severe preeclampsia (47.83%). Most of the women (53.85%) had vaginal delivery and 46.15% of the women underwent LSCS and severe preeclampsia (25.00%) was the most common indication for LSCS. Complications were noted in 64 (20.51%) women and the most

common complication was HELLP syndrome noted in 33 women (10.58%). Of them HELLP I was noted in 20 (60.91%) women. The other complications noted were abruption (8.33%), eclampsia (0.96%), pulmonary oedema (0.96%), renal failure and DIC (1.28% each). Majority of the women had live births (96.15%), while multiple gestation and IUD was noted in 2.24% and 1.60% of the women. Most of the babies (26.65%) weighed between 2.500 to 2.999 kg and the mean birth weight was 2.36±0.77 Kgs. At 5 minutes the mean APGAR score was 8.01±4.76. NICU admission was noted in 20.06% of the babies and the most common cause of NICU admission was LBW (39.06%) followed by fetal distress (28.13%).

Conclusion and interpretation

The present study showed incidence of severe preeclampsia as 5% and incidence of HELLP syndrome in women with severe preeclampsia as 10.57%. The other complications noted were abruption, eclampsia, pulmonary oedema, renal failure and DIC.

Keywords

Haemolysis elevated liver enzymes low platelets (HELLP) syndrome; Severe preeclampsia; Maternal outcome; Neonatal outcome;

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INTRODUCTION

Hypertensive disorders are the most common medical complication occurring in 12-22% of all pregnancies.[1] Approximately 70% of hypertensive disorders are due to gestational hypertension-preeclampsia.[2] The spectrum of hypertensive disease that can complicate pregnancy is broad, ranging from "white coat" hypertension to gestational hypertension, chronic hypertension and preeclampsia to chronic hypertension with superimposed preeclampsia.[3] Eclampsia is the presence of new onset grandmal seizure in a woman with pre-eclampsia. It occurs in 18 % intrapartum, 38 % antepartum and 44% in postnatal cases. [4]

10% of all pregnancies are complicated by pre eclampsia.[5] It refers to the new onset of hypertension (systolic blood pressure $\geq$ 140 mm Hg or diastolic blood pressure $\geq$ 90 mm Hg) and proteinuria ($\geq$ 0.3 gm protein in 24 hours urine specimen) after 20 weeks of gestation in a previously normotensive non proteinuric woman.[6]

The etiology of preeclampsia is unknown: numerous models have attempted to explain its roles in the pathogenesis of immunology, cytokines, and growth factors, including tumor necrosis factor, endothelial damage, platelet dysfunction, and genetics has been implicated in the pathogenesis of preeclampsia.[7,8]

Pre-eclampsia is considered severe if the blood pressure is $\geq$ 160 mm Hg systolic and or $\geq$ 110 mm Hg diastolic or proteinuria of 5 gm or higher in a 24 hours urine specimen or oliguria, cerebral or visual disturbances, pulmonary edema, impaired liver function or thrombocytopenia is present.[9]

Pre-eclampsia is a leading cause of maternal and perinatal morbidity and mortality worldwide.[2] Preterm labor, IUGR, IUD, accidental hemorrhage, pulmonary

edema, cardiac failure, HELLP syndrome (3%), disseminated intravascular coagulation (3%), renal failure (4%), adult respiratory distress syndrome (3%) and cerebral hemorrhage are the complications associated with pre eclampsia (1.2%).[9]

Pre-eclampsia and eclampsia accounts for 24% of all maternal deaths in India.[10] Abruptio placentae, hepatic rupture and eclampsia account for majority of the maternal deaths.[11] Perinatal mortality is increased five-fold in patients of pre-eclampsia with iatrogenic prematurity being the main culprit.[12]

Despite advances in medical practice, pre-eclampsia and eclampsia still remains a leading cause of maternal and perinatal morbidity and mortality throughout the world. Clinical studies of pre-eclampsia and eclampsia can be used for the evaluation of safe motherhood program at population level.[13]

Acute renal failure, hepatic failure, disseminated intravascular coagulation, pulmonary oedema, cerebrovascular haemorrhage and infection are the complications of sf severe pre eclampsia. Preterm delivery is seen in up to 70% of cases and is at less than 28 weeks in 15%. Prematurity is therefore common and perinatal mortality is in the region of 14.1%.[14]

The occurrence of microangiopathic haemolysis, elevated liver enzymes and low platelets (HELLP) is a serious complication of pregnancy associated with statistically significant increase in maternal and fetal morbidity and mortality. The syndrome is seen in 0.5%-0.9% of pregnancies and 10%-20% of patients with severe preeclampsia.[15] Diagnosis is based on reports of haemolysis, raised liver enzymes and low platelets. There may be variation based on the parameters. Martin has defined haemolysis on the basis of progressive anaemia, raised lactate dehydrogenase >600

IU/L; alanine transaminase and aspartate transaminase >40 IU/L and platelets count less than 150000/mm.[16] . Sibai[17] employed LDH of 700 IU/L, AST >70 IU/l and platelets less than 100000/mm^3. The Mississipi classification recognised three classes based on platelet counts of 50000/mm^3, 100000/mm^3, and 150000/mm^3 respectively.[16]

HELLP syndrome is a complication of severe pre eclampsia[18] and was first described by Weinsten in 1982.[19] It is a frequent complication of severe pre eclampsia, characterized by Microangiopathic hemolytic anemia; Hepatic dysfunction; and thrombocytopenia[3] which usually progresses to DIC.

The HELLP syndrome in general complicates 0.2 to 0.6% of all pregnancies and its incidence increases to 4 to 12% in severe pre eclampsia.[20] However upto 15% of the patients will have neither hypertension nor proteinuria. There is a clinical and pathological overlap with acute fatty liver of pregnancy, which makes the diagnosis very difficult. Clinical features include jaundice, right upper quadrant pain, nausea, vomiting, headache and blurring of vision. 70% of HELLP syndrome develops in antepartum[18] period (3^{rd} trimester) and the rest in postpartum period within 48 hours of delivery.[21] The complications of HELLP syndrome include Adverse maternal outcomes: abruption placenta, DIC; acute renal failure, pulmonary edema and intracerebral hemorrhages.[22] The maternal mortality ranges from 1 to 24%. Perinatal complications include Intrauterine growth retardation (IUGR), oligohydramnios fetal distress APGAR score of <7 in 1^{st} and 5^{th} minute. Respiratory distress syndrome (RDS), sepsis, convulsion and perinatal mortality which ranges between 18 to 20.3%.[23]

HELLP syndrome is a preventable complication of pre eclampsia. The patient enters this condition due to failure in early diagnosis of severe pre eclampsia. The

developed countries have achieved great success in preventing the development of this condition and research today is focused on early detection of pre eclampsia and its treatment but developing nations have a long way to go.

There is limited data about HELLP syndrome in cases with severe preeclampsia and incidence of HELLP syndrome, among pregnant women with severe preeclampsia remain in our settings as such cases are occasionally referred to our tertiary care centre. The present study was designed to find out the incidence of severe pre eclampsia and HELLP syndrome, to determine the percentage of renal, pulmonary and cardiac complications, to assess associated maternal morbidity and mortality in these patients so as to describe the epidemiology and disease course which may help in early diagnosis and prompt management of the disease and reduce the morbidity and mortality.

OBJECTIVES

The objectives of this study were;

Primary

To determine the incidence of severe pre eclampsia and its complications especially HELLP syndrome.

Secondary

- To evaluate the complications of severe preeclampsia and HELLP syndrome.
- To assess associated maternal and fetal morbidity and mortality.

REVIEW OF LITERATURE

HYPERTENSIVE DISORDERS OF PREGNANCY

Hypertension in pregnancy complicates around 2-3% of pregnancies. The incidence of Pregnancy induced hypertension occurs is 8-10% of pregnant women in India.[24] In the west it accounts for approximately 2-5% of all pregnancies.[25]

In developing countries PIH(Pregnncy induced Hypertension) accounts for 40% to 80% of maternal mortality occurring mainly as a result of inadequacy of emergency care. The Fetus of a preeclamptic women is prone to fivefold increase in mortality as compared with infants without the disorder. Preeclampsia is responsible for approximately 15% of all preterm births.[26]

Hypertensive disorders of pregnancy are classified into following categories:[24,27]

1. Gestational hypertension,
2. Preeclampsia and Eclampsia
3. Chronic hypertension
4. Preeclampsia superimposed on chronic hypertension.

Hypertension in pregnancy is defined as per ACOG guidelines[28] is a diastolic blood pressure of 90mmHg or higher, or systolic blood pressure level of 140 mm Hg or higher, after 20 weeks of gestation, with or without proteinuria, in a previously normotensive non proteinuric woman, blood pressure measured on more than one occasion at least 4 to 6 hours apart.[28]

Proteinuria is defined as greater than or equal to 0.3 g of protein in a 24- hour urine collection.[28-30]

It has been suggested in few studies that a rise in Blood pressure of 30 mm Hg systolic or 15 mm Hg diastolic should also be considered as a criteria to diagnose preeclampsia.[29,30] But recent guidelines suggest that these patients are at an increased risk of development of PIH and benefit from close observation[29,30]

Features of severe pre eclampsia[29,30]

1. Hypertension – systolic > 160 mm Hg or diastolic > 110 mm Hg on two occasions atleast 4 hrs apart while the patient is on bed rest.
2. Thrombocytopenia- platelet count < 1,00,000 μL.
3. Impaired liver function test – elevated liver transaminases to twice the normal, severe persistent right upper quadrant or epigastric pain unresponsive to medication and not accounted for by alternative diagnosis or both.
4. New development of renal insufficiency - Serum creatinine >1.1 mg/dl OR doubling of serum creatinine in absence of renal disease.
5. Pulmonary odema
6. New onset cerebral or visual disturbances
7. IUGR

For management purposes both gestational hypertension and pre-eclampsia are considered as one. But the prognosis of gestational hypertension is better than pre-eclampsia.[31]

Classifications of Hypertensive Disorders During Pregnancy[32-36]

	American College of Obstetricians and Gyanecologists (ACOG)	**International Society for the Study of Hypertension in Pregnancy (ISSHP)**	**Working Group on High Blood Pressure in Pregnancy**	**Royal College of Obstetricians and Gynecologists (RCOG)**
Chronic Hypertension	BP ≥ 140/90 mm Hg Present before 20 weeks	BP ≥ 140/90 mm Hg Present before 20 weeks	BP ≥ 140/90 mm Hg Present before 20 weeks	***
Gestational Hypertension	BP ≥ 140/90 mm Hg Onset after 20 weeks	BP ≥ 140/90 mm Hg Present before 20 weeks	BP ≥ 140/90 mm Hg Onset after 20 weeks	***
Preeclampsia	BP ≥ 140/90 mm Hg Onset after 20 weeks Proteinuria*	BP ≥ 140/90 mm Hg Onset after 20 weeks Proteinuria*	BP ≥ 140/90 mm Hg Onset after 20 weeks Proteinuria*	Gestational hypertension Proteinuria
Severe Preeclampsia	BP > 160/110 mm Hg Excessive preoteinuria***	BP ≥ 160/110 mm Hg	DBP ≥ 110 mm Hg	BP ≥ 170/110 mm Hg (Severe hypertension)
Preeclampsia Superimposed on Chronic Hypertension	BP ≥ 140/90 mm Hg Present before 20 weeks New onset proteinuria	BP ≥ 140/90 mm Hg Present before 20 weeks New onset proteinuria	New onset proteinuria during pregnancy in chronic hypertension	***

** Proteinuria is defined as > 300 mg on 24 hour urine collection or > 30 mg on a urine spot test*

*** Excessive proteinuria is defined as > 5 gram on 24 hour urine collection*

**** RCOG follows NICE guidelines*

Epidemiology

Worldwide

Hypertensive disorders of pregnancy complicate approximately 5–10% of pregnancies.[37] Hypertensive disorders accounted for 9% maternal deaths in Africa and Asia, and 25% in Latin America and the Carribean.[38,39]

Indian scenario

Incidence of hypertensive disorders in India is found to be 10.08 % as observed through the data collected by the National Eclampsia Registry (NER) (11,266 out of 1,11,725 deliveries) over the past 3 years with 2,554 patients out of this presenting with eclampsia.[39]

Recently Ngwenya S.[40] reported a retrospective descriptive cohort study which was carried out at Mpilo Central Hospital, a tertiary teaching referral government hospital in a low-resource setting in Bulawayo, Zimbabwe to determine the incidence of severe preeclampsia/eclampsia in a low-resource setting; to determine the maternal complications of severe preeclampsia/eclampsia in a low-resource setting; and to determine the perinatal outcomes of severe preeclampsia/eclampsia in a low-resource setting. The incidence of severe preeclampsia/eclampsia at Mpilo Central Hospital was 1.3%. The most common maternal complication was HELLP syndrome. Maternal mortality was 1.7% due to acute renal failure. Nearly half (49.6%) of the babies born were lost to stillbirths and early neonatal deaths.

The HELLP syndrome

The incidence of HELLP syndrome is 10–20% in severe preeclamptic/eclamptic pregnancies.[42,43] The syndrome was first described in 1982 by Weinstein and colleagues[44] as being characterized by hemolysis, low platelets and elevated liver enzymes. Maternal morbidity and mortality is significant in HELLP syndrome. Hypertension and proteinuria may not be present,[42] Women with HELLP syndrome should typically be delivered as soon as possible due to the significant morbidity and mortality. They are not candidates for expectant management.

The HELLP is currently regarded as a variant of severe preeclampsia or a complication.[15]

The incidence of HELLP syndrome is 0.5 to 0.9 % in all pregnancies 10 to 20 % in severe pre eclampsia.[45,46] In about 70% of the cases, the HELLP syndrome develops before delivery[47] with a peak frequency between the 27th and 37th gestational weeks; 10% occur before the 27th week, and 20% beyond the 37th gestational week.[19] The mean age of pregnant women with HELLP syndrome is usually higher than in women with preeclampsia.[48,49] Most white women with HELLP are multiparous.[50] The HELLP syndrome usually develops within the first 48 hours in the post-partum period in women who have had proteinuria and hypertension prior to delivery.[47] The onset of the HELLP syndrome is usually rapid.[81] In 10–20% of the cases, HELLP syndrome may be non proteinuric and normotensive.[17] Excessive weight gain and generalized oedema precede the syndrome in more than 50% of the cases.[15,52]

Diagnostic criteria

Main diagnostic criteria of the HELLP syndrome

There are two major definitions for diagnosing the HELLP syndrome. In the Tennessee Classification System, Sibai has proposed strict criteria for "true" or "complete" HELLP syndrome (all the three criteria should be met).[17,52] If two of the three criteria are met, then it is labeled Partial HELLP. Intravascular haemolysis is diagnosed by abnormal peripheral blood smear, increased serum bilirubin (≥ 20.5 μmol/L or ≥ 1.2 mg/100 mL) and elevated LDH levels (> 600 units/L (U/L).[52,53]

Main diagnostic criteria of the HELLP syndrome[51]

HELLP class	Tennessee Classification	Mississippi classification
1	Platelets ≤ $100 \cdot 10^9$/L	Platelets ≤ $50 \cdot 10^9$/L
	AST ≥ 70 IU/L	AST or ALT ≥ 70 IU/L
	LDH ≥ 600 IU/L	LDH ≥ 600 IU/L
2		Platelets ≤ $100 \cdot 10^9$/L ≥ $50 \cdot 10^9$/L
		AST or ALT ≥ 70 IU/L
		LDH ≥ 600 IU/L
3		Platelets ≤ $150 \cdot 10^9$/L ≥ $100 \cdot 10^9$/L
		AST or ALT ≥ 40 IU/L
		LDH ≥ 600 IU/L

In The Mississippi-Triple Class System, a further classification of the disorder is based on the nadir platelet count any time during the course of the disease.[51] Class 1 and class 2 are associated with haemolysis (LDH > 600 U/L) and elevated AST (≥ 70 U/L) concentration, while class 3 requires only LDH > 600 U/L and AST ≥ 40 U/L in addition to the specific platelet count.[15]

Different criteria are used to diagnose HELLP syndrome.[17] The condition can be diagnosed simply on biochemical evidence. Some require the presence of severe preeclampsia together with biochemical substantiation to diagnose HELLP. Others deal with the HELLP syndrome as partial or incomplete HELLP. A number of studies have included women with lack of suspicion or evidence of haemolysis.[15,17] According to Smulian et al.[54] the threshold of normal LDH values may be much lower than 600 U/L depending on the laboratory method adopted. Visser and Wallenburg used ALAT > 30 U/L to define abnormality (2 SD above mean in hospital).[55] Clearly, the analytical method used is important for the diagnostic reference range.[15]

However, at present differing diagnostic criteria for HELLP syndrome have been reported, two commonly used criteria follow.

OE Sibai et al.[47] (each of following required)

1. Hemolysis on peripheral smear, lactate dehydrogenase > 600 U/L, or total bilirubin > 1.2 mg/dL.
2. Aspartate aminotransferase > 70 U/L.
3. Platelet count < 100,000 cells/mm^3.

OE Martin et al[21] (each of following required)

1. Lactate dehydrogenase > 600 U/L.
2. Aspartate aminotransferase or alanine aminotransferase > 40 IU/L.
3. Platelet count < 150,000 cells/mm^3.

Studies have shown that, outcomes for pregnancy complicated by hypertension carries significant risk for complications. There are several immediate and long-term maternal health risks as well as fetal risks which varies widely in different studies due to geographical variation, sociocultural practices and varied criteria of patient selection.[56]

In a report by Sibai et al.[47] on the outcome of 442 pregnancies complicated by HELLP, cerebral bleeding was not mentioned as a complication.

Sibai BM et al.[42] conducted a prospective cohort study on 442 pregnancies complicated with HELLP syndrome to describe the incidence and effects of serious obstetric complications on maternal outcome in pregnancies complicated by HELLP syndrome. They reported five maternal deaths, of which three attributed to diffuse hypoxic encephalopathy, and significant morbidity – including placental abruption (16%), acute renal failure (7.7%), pulmonary edema (6%) and subcapsular hematoma (0.9%) in a study of 442 patients with HELLP syndrome.[42]

Audibert et al.[49] report cerebral bleeding to occur in 1.5% of the cases. Contrary to this, in a highly selected group of 37 women with the HELLP syndrome that was transferred to an obstetric intensive care unit in Turkey, 15 women (40%) had cerebral haemorrhage. In this study CT and MRI were used as diagnostic tools.[57]

Maternal mortality

In a large retrospective cohort study[47] comprising 442 pregnancies complicated by the HELLP syndrome, the maternal mortality was 1.1%.[16] However, higher maternal mortality, up to 25%, has been reported. Unexpected rapid death from HELLP may require forensic expertise.[58] Isler et al.[24] found cerebral haemorrhage or stroke to be the primary cause of death in 26% and the most contributing factor in another 45% of the deaths. Maternal mortality rate in hepatic rupture ranges from 18 to 86%.[59]

Tuffnell DJ et al.[41] reported a five-year prospective study in 2005 to establish the risk of serious complications from severe pre-eclampsia and eclampsia in a region using a common guideline for the management of these conditions. Between 1 January 1999 and 31 December 2003, 210631 women had delivered. One thousand eighty-seven women were diagnosed with severe pre-eclampsia or eclampsia (5.2/1000). Serious complications were reporred in 151 women including 82 women (39/10,000) having eclamptic seizures and 49 women (23/10,000) requiring ICU admission. 54 out of 1145 babies died before discharge, giving a mortality rate of 47.2/1000, but no maternal deaths were reported. Of the 82 cases of eclampsia, 45 occurred antenatally (55%), 18 before admission to the maternity unit. Eleven cases occurred in labour (13%), including 1 during a caesarean section, and 26 cases occurred following delivery (32%). Twenty-five women developed pulmonary oedema (2.3% of cases) and six women required renal dialysis (0.55% of cases). One hundred and sixty-five (15%) required no antihypertensive therapy and 489 (53%) of the remainder required only oral therapy. Two hundred and one (18.5%) required more than one drug.

Quah TC et al.[60] in 2001 conducted a study was to review all obstetric admissions to the intensive therapy unit at the KK Women's and Children's Hospital from 1998 to 1999 with respect to indications for admission, interventions employed and clinical outcome. There were 31,725 deliveries in our hospital during the study period of which there were 239 admissions to the intensive therapy unit. Of these, 42% were Malays, 41% Chinese, 12% Indians and 5% other races. 65% stayed 1 day, 24% 2 days, 7% 3 days and 4% more than 3 days. The patients' ages ranged from 18 to 44 years. The indications for admission were hypertension (50%), haemorrhage (24%), respiratory insufficiency (10%), neurological problems (11%) and sepsis (3%). The maternal mortality and stillbirth rates were 1.3% and 3.7% of intensive therapy unit admissions, respectively. The study concluded that, the admission rate to the intensive therapy unit as 0.73% of all deliveries during the 2-year study period and hypertensive disease and haemorrhage were the predominant admitting diagnoses.

Iacobelli S. et al.[61] assessed the prevalence of preterm birth in pre-eclamptic deliveries in Reunion Island, a tropical overseas French department to compare this prevalence with that of international literature. All singleton live-born deliveries referred to three maternity centers in Reunion Island over 13 years were eligible. Pre-eclampsia occurred in 2.3% of 51 927 singleton live-born deliveries in Reunion Island. The prevalence of preterm birth among pre-eclamptic deliveries was 59.8% (28.6% late and 31.2% early preterm birth). Among identified reports, only one prospective study from Canada (1986-1995) described preterm and early preterm birth rates higher than Reunion Island. A cohort-based report from Guadeloupe, another tropical French DOM, showed a preterm birth prevalence of 60.9%, with 30.8% of early preterm birth. It was concluded that, predominance of early- or late-onset pre-

eclampsia has huge geographical differences. Further investigations are required to address risk factors for preterm birth and early onset pre-eclampsia in French DOM.

Ghimire S.[62] carried out a retrospective cross-sectional hospital based study to assess feto-maternal outcomes in their setting in Nobel Medical College, Biratnagar, from 17th June 2014 to 16th June 2015. Among 8,066 deliveries, 112 had eclampsia with incidence of 13.8/1000 deliveries. Majority (41%) were of <19 years of age. Above 90% were unbooked. About 63.4% were primiparas and 83% had antepartum eclampsia. Eclamptic fits were more common (41.6%) in 37-40 weeks period of gestation. About 18.9% women developed eclampsia related complications. Common causes of maternal deaths (5.36%) were pulmonary edema, aspiration pneumonia, cerebrovascular accidents and HELLP syndrome. Perinatal death was 9%.

Perinatal morbidity and mortality

Perinatal mortality and morbidity are higher in the HELLP syndrome, and are primarily dependent on the gestational age when the condition develops.[15]

According to Gul et al.[63] the perinatal mortality is 34% before 32 weeks' gestation, and 8% after the 32nd gestational week. The leading causes of neonatal death are premauturity, placental insufficiency and IUGR. Hepatic rupture has a perinatal mortality rate that can reach 80%.[15,59]

Murray et al.[64] published in 2001 the outcome of 20 cases of the HELLP syndrome over a 5-year period. 85% were delivered by Caesarean section within 24 hours of diagnosis. 65% were preterm. The mean gestation at delivery was 33.5 weeks and the mean birth weight 1923 g. 40% of the neonates developed respiratory distress syndrome (RDS).

Analysis of the perinatal and neonatal data for women diagnosed with HELLP from 1993 to 1996 was performed by Singhal et al.[65] who compared the neurodevelopmental outcome of HELLP a group of birth weight matched controls. 104 women with HELLP syndrome gave birth to of 109 infants (mean gestational age 32.6 weeks, mean birth weight 1766 g). Prematurity is the leading cause of all morbidity and mortality despite having no significant differences in gender, APGAR score, need for resuscitation, RDS, sepsis, NEC or death in the neonatal unit. No significant differences in neonatal mortality and morbidity were found in infants weighing less than 1250 g compared to the weight matched control group. At 3 years of age, the HELLP group had fewer children with cerebral palsy (CP) and mental disability.[65]

Kandler et al.[66] reported that in the time span between 6 and 72 months (median 24 months) after delivery, 90% of children born from mothers with HELLP showed normal development or only minor disabilities. 33 weeks was the mean gestational ageand the mean birth weight 1671 g. However, the neonatal outcome is poor before 25 weeks' gestation or with birth weights less than 700 g; after 26 weeks' gestation or in infants weighing more than 700 g it is substantially better.

In a study conducted by Aabidha PM. et al.[67] in a secondary care hospital in South India in 2015, the incidence of pre eclampsia was approximately 5%.

In a study conducted by Balsera EC. et al.[18] in 2011 it was analysed that the maternal morbidity and mortality among patients admitted to Obstetric Intensive Care Unit (OICU) incidence of pre eclampsia was 7%. 5% of all pre eclampsia developed eclampsia. 19% of the pre eclamptic cases develop HELLP syndrome. 9% develop heart failure 5% develop acute renal failure and coagulation disorders in 2% cases.

In a prospective study conducted by Banoo S. et al.[20] in a tertiary care hospital in Srinagar in 2007, to analyse what number of severe PE patients develop HELLP syndrome.100 patients were enrolled out of which 10% had HELLP syndrome, 8% had partial HELLP syndrome and 82% had no HELLP syndrome.

In a retrospective descriptive study conducted by Virgil Gracia P. et al.[68] in Panama over 3 years, in 2000, 558 pregnancies were complicated by pre eclampsia and 26 by eclampsia. The incidence of HELLP syndrome was 12% in severe pre eclampsia patients and 34.6 % in eclampsia patients. with a total incidence of 16%.

In a review article on HELLP syndrome by Satpathy H et al.[69] published in Feb 2009, the incidence of HELLP syndrome was found to be 1% in all pregnancies and 4 to 12 % in severe pre eclampsia or eclampsia.

METHODOLOGY

This study was conducted in the Department of Obstetrics and Gynecology, KLES Dr. Prabhakar Kore Hospital and Medical Research Centre, Belagavi.

Study design

The study design was a cross-sectional study.

Study duration and period

This study was conducted for period of one year from January 2016 to December 2016.

Place

The present study conducted in the labour room and wards of KLES Dr. Prabhakar Kore Hospital and Medical Research Centre, Belagavi, a tertiary care teaching hospital attached to Jawaharlal Nehru Medical College, Belagavi.

Source of data

Pregnant women getting admitted in the labour room of KLES Dr Prabhakar Kore Charitable Hospital and Medical Research Center, Belagavi and who were diagnosed to have severe preeclampsia fulfilling selection criteria during the study period were enrolled.

Sample size

The study was comprised of 312 pregnant women.

Sampling procedure

The sample size was calculated considering the prevalence based on the formula as below.

$$n= [2(z1 + z2)^2 *p(1-p)] / (p1-p2)^2$$

Where,

z1 = Constant (1.96)

z2 = Constant (0.84)

p = p1 +p2/2

p1 = 0.07[19] of all the pregnancies that progress to develop pre eclampsia

p2 = 0.19[19] of the pre eclampsia cases that progress towards HELLP

p=0.07+0.19/2 = 0.13

L = Standard error (10%) at 95% confidence level

Therefore,

$$n= [2(1.96+0.84)^2 *0.13(1-.13)]/(.19-.03)^2$$

$$n = 123.153 \approx 125 \text{ (Approx)}$$

The sample obtained from the above formula was 125. However 312 women fulfilled the selection criteria during the study period and were enrolled in the study.

Selection criteria

Inclusion criteria

- Women with severe preeclampsia or any of the following laboratory criteria will be included in the study

- Severe preeclampsia was defined by presence of any of the below mentioned features.[25]
    - Hypertension – systolic > 160 mm Hg and or diastolic > 110 mm Hg on two occasions at least 4 hours apart while the patient is on bed rest developing after 20 weeks gestation with proteinuria.
    - Thrombocytopenia- platelet count < 1,00,000
    - Impaired liver function test – elevated liver transaminases to twice the normal, severe persistent right upper quadrant or epigastric pain unresponsive to medication and not accounted for by alternative diagnosis or both.
    - New development of renal insufficiency - Serum creatinine >1.1 mg/dl OR doubling of serum creatinine in absence of renal disease.
    - Pulmonary odema.
    - New onset cerebral or visual disturbances.
- Gestational age >24 weeks

Exclusion criteria

Pregnant women with;

- Those with medical disorders like chronic hypertension, renal disease, epilepsy.
- Those not willing to participate in the study

Ethical clearance

Prior to the commencement of study, the ethical clearance was obtained from the Institutional Ethics Committee, Jawaharlal Nehru Medical College, Belagavi.(Annexure III)

Informed Consent

The eligible women were explained about the nature of the study and a written informed consent was obtained (Annexure I).

Method of collection of data

After the enrollment demographic data, obstetric history and current pregnancy details were obtained through an interview. These women were subjected to clinical examination. The data obtained was recorded on the predesigned and pretested proforma (Annexure II).

Investigations

The selected women underwent following investigations.

- Haemoglobin levels
- Prothrombin time
- Activated Partial Thromboplastin Time
- Peripheral smear
- Blood group
- Serum fibrinogen
- Urine albumin, microscopy
- Lactate dehydrogenase
- Liver function tests
- Renal function tests.

Medical management

The medical management was done with following medications

- Antihypertensive drugs: eg, nifedipine, hydralazine, labetolol
- Magnesium sulphate intramuscular for therapeutic and prophyaxis purposes

Obstetric management

Termination of pregnancy based on the BISHOPS score by vaginal delivery or a caesarean section was done for obstetric indications. The Mother and the baby were monitored for one week in the postpartum period.

Outcome variables

The selected women were monitored for maternal and neonatal outcomes as below.

Maternal outcome

- Onset of labour
- Mode of delivery
- In case of caesarean section delivery, indication for LSCS
- Maternal complications
- Maternal mortality

Neonatal outcome

- Birth weight
- APGAR score -1min 5min
- Admission in NICU
- Causes of Admission to NICU
- Neonatal mortality

The above outcomes were monitored for women who developed HELLP syndrome also.

With regard to complications, the women were diagnosed to have HELLP syndrome based on Mississippi classification.[16] Abruption was considered when a clinical and sonography aided diagnosis that includes antepartum haemorrhage with pre mature separation of a normally situated placenta, more common in pre eclampsia. Acute renal failure in obstetrics was regarded as an abrupt decline in renal function characterised by a urine output of less than 400 ml in 24 hours pulmonary oedema was defined as bilateral crepts on auscultation. Plus bilateral chest infiltrates on x ray and impaired oxygenation PaO2 less than 200 mm hg, eclampsia was defined as pre eclampsia with convulsions and DIC was defined as fibrinogen less than 180 mg/DL with a raised PT INR.[71]

Statistical analysis

The data obtained was coded and entered into Microsoft Excel Worksheet (Annexure III). The data was analysed using SPSS statistical software version 20.0. The categorical data was expressed as rates, ratios and proportions and continuous data was expressed as mean ± standard deviation (SD). The comparison of continuous data done using independent sample 't' test. A probability value (p value) of ≤0.05 was considered as statistically significant.

RESULTS

The present cross sectional study was conducted for the period of one year from January 2016 to December 2016 in the labour room and wards of Department of obstetrics and Gynaecology, KLES Dr. Prabhakar Kore Hospital and Medical Research Centre, Belagavi. A total of 312 pregnant women with blood pressure ≥ 160/110 mmHg suggestive of severe preeclampsia were enrolled. The consort diagram for Screening, selection and enrollment is as shown below. During the study period the incidence of severe preeclampsia was found to be 5.00%

Screening, selection of the study population

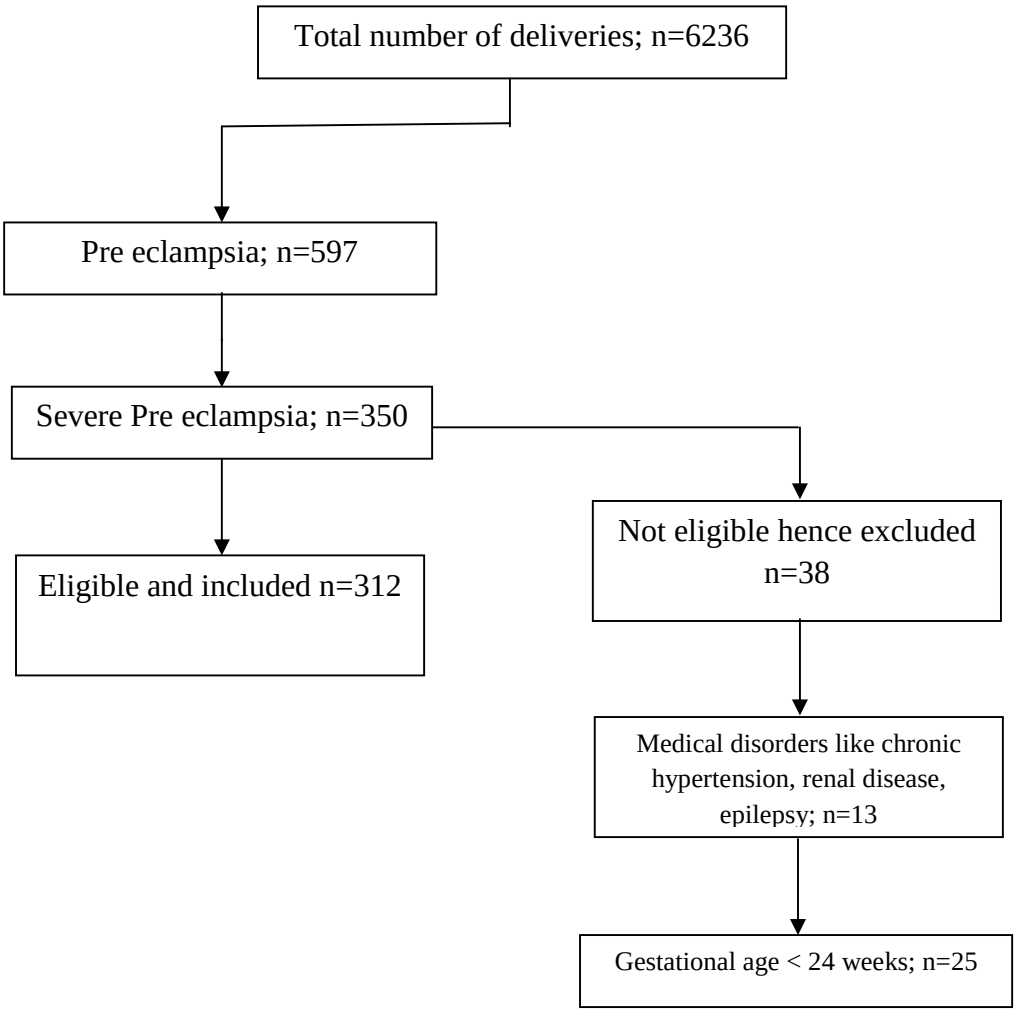
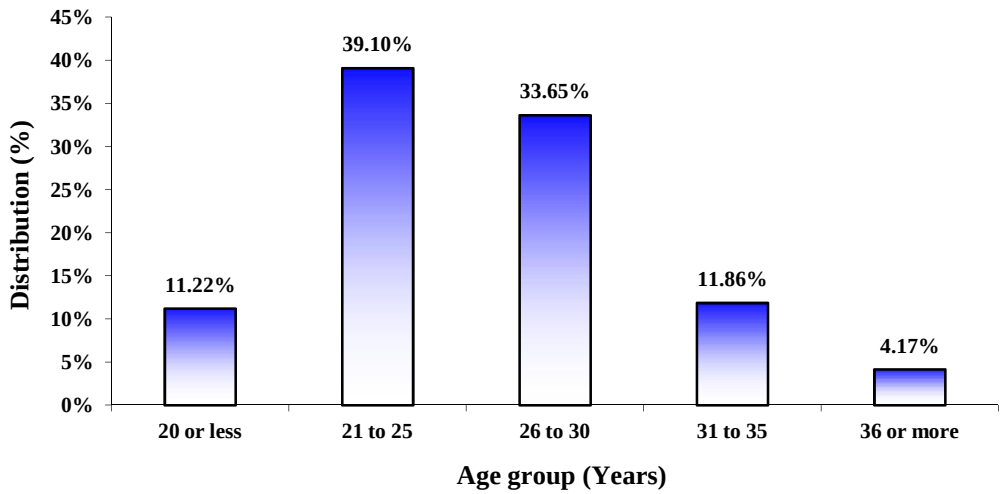


Table 1. Distribution of women according to the maternal age in women with severe preeclampsia

Age group (Years)	Distribution (n=312)	
	Number	Percentage
20 or less	35	11.22
21 to 25	122	39.10
26 to 30	105	33.65
31 to 35	37	11.86
36 or more	13	4.17
Total	**312**	**100.00**

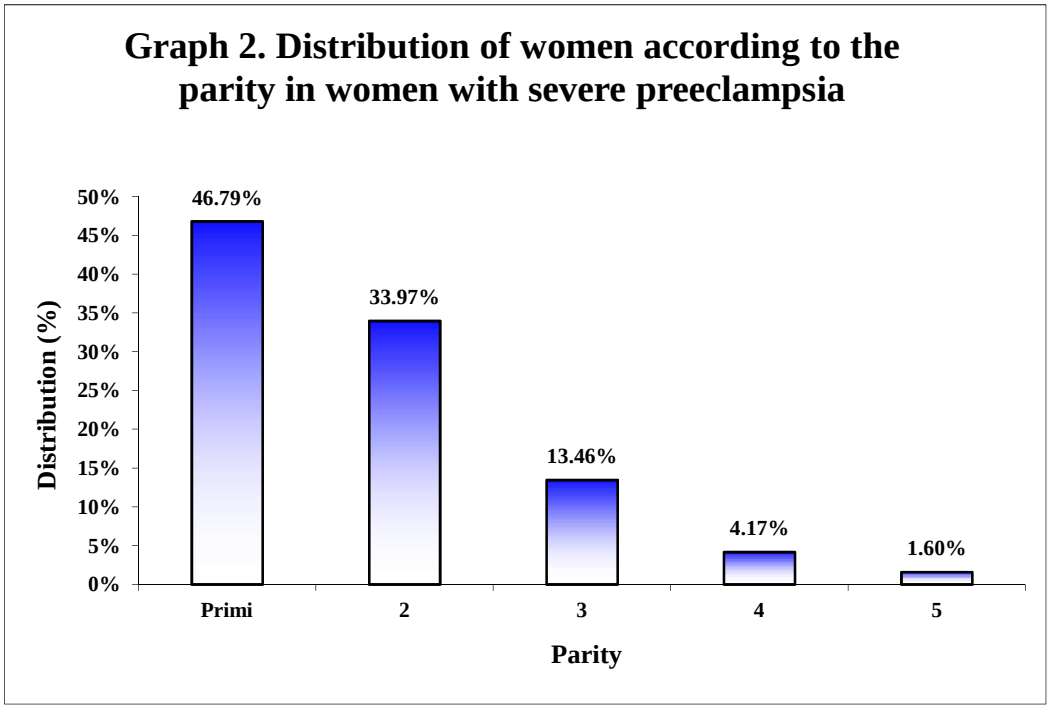
Graph 1. Distribution of women according to the maternal age in women with severe preeclampsia



In the present study most of the women were aged from 21 to 25 years (39.10%). The mean age was 26.18±4.45 years. The median age was 25 years and ranged between 18 to 38 years.

Table 2. Distribution of women according to the parity in women with severe preeclampsia

Parity	Distribution (n=312)	
	Number	Percentage
Primi	146	46.79
2	106	33.97
3	42	13.46
4	13	4.17
5	5	1.60
Total	**312**	**100.00**

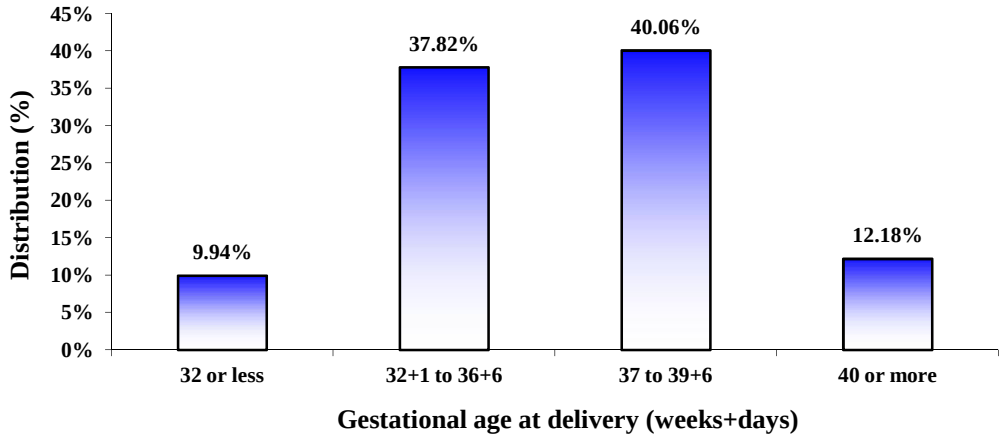


In the present study most of the women were primi (46.47%) followed by para 2 (33.97%), para 3 (13.46%), para 4 (4.17%) and para 5 (1.60%).

Table 3. Distribution of women according to the gestational age at delivery in women with severe preeclampsia

Gestational age at delivery (weeks+days)	Distribution (n=312)	
	Number	**Percentage**
32 or less	31	9.94
32+1 to 36+6	118	37.82
37 to 39+6	125	40.06
40 or more	38	12.18
Total	**312**	**100.00**

Graph 3. Distribution of women according to the gestational age at delivery in women with severe preeclampsia

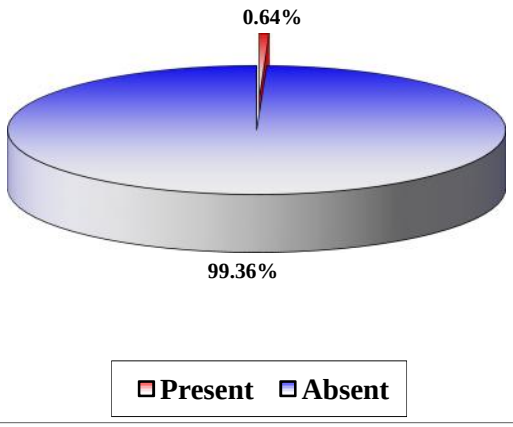


In the present study most of the women delivered between 37 to 39+6 weeks (40.06%). The mean gestational age at delivery was 36.31±3.51 weeks.

Table 4. Distribution of women according to the gestational diabetes mellitus in women with severe preeclampsia

Gestational diabetes mellitus	Distribution (n=312)	
	Number	**Percentage**
Present	2	0.64
Absent	310	99.36
Total	**312**	**100.00**

Graph 4. Distribution of women according to the gestational diabetes mellitus in women with severe preeclampsia

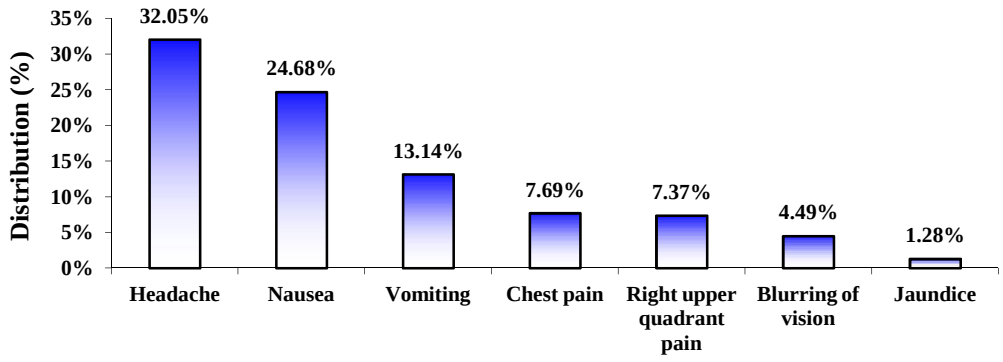


In the present study 0.64% of the women had gestational diabetes mellitus.

Table 5. Distribution of women according to the clinical presentation in women with severe preeclampsia

Clinical presentation	Distribution (n=312)	
	Number	Percentage
Headache	100	32.05
Nausea	77	24.68
Vomiting	41	13.14
Chest pain	24	7.69
Right upper quadrant pain	23	7.37
Blurring of vision	14	4.49
Jaundice	4	1.28

Graph 5. Distribution of women according to the clinical presentation in women with severe preeclampsia

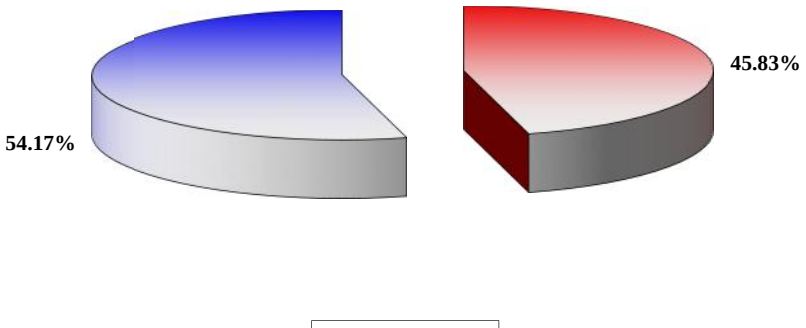


In the present study the most common clinical presentation was headache (32.05%) followed by nausea (24.68%), Vomiting (13.14%), chest pain (7.69%), right upper quadrant pain (7.37%), blurring of vision (4.49%) and jaundice 1.28%.

Table 6. Distribution of women according to the administration of magnesium sulphate in women with severe preeclampsia

Magnesium sulphate administration	Distribution (n=312)	
	Number	**Percentage**
Yes	143	45.83
No	169	54.17
Total	**312**	**100.00**

Graph 6. Distribution of women according to the administration of magnesium sulphate in women with severe preeclampsia

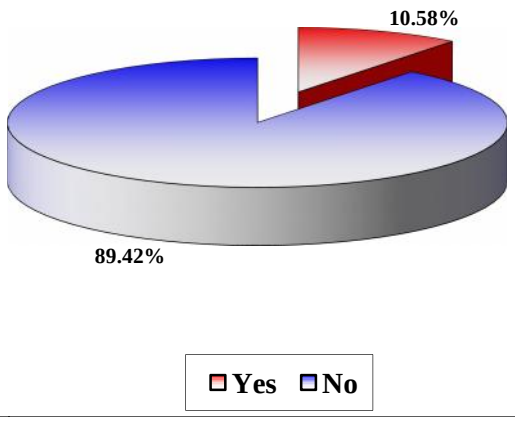


In the present study magnesium sulphate administration was done in 45.83% of the women.

Table 7. Distribution of women according to the HELLP syndrome in women with severe preeclampsia

HELLP syndrome	Distribution (n=312)	
	Number	Percentage
Yes	33	10.58
No	279	89.42
Total	**312**	**100.00**

Graph 7. Distribution of women according to the HELLP syndrome in women with severe preeclampsia

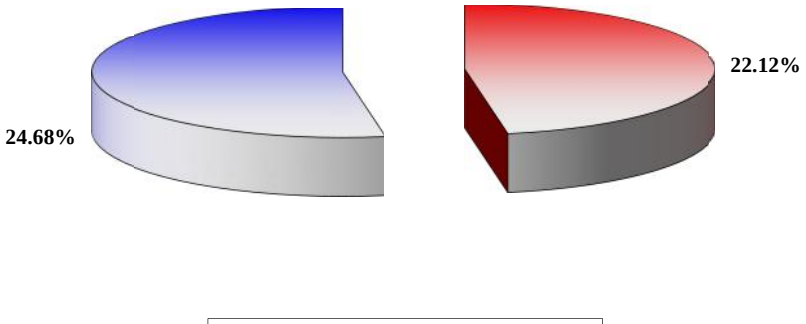


In the present study the 10.58% of the women had developed HELLP syndrome.

Table 8. Distribution of women according to the onset of labour in women with severe pre eclampsia

Onset of Labor	Distribution (n=312)	
	Number	**Percentage**
Induction	69	22.12
Spontaneous	77	24.68
Total	**146**	**46.79**

Graph 8. Distribution of women according to the onset of labour in women with severe preeclampsia

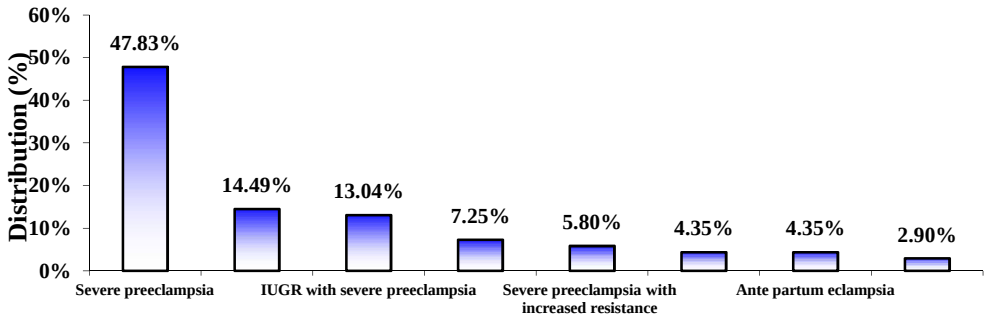


In the present study 24.68% of the women were induced for labour while 22.12% of the women had spontaneous labour.

Table 9. Distribution of women according to the indications for induction of labour in women with severe preeclampsia

Indications for induction of labor	Distribution (n=69)	
	Number	**Percentage**
Severe preeclampsia	33	47.83
Postdatism	10	14.49
IUGR with severe preeclampsia	9	13.04
IUD with severe preeclampsia	5	7.25
Severe preeclampsia with increased resistance on doppler	4	5.80
Severe preeclampsia with GDM	3	4.35
Antepartum eclampsia	3	4.35
HELLP	2	2.90
Total	**69**	**100.00**

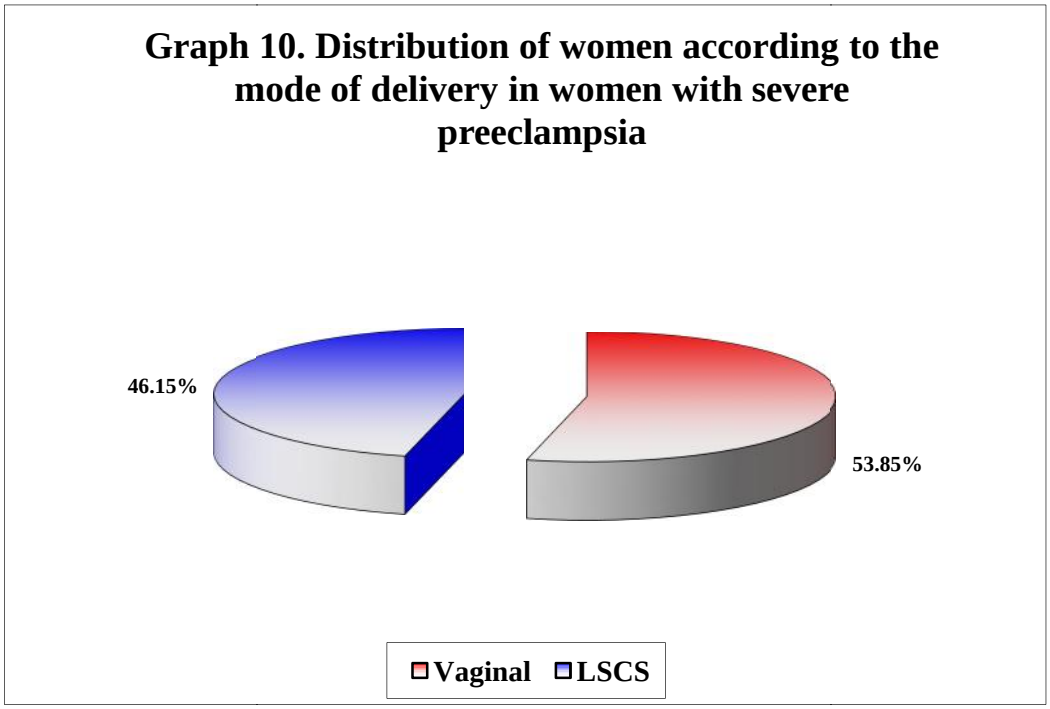
Graph 9. Distribution of women according to the indications for induction of labour in women with severe preeclampsia



In the present study the most common indication for the induction of labour was severe preeclampsia (47.83%) followed by postdatism (14.49%).

Table 10. Distribution of women according to the mode of delivery in women with severe preeclampsia

Mode of delivery	Distribution (n=312)	
	Number	Percentage
Vaginal	168	53.85
LSCS	144	46.15
Total	**312**	**100.00**

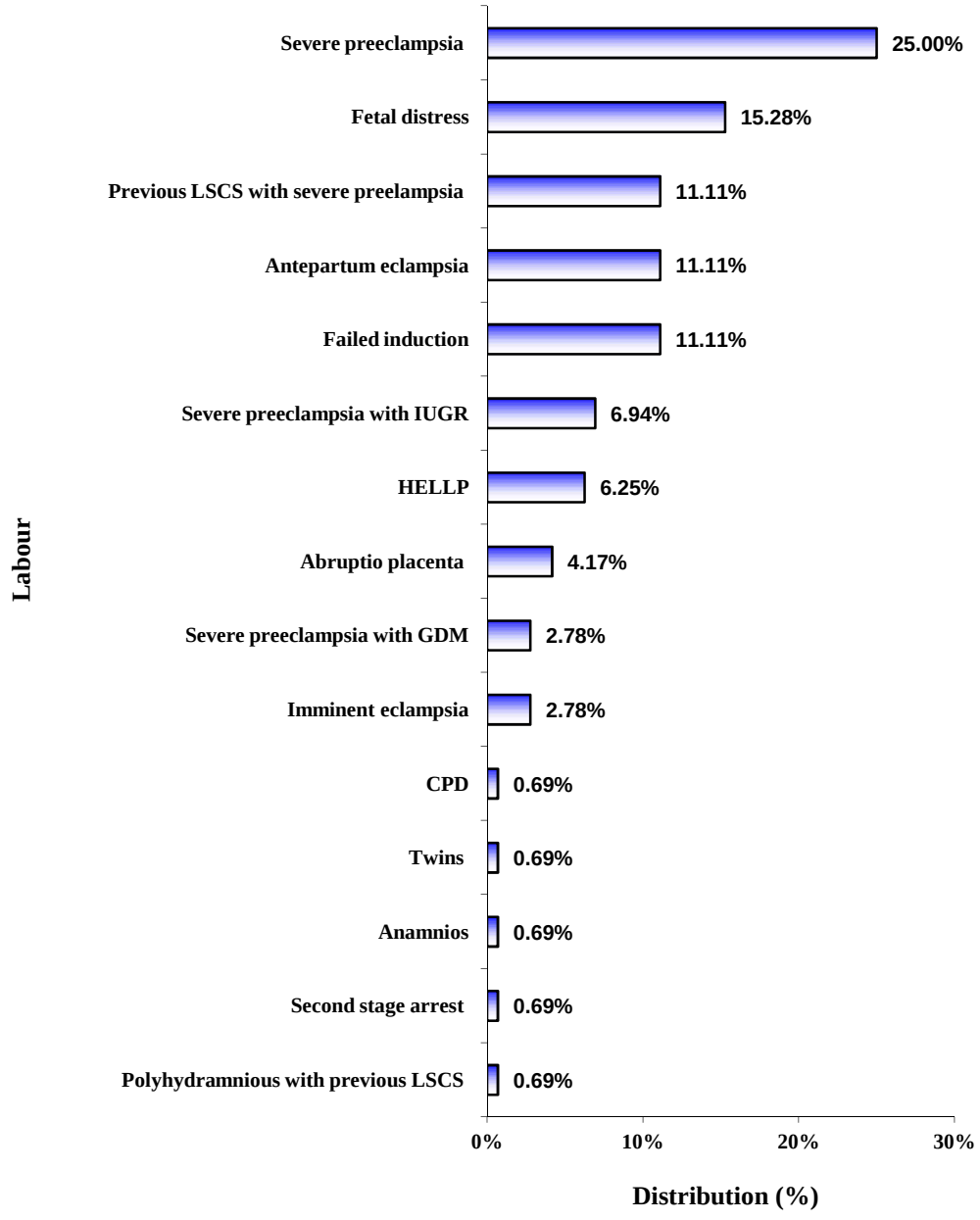


In the present study, 53.85% of the women had vaginal delivery and 46.15% of the women underwent LSCS.

Table 11. Distribution of women according to the indications for LSCS in women with severe preeclampsia

Indications	Distribution (n=144)	
	Number	Percentage
Polyhydramnious with previous LSCS	1	0.69
Second stage arrest	1	0.69
Anamnios	1	0.69
Twins	1	0.69
CPD	1	0.69
Imminent eclampsia	4	2.78
Severe preeclampsia with GDM	4	2.78
Abruptio placenta	6	4.17
HELLP	9	6.25
Severe preeclampsia with IUGR	10	6.94
Failed induction	16	11.11
Antepartum eclampsia	16	11.11
Previous LSCS with severe preelampsia	16	11.11
Fetal distress	22	15.28
Severe preeclampsia	36	25.00
Total	**144**	**100.00**

Graph 11. Distribution of women according to the indications for LSCS in women with severe preeclampsia

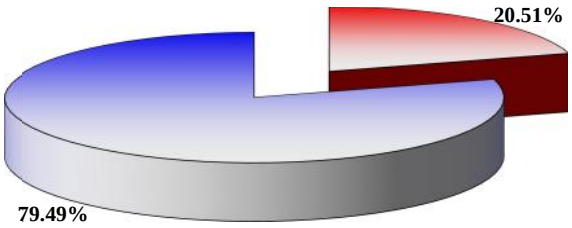


In the present study, the most common indication for LSCS was severe preeclampsia 25.00% followed by fetal distress (15.28%). The other indications are as depicted in Table 11 and graph 11.

Table 12. Distribution of women according to the complications in women with severe preeclampsia

Complications	Distribution (n=312)	
	Number	Percentage
Yes	64	20.51
No	248	79.49
Total	**312**	**100.00**

Graph 12.Distribution of women according to the complications in women with severe preeclampsia

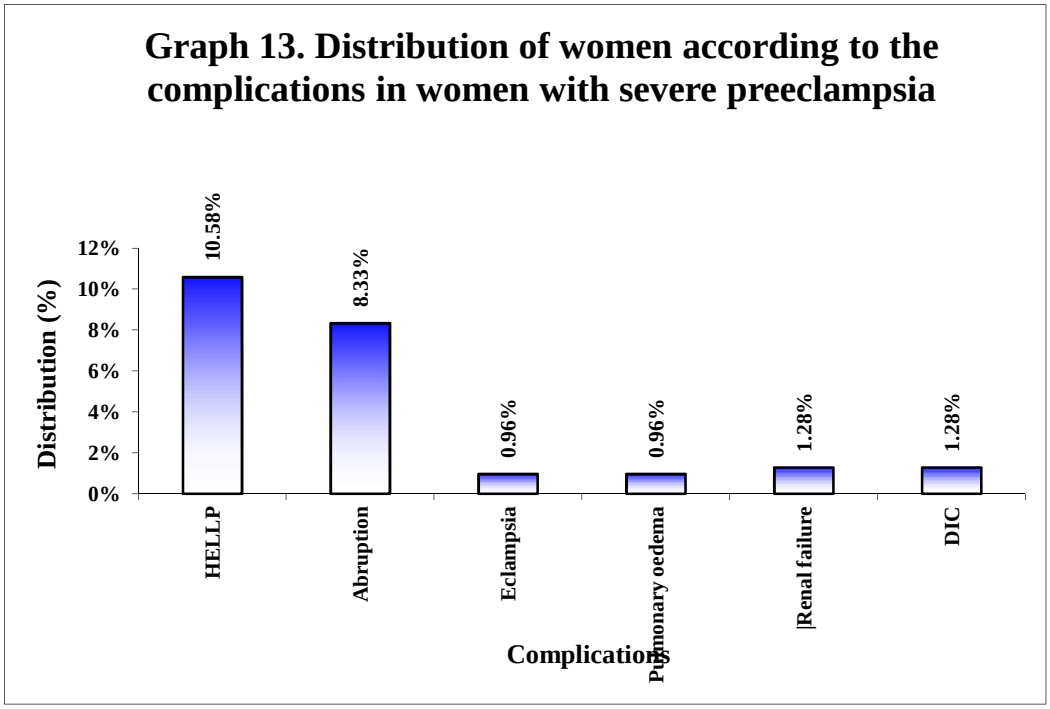


In this study, 20.51% of the women with severe pre eclampsia developed complications.

Table 13. Distribution of women according to the complications in women with severe preeclampsia

Complications	Distribution (n=312)	
	Number	Percentage
HELLP	33	10.58
Abruption	26	8.33
Eclampsia	4	0.96
Pulmonary oedema	4	0.96
Renal failure	3	1.28
DIC	3	1.28

Multiple complications noted hence total not shown

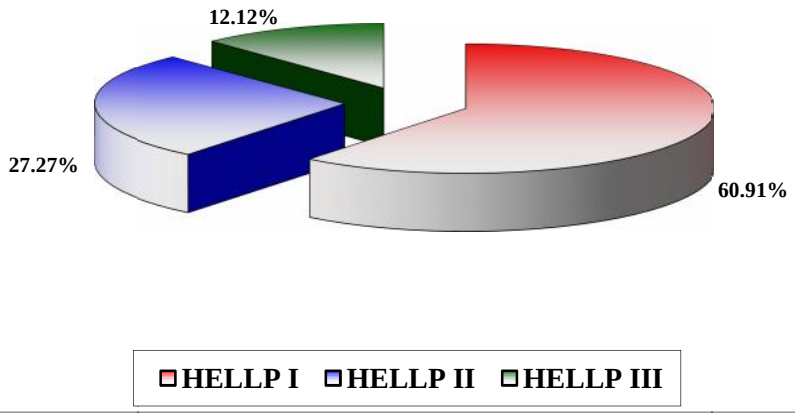


In the present study, the most common complication was HELLP syndrome (10.58%) followed by abruption (8.33%), eclampsia (\0.96%), pulmonary oedema (0.96%), renal failure and DIC (1.28%).

Table 14. Distribution of women according to the severity of HELLP syndrome in women with severe preeclampsia (MISSISIPPI classification)

Severity	Distribution (n=33)	
	Number	Percentage
HELLP I	20	60.61
HELLP II	9	27.27
HELLP III	4	12.12
Total	**33**	**100.00**

Graph 14. Distribution of women according to the severity of HELLP syndrome in women with severe preeclampsia

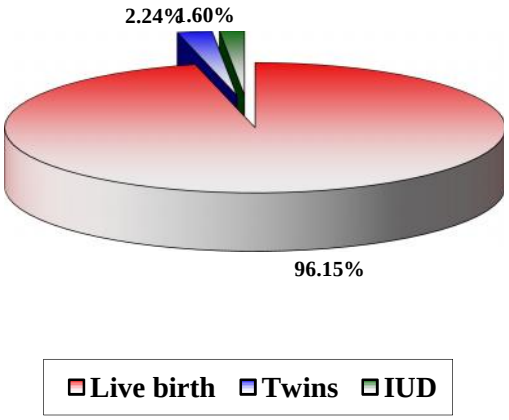


In this study most of the women who developed HELLP Syndrome were HELLP I (60.91%), followed by HELLP II (27.27%) and HELLP III (12.12%).

Table 15. Distribution of women according to the pregnancy outcome in women with severe preeclampsia

Pregnancy outcome	Distribution (n=312)	
	Number	**Percentage**
Live birth	300	96.15
Twins	7	2.24
IUD	5	1.60
Total	**312**	**100.00**

Graph 15. Distribution of women according to the pregnancy outcome in women with severe preeclampsia

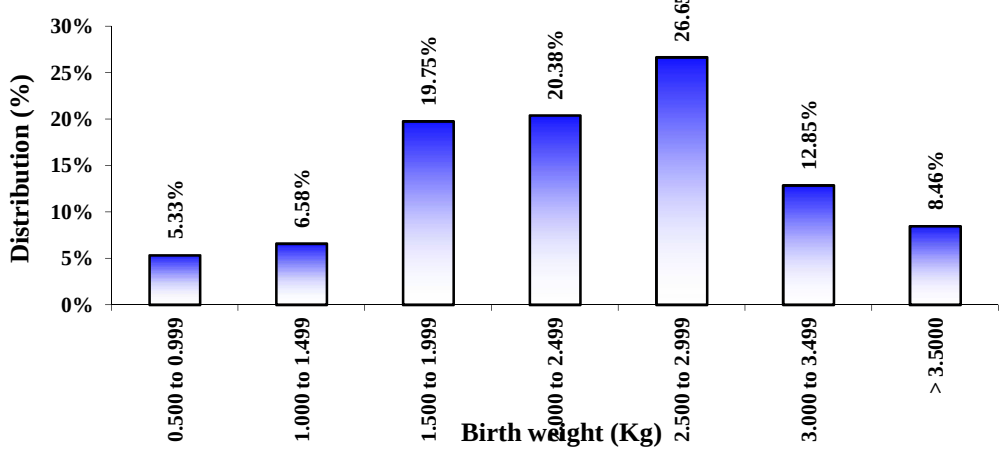


In the present study majority of the women had live births (96.15%), while multiple gestation and IUD was noted in 2.24% and 1.60% of the women respectively.

Table 16. Distribution of neonates according to the birth weight in women with severe preeclampsia

Birth weight (Kg)	Distribution (n=319)	
	Number	Percentage
0.500 to 0.999	17	5.33
1.000 to 1.499	21	6.58
1.500 to 1.999	63	19.75
2.000 to 2.499	65	20.38
2.500 to 2.999	85	26.65
3.000 to 3.499	41	12.85
> 3.5000	27	8.46
Total	**319**	**100.00**

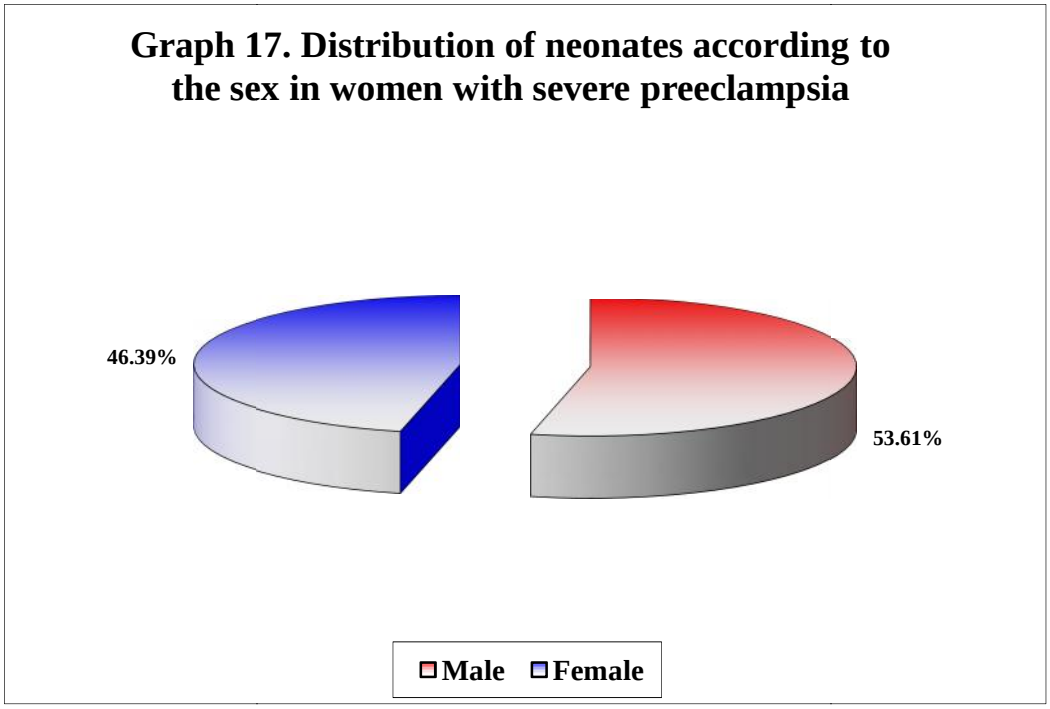
Graph 16. Distribution of neonates according to the birth weight in women with severe preeclampsia



In the present study 26.65% of the babies weighed between 2.500 to 2.999 kg followed by 2.000 to 2.499 Kg (20.38%) and 1.500 to 1.999 kg (19.75%). The mean birth weight was 2.36±0.77 Kgs.

Table 17. Distribution of neonates according to the sex in women with severe preeclampsia

Sex	Distribution (n=319)	
	Number	Percentage
Male	171	53.61
Female	148	46.39
Total	**319**	**100.00**

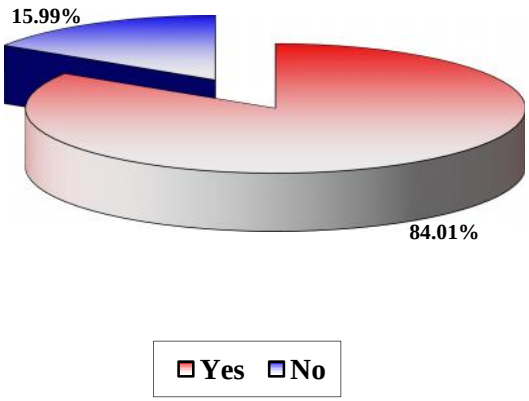


In the present study, 53.61% of the babies were males and 46.39% were females.

Table 18. Distribution of neonates according to the resuscitation born to the women with severe preeclampsia

Requirement	Distribution (n=319)	
	Number	Percentage
Yes	268	84.01
No	51	15.99
Total	**319**	**100.00**

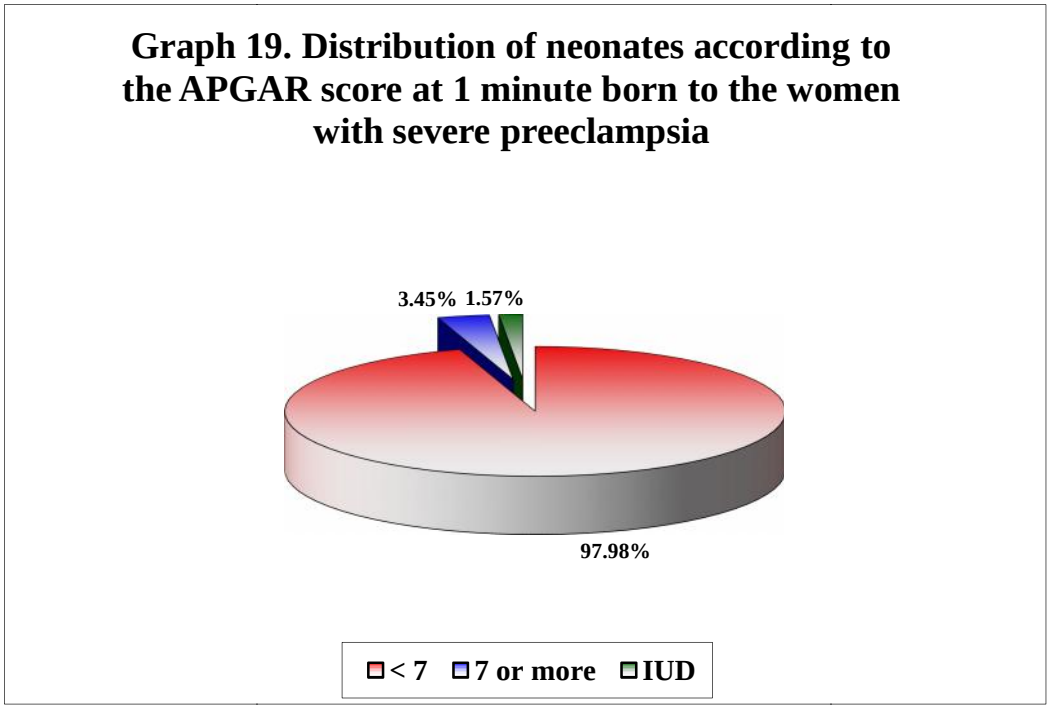
Graph 18. Distribution of neonates according to the rescuscitation born to the women with severe preeclampsia



In the present study, 84.01% of the babies required resuscitation.

Table 19. Distribution of neonates according to the APGAR score at 1 minute born to the women with severe preeclampsia

APGAR Score	Distribution (n=319)	
	Number	**Percentage**
< 7	303	94.98
7 or more	11	3.45
No APGAR score (IUD)	5	1.57
Total	**319**	**100.00**

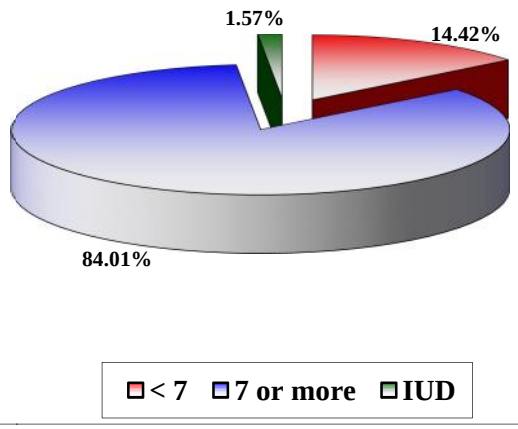


In this study at 1 minute APGAR score of >7 was noted in 94.98% of the babies. The mean APGAR score at one minute was 6.23±1.13.

Table 20. Distribution of neonates according to the APGAR score at 5 minute born to the women with severe preeclampsia

APGAR Score	Distribution (n=319)	
	Number	Percentage
< 7	46	14.42
7 or more	268	84.01
IUD	5	1.57
Total	**319**	**100.00**

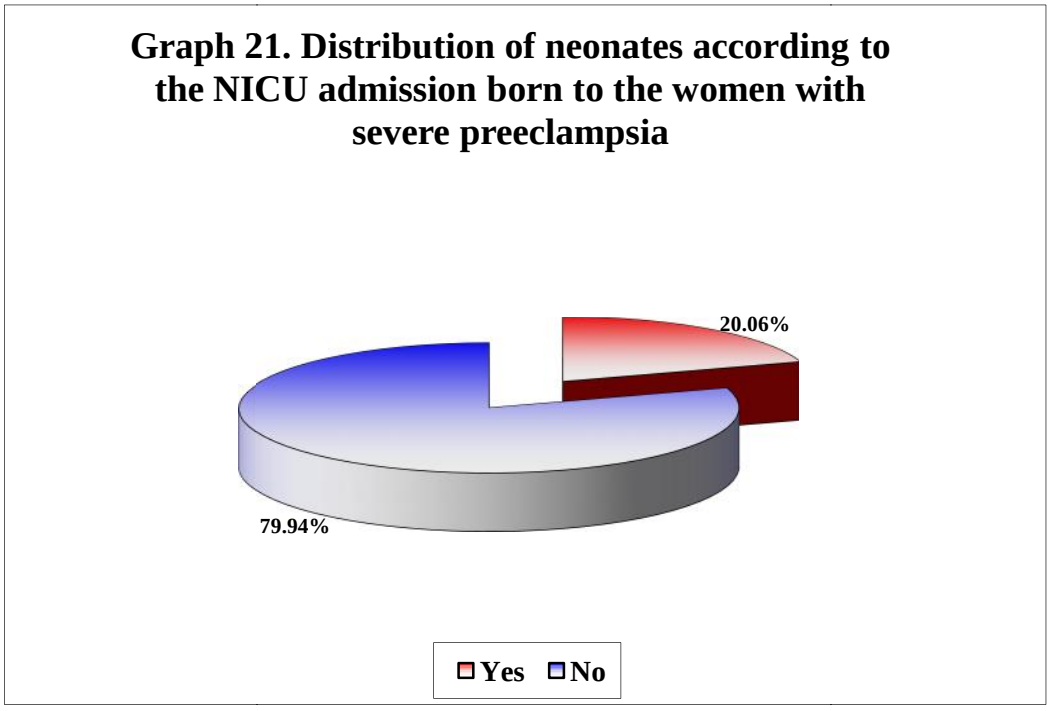
Graph 20. Distribution of neonates according to the APGAR score at 5 minute born to the women with severe preeclampsia



In the present study at 5 minutes APGAR score of ≥ 7 was noted in 84.01% of the babies. The mean APGAR score was 8.01±4.76.

Table 21. Distribution of neonates according to the NICU admission born to the women with severe preeclampsia

NICU admission	Distribution (n=319)	
	Number	**Percentage**
Yes	64	20.06
No	255	79.94
Total	**319**	**100.00**

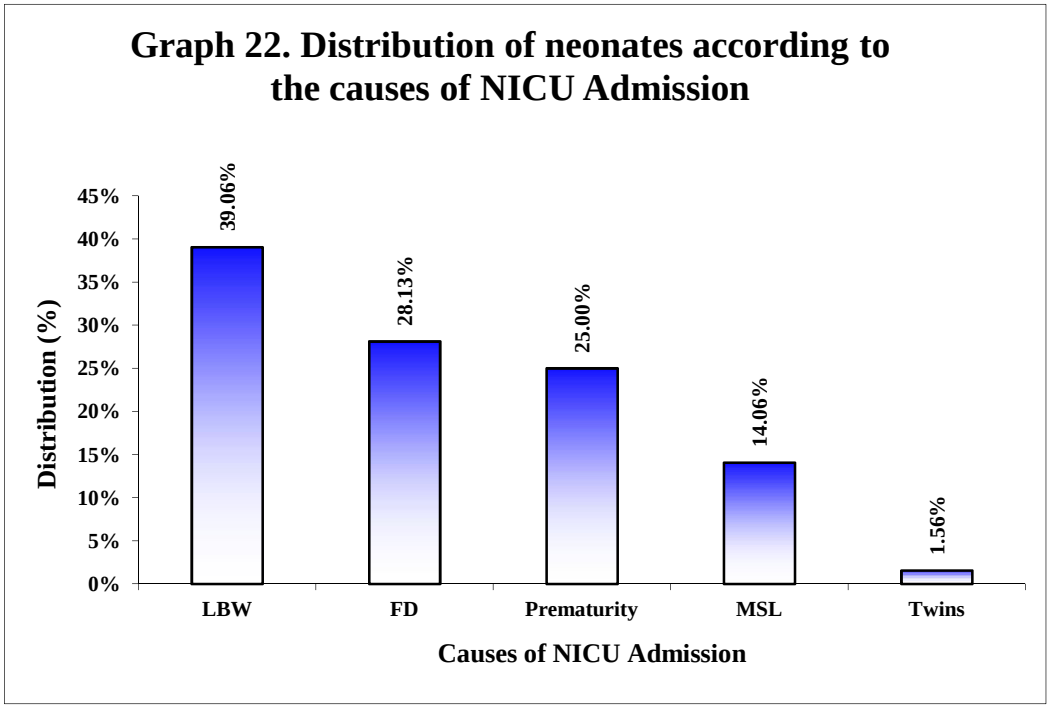


In the present study, 20.06% of the babies required NICU admission.

Table 22. Distribution of neonates according to the causes of NICU Admission born to the women with severe preeclampsia

Causes of NICU Admission	Distribution (n=64)	
	Number	Percentage
LBW	25	39.06
FD	18	28.13
Prematurity	16	25.00
MSL	9	14.06
Twins	1	1.56

Multiple causes hence total not shown

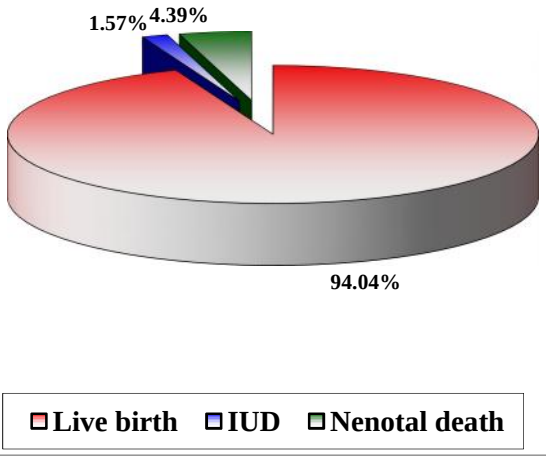


In the present study the most common cause of NICU admission was LBW (39.06%) followed by fetal distress (28.13%).

Table 23. Distribution of women according to the neonatal outcome born to the women with severe preeclampsia

Neonatal outcome	Distribution (n=319)	
	Number	Percentage
Live birth	300	94.04
IUD	5	1.57
Neonatal death	14	4.39
Total	**319**	**100.00**

Graph 23. Distribution of women according to the neonatal outcome



In the present study , 94.04% of the women had live birth, while IUD was noted in 1.57% and early neonatal death in 4.39%.

Table 24. Clinical and biochemical characteristics of women with complications vs women without complications

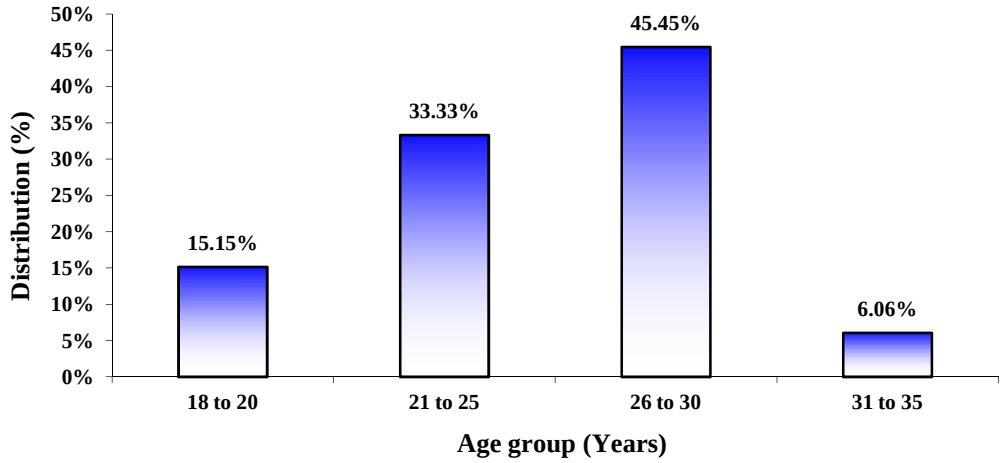
Clinical characteristics	Complications				p value
	Yes (n=64)		No (n=248)		
	Mean	SD	Mean	SD	
Age (Years)	26.16	4.47	26.19	4.45	0.963
Systolic (mm Hg)	162.34	11.42	162.10	12.65	0.882
Diastolic (mm Hg)	105.28	10.40	106.44	10.96	0.436
Haemoglobin (g/dL)	11.11	2.38	11.25	2.17	0.673
Platelet count (per cumm)	132265.63	102760.71	217607.28	97904.19	< **0.001**
SGOT (IU/L)	168.16	160.79	47.74	96.93	< **0.001**
SGPT (IU/L)	116.42	101.41	39.54	79.64	< **0.001**
Uric acid (mg/dL)	6.27	1.89	6.26	5.87	0.976
Serum Creatinine (mg/dL)	0.85	0.77	2.47	16.18	0.119
LDH	557.52	417.66	429.23	266.78	**0.022**
Fibrinogen	314.92	108.75	334.53	103.93	0.198
Gestational age (weeks)	35.21	4.10	36.60	3.28	**0.014**

The comparison of clinical characteristics in women with and without complications is as shown in Table 23. It was observed that, the SGOT and SGPT, LDH were significantly high in women who developed complications ($p<0.05$). Also the mean platelet count and gestational age in women with complications was significantly low ($p=0.014$).

Table 25. Distribution of women according to the demographic characteristics in women with HELLP syndrome

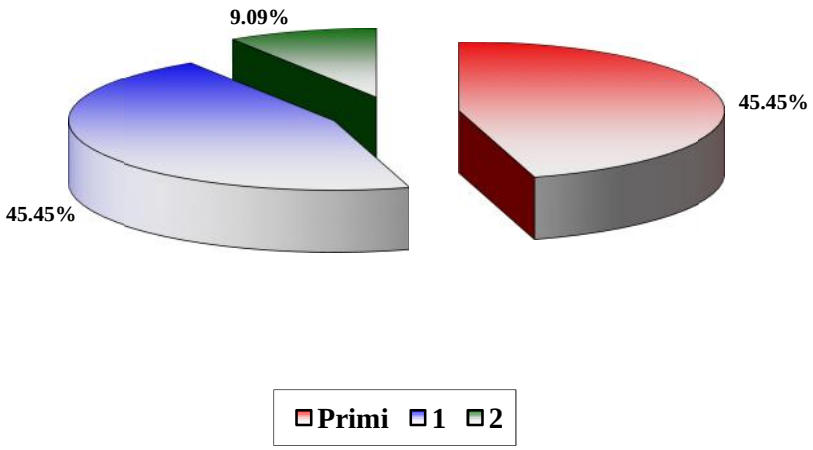
Demographic characteristics	Findings	Distribution (n=33)	
		Number	Percentage
Age group (Years)	18 to 20	5	15.15
	21 to 25	11	33.33
	26 to 30	15	45.45
	31 to 35	2	6.06
	Total	**33**	**100.00**
Parity	Primi	15	45.45
	1	15	45.45
	2	3	9.09
	Total	**33**	**100.00**

Graph 24. Distribution of women according to maternal age in women with HELLP syndrome



In the present study, most of the women with HELLP were in age group between 26 to 30 (45.45%). The mean age was 25.18±3.81 years (in women with HELLP syndrome)

Graph 25. Distribution of women according to the parity in women with HELLP syndrome

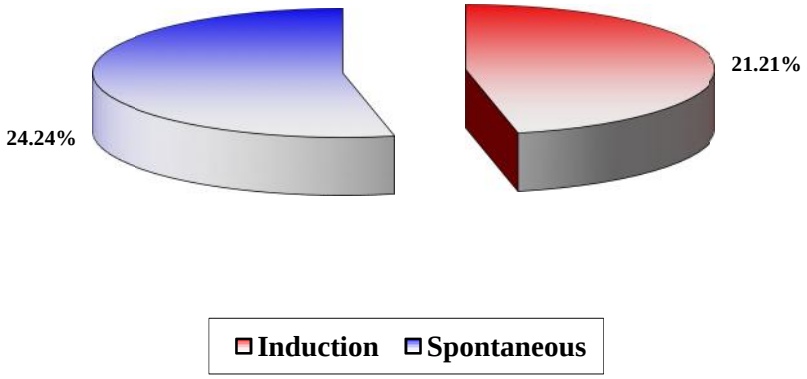


In this study most of the women were primi and para 1 (45.45%) each and para 2 (9.09%).(in women with HELLP syndrome)

Table 26. Distribution of women according to the labour in women with HELLP syndrome

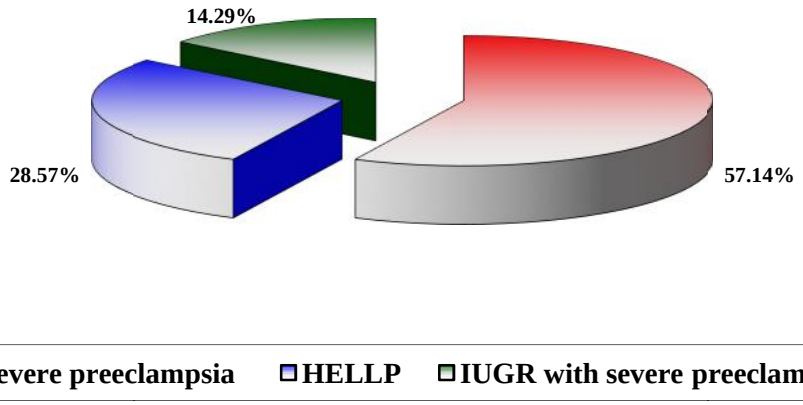
Labour	Findings	Distribution	
		Number	**Percentage**
Onset (n=15)	Induction	7	21.21
	Spontaneous	8	24.24
	Total	**15**	**45.45**
Indications (n=7)	Severe preeclamlivwpsia	4	57.14
	HELLP	2	28.57
	IUGR with severe preeclampsia	1	14.29
	Total	**7**	**100.00**

Graph 26. Distribution of women according to the onset of labour in women with HELLP syndrome



In this study, 24.24% of the women had spontaneous labour while 21.21% of the women were induced for labour. (in women with HELLP syndrome)

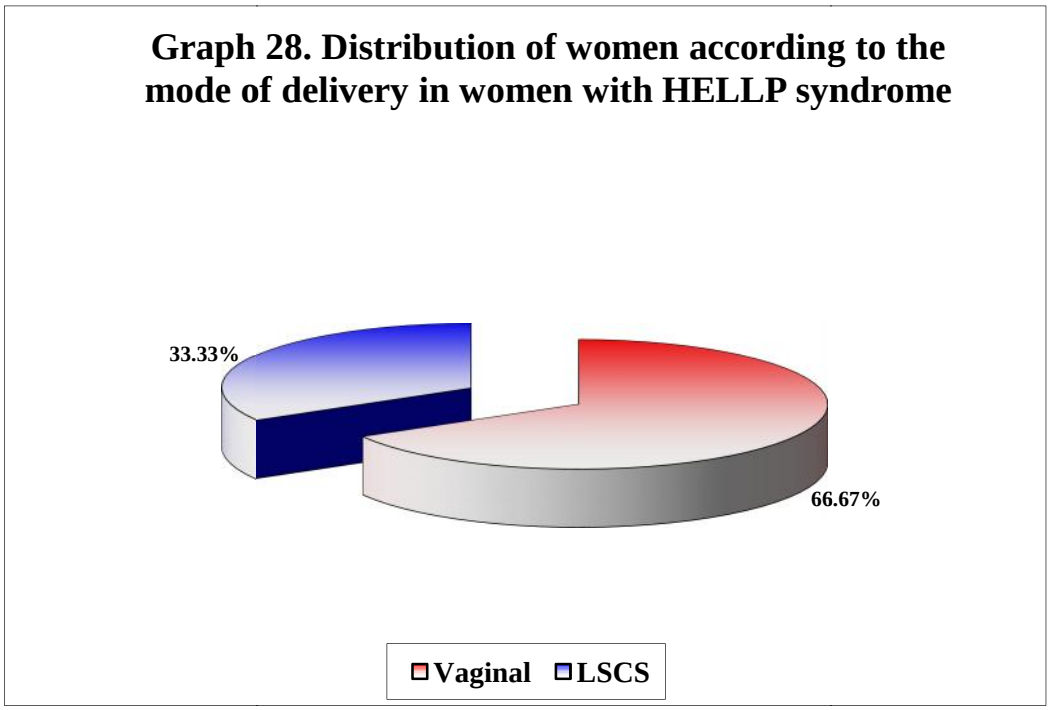
Graph 27. Distribution of women according to the indications for induction of labour in women with HELLP syndrome



In the present study, most common indication for the induction of labour was severe preeclampsia (57.14%) followed by HELLP (28.57%) and IUGR with severe preeclampsia (14.29%) of the women. (in women with HELLP syndrome)

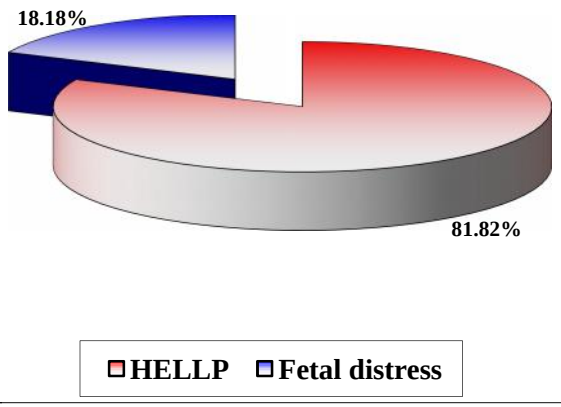
Table 27. Distribution of women according to the mode of delivery in women with HELLP syndrome

Mode of delivery	Findings	Distribution	
		Number	**Percentage**
Mode of delivery (n=33)	Vaginal	22	66.67
	LSCS	11	33.33
	Total	**33**	**100.00**
Indication for LSCS	HELLP	9	81.82
(n=11)	Fetal distress	2	18.18
	Total	**11**	**100.00**



In the present study 66.67% of the women had vaginal delivery and 33.33% of the women had undergone for LSCS. (in women with HELLP syndrome)

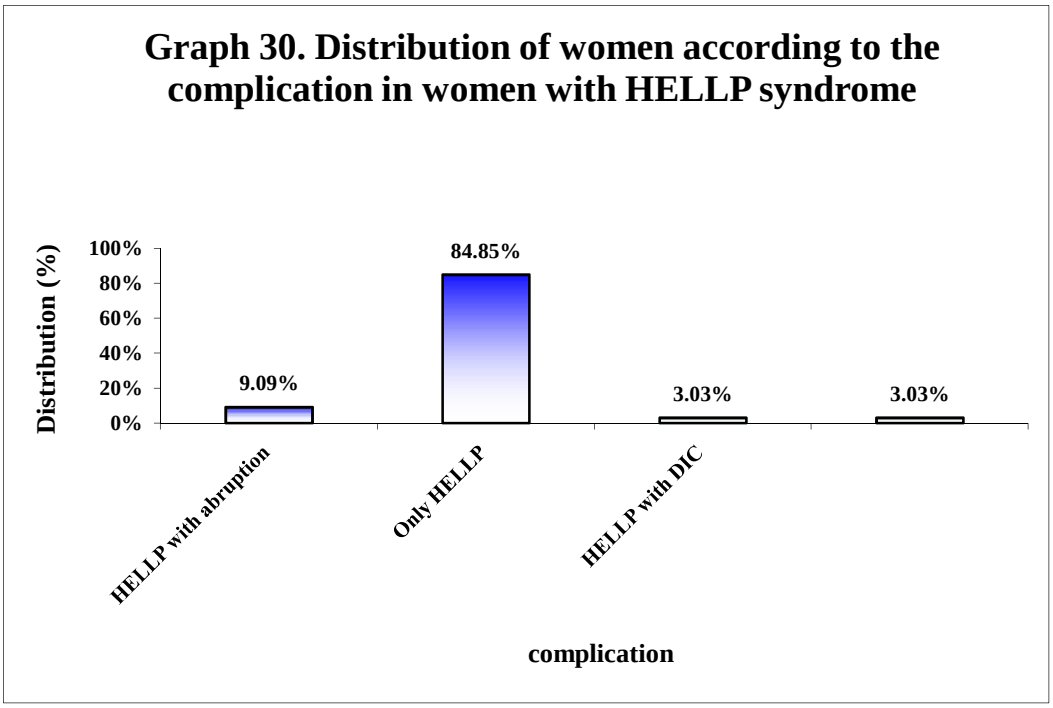
Graph 29. Distribution of women according to the indications for LSCS in women with HELLP syndrome



In the present study most common indication for LSCS was HELLP (81.82%) followed by fetal distress (18.18%).(in women with HELLP syndrome)

Table 28. Distribution of women according to the complications in women with HELLP syndrome

Complications	Findings	Distribution (n=33)	
		Number	Percentage
Complications	HELLP with abruption	3	9.09
	Only HELLP	28	84.85
	HELLP with DIC	1	3.03
	HELLP with abruption with renal failure	1	3.03
	Total	**33**	**100.00**

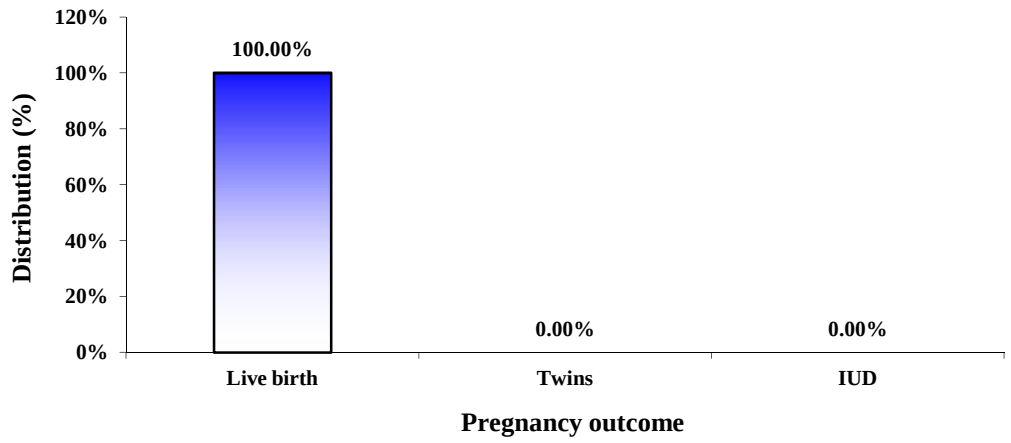


In the present study, abruption was noted in 9.09 % and DIC and renal failure in 3.03 % each in women with HELLP syndrome

Table 29. Distribution of women according to the pregnancy outcome in women with HELLP syndrome

Pregnancy outcome	Distribution (n=33)	
	Number	Percentage
Live birth	33	100.00
Twins	0	0.00
IUD	0	0.00
Total	**33**	**100.00**

Graph 31. Distribution of women according to the pregnancy outcome in women with HELLP syndrome

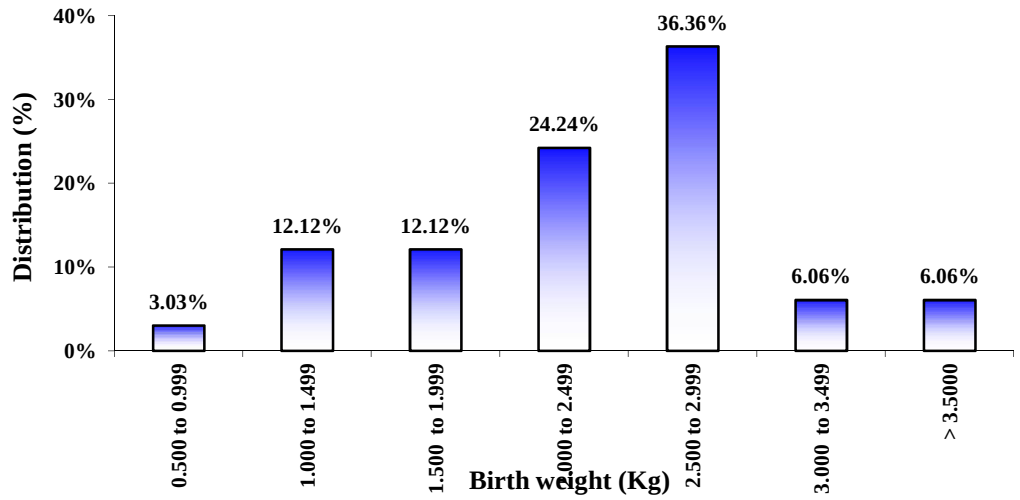


In the present study 100.00% of the women had live birth. (in women with HELLP syndrome)

Table 30. Distribution of neonates according to the birth weight in women with HELLP syndrome

Birth weight (Kg)	Distribution (n=33)	
	Number	Percentage
0.500 to 0.999	1	3.03
1.000 to 1.499	4	12.12
1.500 to 1.999	4	12.12
2.000 to 2.499	8	24.24
2.500 to 2.999	12	36.36
3.000 to 3.499	2	6.06
> 3.5000	2	6.06
Total	**33**	**100.00**

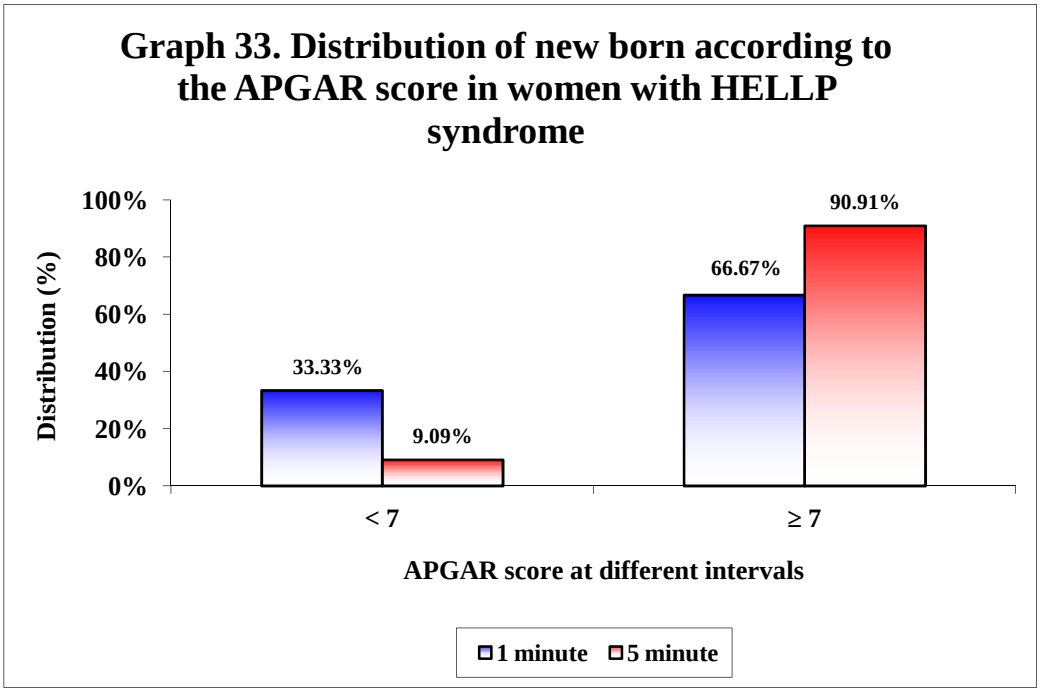
Graph 32. Distribution of neonates according to the birth weight in women with HELLP syndrome



In the present study, 36.36% of the babies birth weight between 2.500 to 2.999 kg followed by 2.000 to 2.499 kg (24.24%), 1.000 to 1.499 kg and 1.500 to 1.999 kg (12.12%) each. (in women with HELLP syndrome)

Table 31. Distribution of new born according to the APGAR score in women with HELLP syndrome

APGAR score at different intervals	Findings	Distribution (n=33)	
		Number	Percentage
1 minute	< 7	11	33.33
	≥ 7	22	66.67
	Total	**33**	**100.00**
5 minute	< 7	3	9.09
	≥ 7	30	90.91
	Total	**33**	**100.00**

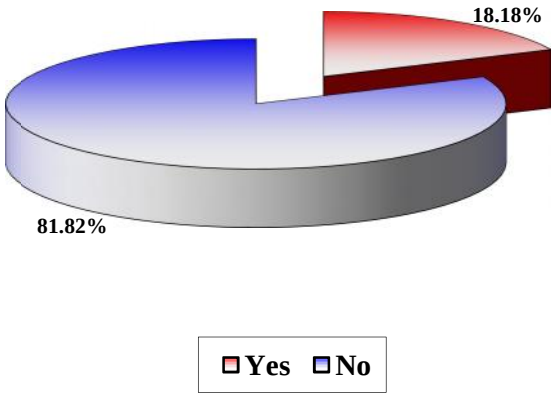


In this study at 1 minute APGAR score in ≥ 7 was noted in 66.67% of the new born babies while at 5 minute APGAR score in ≥ 7 was noted in 90.91% of the new born babies. (in women with HELLP syndrome)

Table 32. Distribution of new born according to the NICU admission in women with HELLP syndrome

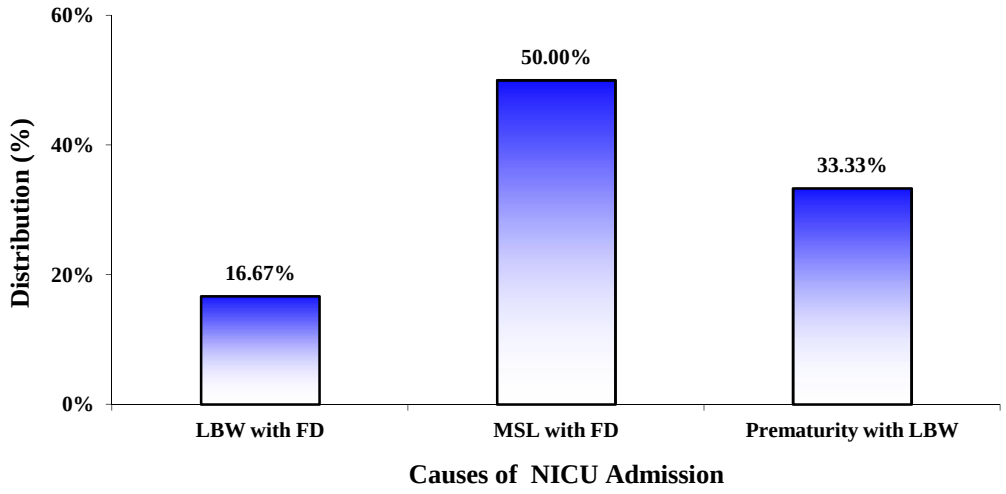
NICU admission	Findings	Distribution	
		Number	Percentage
Requirement (n=33)	Yes	6	18.18
	No	27	81.82
	Total	**33**	**100.00**
Causes (n=6)	LBW with FD	1	16.67
	MSL with FD	3	50.00
	Prematurity with LBW	2	33.33
	Total	**6**	**100.00**

Graph 34. Distribution of neonates according to the NICU admission in women with HELLP syndrome



In the present study, 18.18% of the babies required NICU admission (in women with HELLP syndrome) .

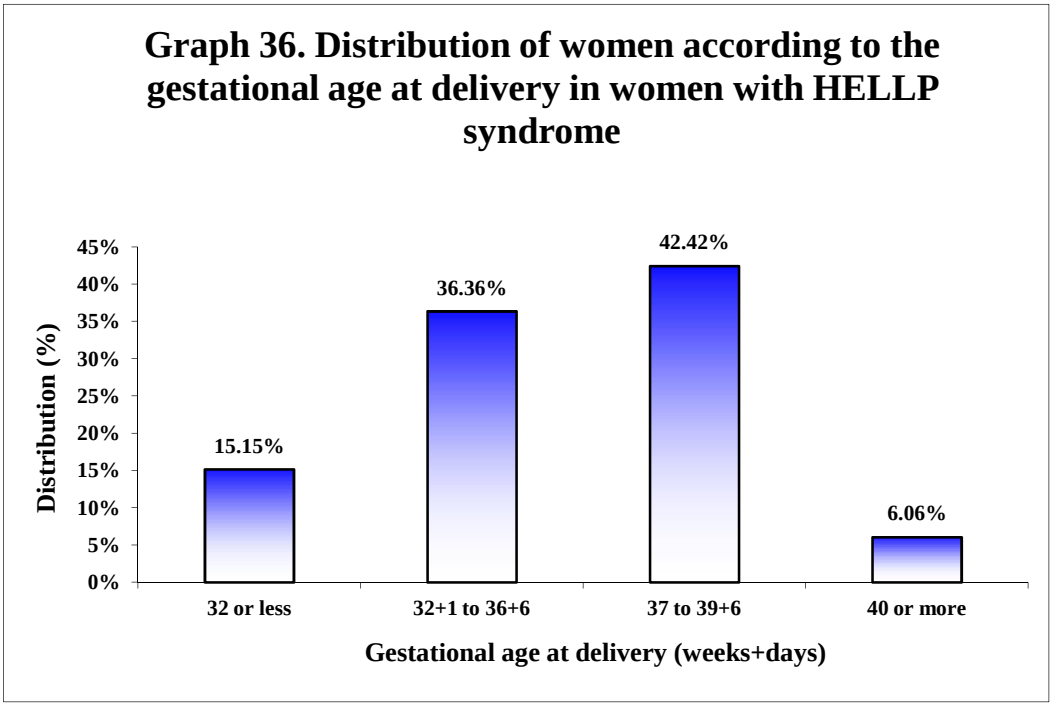
Graph 35. Distribution of neonates according to the causes of NICU Admission in women with HELLP syndrome



In the present study, the most common cause of NICU admission was MSL with FD (50.00%) followed by prematurity with LBW (33.33%) and LBW with FD (16.67%) in women with HELLP syndrome

Table 33. Distribution of women according to the gestational age at delivery in women with HELLP syndrome

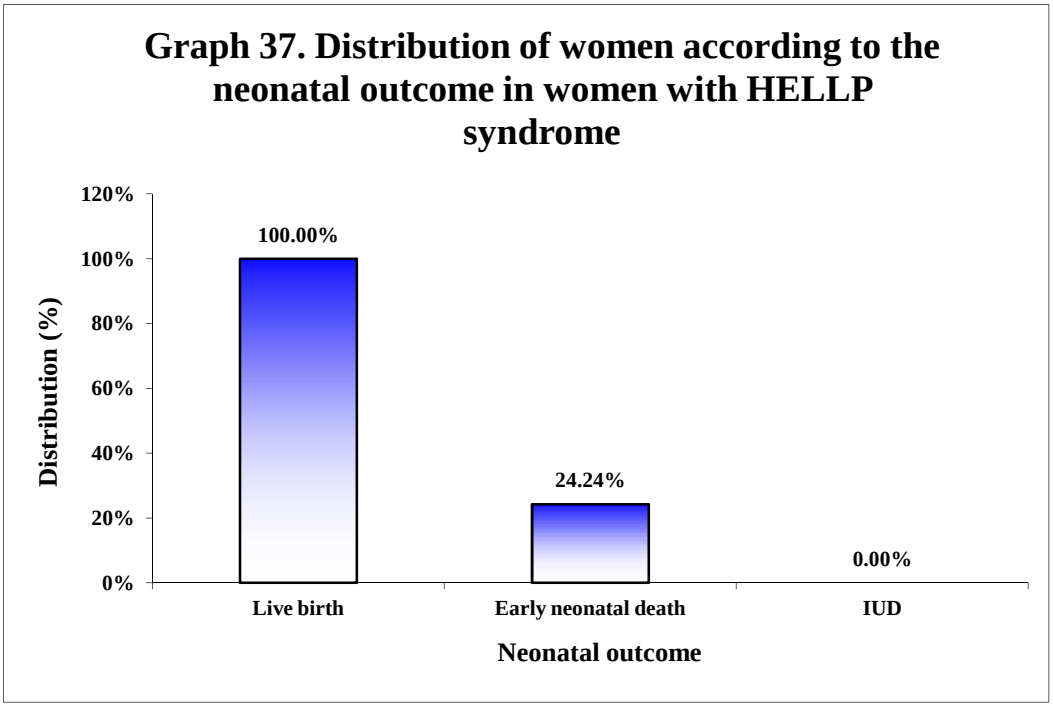
Gestational age at delivery (weeks+days)	Distribution (n=33)	
	Number	Percentage
32 or less	5	15.15
32+1 to 36+6	12	36.36
37 to 39+6	14	42.42
40 or more	2	6.06
Total	**33**	**100.00**



In the present study, most of the women delivered between 37 to 37+6 weeks (36.36%). The mean gestational age at delivery was 36.13±3.39 weeks(in women with HELLP syndrome)

Table 34. Distribution of women according to the neonatal outcome in women with HELLP syndrome

Neonatal outcome	Distribution (n=33)	
	Number	Percentage
Live birth	33	100.00
Early Neonatal death	8	24.24
IUD	0	0.00
Total	**41**	**124.24**



In the present study, 100.00% of women delivered live birth, while early neonatal death in 24.24%.(in women with HELLP syndrome)

Table 35. Clinical and biochemical characteristics of patients with HELLP syndrome vs patients without HELLP syndrome

Clinical characteristics	HELLP syndrome				p value
	Yes (n=33)		No (n=279)		
	Mean	SD	Mean	SD	
Age (Years)	25.18	3.81	26.30	4.51	0.127
Systolic (mm Hg)	164.18	11.12	161.91	12.53	0.280
Diastolic (mm Hg)	101.94	10.24	106.70	10.82	0.016
Haemoglobin (g/dL)	10.51	2.59	11.30	2.16	0.105
Platelet count (per cu mm)	56266.67	35238.12	217114.00	96710.69	< **0.001**
SGOT (IU/L)	239.91	38.33	52.64	113.88	< **0.001**
SGPT (IU/L)	175.03	34.09	41.15	83.73	< **0.001**
Uric acid (mg/dL)	6.72	1.86	6.21	5.57	0.271
Serum Creatinine (mg/dL)	0.81	0.24	2.29	15.27	0.108
LDH (U/L)	690.94	514.77	427.46	263.65	**0.005**
Fibrinogen	360.32	98.88	328.18	104.84	0.266
Gestational age (weeks)	36.00	3.43	36.34	3.52	0.744

The comparison of clinical characteristics in women with and without HELLP syndrome is as shown in Table 35. It was observed that, the mean platelet count, was significantly low in women with HELLP syndrome and mean SGOT and SGPT, LDH were significantly high in women who developed HELLP syndrome ($p<0.05$).

Table 36. Clinical and biochemical characteristics in women with HELLP syndrome vs patients with other complications

Clinical characteristics	Complications				p value
	HELLP (n=33)		Others (n=31)		
	Mean	SD	Mean	SD	
Age (Years)	24.77	3.44	27.19	4.92	**0.029**
Systolic (mm Hg)	163.81	11.08	160.39	11.60	0.240
Diastolic (mm Hg)	102.06	10.56	108.84	9.49	**0.010**
Haemoglobin (g/dL)	10.60	2.59	11.73	1.99	0.059
Platelet count (per cu mm)	55896.77	36095.81	213167.74	87944.56	**<0.001**
SGOT (IU/L)	239.77	39.42	91.77	202.57	**<0.001**
SGPT (IU/L)	177.58	33.36	54.03	112.05	**<0.001**
Uric acid (mg/dL)	6.85	1.84	5.80	1.84	**0.028**
Serum Creatinine (mg/dL)	0.81	0.24	0.89	1.09	0.710
LDH	690.94	514.77	413.39	240.88	**0.009**
Fibrinogen	360.32	98.88	277.32	99.58	**0.002**
Gestational age (weeks)	36.00	3.43	34.23	4.59	0.090

Table 36 shows the comparison of clinical and biochemical characteristics in women with HELLP syndrome as compared to women with other complications. It was observed that, the mean age and platelet count, was significantly low in women with HELLP syndrome while mean SGOT and SGPT, uric acid, LDH and fibrinogen were significantly high in women who developed HELLP syndrome ($p<0.05$) as compared to that in patients with other complications

DISCUSSION

Pre-eclampsia is a life threatening complication of pregnancy. It is a condition that typically starts after 20 week of pregnancy and related to increased blood pressure (≥140/90 mmHg) and protein in mother's urine (urinary albumin protein ≥300 mg/24 h). Preeclampsia maybe mild or severe. Worldwide, preeclampsia occurs in about 5 to 8% of the pregnancies, and is the second leading cause of direct maternal and fetal deaths. The etiology of pre-eclampsia is still obscure, despite many attempts to identify possible causes. The prevalence of preeclampsia varies in different populations and in different ethnic groups.[71]

Overall, preeclampsia remains a significant public health threat in both developed and developing countries contributing to maternal and perinatal morbidity and mortality globally.[72] However, there has not been many studies concerning the epidemiology of preeclampsia in Indian population and data on severe preeclampsia and its complications including HELLP syndrome is scant. Therefore, this study was designed to determine the incidence of severe pre eclampsia and its complications especially HELLP syndrome and to assess associated maternal and fetal morbidity and mortality.

This crosssectional study was performed for the period of one year from January 2016 to December 2016. During the study period there were 6236 number deliveries. Among them 597 women (9.57%) developed preeclampsia. Further 350 women had severe preclampsia. Out of which 13 women were excluded due to medical disorders like chronic hypertension, renal disease and epilepsy while 25 women had gestational age of < 24 weeks and a total of 312 pregnant women with blood pressure equal to or more than 160/110 mmHg suggestive of severe

preeclampsia were enrolled. Hence the incidence of severe preeclampsia after excluding medical disorders like chronic hypertension, renal disease and epilepsy and gestational age of < 24 weeks was 5%. Despite advances in medical practice, pre-eclampsia/eclampsia has remained a leading cause of maternal mortality throughout the world. It is a common problem in developing countries because of illiteracy, poor antenatal care, lack of health awareness and poverty. A study conducted by Aabidha PM. et al.[67] in a secondary care hospital in South India in 2015, the incidence of pre eclampsia was approximately 5%.[7]

The incidence of severe preeclampsia observed in this study was high compared to a recent study by Ngwenya S.[40] who showed that the incidence of severe preeclampsia/eclampsia at Mpilo Central Hospital, Bulawayo, Zimbabwe, was 1.3%, which is similar to the one found in Tanzania (1.7%). In the UK, it was 0.5%. In low-resource settings, patients fail to book due to financial constraints, and this may lead to poor outcomes. However the study by Ngwenya S.[40] was a retrospective. Also the criteria for the identification of severe preclampsia was high blood pressure (diastolic ≥110 mmHg) and either severe headaches, epigastric pain, or deranged biochemical/hematological blood indices. Curial-Balsera E et al.[18] in their study to describe the incidence and clinical and epidemiological profile of patients with severe preeclampsia reported that the incidence of severe preeclampsia as 4/1000 deliveries (0.37%).

Another study by Ananth C et al.[73] To estimate the contributions of biological aging, historical trends, and birth cohort effects on trends in pre-eclampsia in the United States. This study shows the prevalence of all pre-eclampsia and those of mild and severe pre-eclampsia between 1980 and 2010. For any pre-eclampsia, the rate

increased from 3.4% in 1980 to 3.8% in 2010. This increase is driven by severe pre-eclampsia; the rate increased from 0.3% in 1980 to 1.4% in 2010, a relative increase of 322%. In contrast, the prevalence rate of mild pre-eclampsia declined by 19%, from 3.1% in 1980 to 2.5% in 2010 (perhaps reflecting a shift from the mild to severe pre-eclampsia).

In the present study age ranged between 18 to 38 years. More than one third of the women were aged from 21 to 25 years (39.10%). The mean age was 26.18±4.45 years. These findings suggest that the frequency of severe preeclampsia peaked in young women. Though advanced maternal age has been found to be an independent risk factor for pre-eclampsia, in this study most of the women were in the aged between 21 to 25 years, which can be explained by the practice of early marriage which is more common in Indian population. The age distribution pattern observed in the present study was consistent with another Indian study from Tamil Nadu by Abidha PM et al.[67] where out of 1900 women screened 93 were detected with pre-eclampsia. Out of 93 patients with pre-eclampsia, 46.23% of the women were aged between 21–25 years. In contrast to these observations Curial-Balsera E et al.[18] in their study to describe the incidence and clinical and epidemiological profile of patients with severe preeclampsia admitted to intensive care in Spain reported mean age as 30.47±5.7 years which was high compared to the present study and a study by Abidha PM et al.[67]

In this study 46.47% of the women belonged to primi para (46.47%), para 2, para 3, para 4 and para 5 was noted in 33.97%, 13.46%, 4.17% and 1.60% of the women respectively. These findings suggest that, severe preeclampsia was widely prevalent among women with primi para. This observations was similar to those

reported in most existing literature that pre-eclampsia is common among the primigravida. Hernandez et al.[74] in his study found that the risk of pre-eclampsia was 4.1% in the first pregnancy and 1.7% in later pregnancies overall. The risk for multiparous women without a history of pre-eclampsia was around 1%.

It is reported that, women with moderate pre-eclampsia generally have no symptoms. Women with severe pre-eclampsia, or with very high blood pressure, may feel unwell, with symptoms such as headache, upper abdominal pain, or visual disturbances.[72] In the present study the most common clinical presentation was headache (32.05%) followed by nausea (24.68%), Vomiting (13.14%), chest pain (7.69%), right upper quadrant pain (7.37%), blurring of vision (4.49%) and jaundice 1.28%. It is reported that, magnesium sulphate, for women with eclampsia reduces the RR of maternal death, further seizures and of serious maternal morbidity (respiratory depression, coma, pneumonia). Magnesium sulphate is the anticonvulsant of choice for women with eclampsia.[75] In this study the magnesium sulphate administration was done in 45.83% of the women.

Delivery of the fetus is the only way pre-eclampsia can be treated. Induction of labor once the fetus reaches maturity is the general management.[18] In this study 24.68% of the women were induced for labour while 22.12% of the women had spontaneous labour. The most common indication for the induction of labour was severe preeclampsia (47.83%) followed by postdatism (14.49%). In contrast Ngwenya S.[40] reported higher rate of induction (58%).

In the present study more than half (53.85%) of the women had vaginal delivery and 46.15% of the women underwent LSCS. The most common indication for LSCS was severe preeclampsia 25.00% followed by fetal distress (15.28%). In

contrast a retrospective descriptive cohort study by Ngwenya S.[40] in a tertiary teaching referral government hospital in a low-resource setting majority of the patients were delivered by cesarean section (78.5%) due to the seriousness of the condition, and in most cases, there would be delayed presentation; hence no further time would be available to consider vaginal delivery. Despite having 75% of the patients being booked, factors that contributed to delay in seeking treatment were multifactorial. There was a combination of sudden presentation of the disease, missed diagnosis by poor attenders, patients' own delay to seek treatment due to either taking the condition lightly or lack of money. All the patients with severe preeclampsia/eclampsia were treated with magnesium sulfate for 24–48 hours and were admitted to ICU as per the labor ward protocol for the unit. The lower rate of LSCS in the present study can be attributed to the muiltidisciplinary approach, timely diagnosis, early presentation and prompt administration of magnesium sulphate.

Pregnancy-induced hypertension is a common cause of maternal morbidity and mortality, especially in developing countries.[18] Maternal complications of severe preeclampsia/eclampsia can be serious, leading to maternal, fetal, and neonatal morbidity and mortality. These include HELLP syndrome,[40,76] disseminated intravascular coagulopathy and acute renal failure. Severe preeclampsia was found to be associated with an 8.7-fold risk of composite maternal complication.[76] The risk of a woman in the developing world dying from a maternal-related cause is 33 times higher than a woman in the developed world.[77] Maternal mortality results from cerebral hemorrhage,[78] pulmonary edema,[79] acute renal failure, hepatic rupture, or DIC. Long-term effects may include chronic renal failure, cardiovascular disease,[80] or cortical blindness. Most patients (85.1%) did not have a major complication. In this study 20.51% of the women developed complications. The most common

complication was HELLP syndrome (10.57%) followed by abruption (8.33%), eclampsia (1.28%), pulmonary oedema (1.28%), renal failure and DIC (0.96% each). These observations were consistent with a retrospective descriptive cohort study by Ngwenya S.[40] who reported complications among 14.9% of the women and HELLP syndrome (9.1%) was the most common major complication the other complications were abruption placenta (2.5%), acute renal failure (1.7%), DIC (0.8%) and pulmonary oedema (0.8%). However, in the present study it was heartening to know that there was no maternal mortality throughout the study period. Curiel-Balsera et al.,[18] Ngwenya S. et al.[40] and Quah et al.[81] reported 1.5%, 1.7% and 1.3% maternal mortality in their settings, respectively. This difference may be following to low period of our study. However, Tuffnell et al.[41] reported no maternal death in their setting during a 4 years study period. In addition, current overall incidence in developed world is low varying from 0.2-0.4 per thousand.[18,28] The rate in developing countries is as high as 10% of the deliveries.[18] A high incidence (21.4%) of maternal death among preeclamptic women was reported in the study of Souza et al.[82] Most admitted patients were those at their postpartum period. Other studies also show that majority (>80%) of postpartum patients were admitted to the ICU.[18,82]

In the present study HELLP syndrome was noted among 10.57% of the women with severe preeclampsia.

In this study majority of the women had live births (96.15%), while multiple gestation and IUD was noted in 2.24% and 1.60% of the women. These observations were consistent with a retrospective descriptive cohort study by Ngwenya S.[40] where the rate of live births was 78% there were six sets of twins, but, rate of stillbirth was very high that is 22% due to stillbirths. In a study by Abidha PM et al.[67] from Tamil

Nadu India, the rate of stillbirths was 10% which was high considered to present study.

In this study 96.15% of the women had live births and multiple gestation was noted among seven (2.24%) women and there were five IUDs (1.60%) resulting in neonatal outcome among 319 babies. 53.61% of the babies were males and 46.39% were females. Most of the babies delivered between 37 to 39+6 weeks (40.06%). The mean gestational age at delivery was 36.31±3.51 weeks. In a study by Ngwenya S.[40] the mean gestational age was 33.4±4.4 weeks gestation which was slightly low compared to the present study. More than one fourth (26.65%) of the babies weighed between 2.500 to 2.999 kg followed by 2.000 to 2.499 Kg (20.38%), 1.500 to 1.999 kg (19.75%). The mean birth weight was 2.36±0.77 Kgs. The mean birth weight observed in the present study was considerably high compared to a study by Ngwenya S.[40] where the mean birth weight was 1,906 ±785.8 g. Majority of the babies that is 84.01% of the babies required resuscitation. Majority of the neonates had APGAR score of > 7 at 1 minute interval (94.98%) The mean APGAR score at one minute was 6.23±1.13. At 5 minutes interval APGAR score of ≥ 7 was noted in majority of the of the babies (84.01%). The mean APGAR score was 8.01±4.76. In a study by Abidha PM et al.[67] from Tamil Nadu India, 10% of the neonates had APGAR score of less than 5. Requirement of NICU admission was noted among 20.06% of the babies and the most common cause of NICU admission was LBW (39.06%) followed by fetal distress (28.13%). Early nenotal death was noted in 4.39%.

In this study 20.06% of the babies required NICU admission. In contrast a study by Ngwenya S.[40] reported higher rate of NICU admission as 54.5% of the babies were admitted to NICU. Unlike the present study, a study by Ngwenya S.[40] The vast

majority of those admitted (81.5%) were due to a combination of prematurity, low birth weight, and respiratory distress syndrome (RDS), and 18.5% were due to low Apgar scores. Out of the total number (127) of babies born, 35 (27.6%) were early neonatal deaths which was high compared to the present study.

The higher rate of NICU admission and early neonatal death in a study by Ngwenya S.[40] can be explained by the fact that, in low-resource settings, there are untrained workers who cannot handle emergencies. The health workers are also not well-paid and are not well-motivated. There is also the issue of inadequate equipment/facilities and resources. Ultrasonography is not widely available. The instrument for fetal heart rate monitoring remains the Pinard stethoscope, which may not be properly used causing missed diagnosis in fetal heart rate abnormalities.

The comparison of clinical characteristics revealed, significantly higher SGOT (168.16 ± 160.79 vs 47.74 ± 96.93; $p<0.001$), SGPT (116.42±101.41 vs 39.54±76.64; $p<0.001$) and LDH (557.52±417.66 vs 429.23±266.78; $p=0.022$) in women who developed complications while the mean platelet count (132265.63±102760.71 vs 217607.28±97904.19; $p<0.001$) and gestational age (35.21±4.10 vs 36.60±3.28; $p=0.014$) were low. However, no statistically significant difference was noted with regard to mean maternal age, systolic and diastolic blood pressure, haemoglobin levels, uric acid and fibrinogen levels ($p>0.050$). Thus pregnant women presenting with higher SGOT, SGPT and LDH, and lower platelet count in women with preeclampsia pose significant risk of complications. Hence these findings prompt timely assessment and management of the condition to the gynaecologists in order to prevent development of life threatening complications. However, Curial-Balsera E et al.[18] showed no significant differences in the appearance of complications according

to the diagnosis upon admission except haemoglobin levels which were significantly low in women with complications.

It is reported that, the HELLP syndrome occurs in about 0.5 to 0.9% of all pregnancies and in 10 to 20% of cases with severe preeclampsia.[45,46] In this study 5% of the women developed severe pre eclampsia. The frequency of severe pre eclampsia noted in this study was sharp in agreement with a study conducted by Aabidha PM. et al.[18] in a secondary care hospital of South India during 2015, where the incidence of pre eclampsia was approximately 5%.[7] The incidence of severe preeclampsia observed in this study was high compared to a recent study by Ngwenya S.[40] who showed that the incidence of severe preeclampsia/eclampsia at Mpilo Central Hospital, Bulawayo, Zimbabwe, was 1.3%, and other study from Tanzania (1.7%) and UK (0.5%). Curial-Balsera E et al.[18] in their study to describe the incidence and clinical and epidemiological profile of patients with severe preeclampsia reported that the incidence of severe preeclampsia as 4/1000 deliveries (0.37%).

Maternal complications of severe preeclampsia/eclampsia can be serious, HELLP syndrome,[72,40] disseminated intravascular coagulopathy and acute renal failure. In this study incidence of HELLP syndrome in pregnancy complicated by severer preeclampsia was 10.57%. Based on Mississippi classification[16] majority of the women had HELLP I (60.61%) followed by HELLP II (27.27%) and HELLP III (12.12%). A recent study by Isukapalli V et al.[84] in Vishakhapattanam, Andhra Pradesh also reported incidence of HELLP in severe preeclampsia as 11% which was similar to the present study. But majority of the cases in their study were HELLP II cases (69.23%). Another retrospective descriptive cohort study by Ngwenya S.[40] reported incidence of HELLP syndrome as 9.1%. In contrast to these observations,

Turgut A et al.[85] in 2010 reported 18% rate of HELLP syndrome among patients with severe preeclampsia which was high compared to the present study. Liu et al.[24] reported a higher proportion than the study by Turgut A et al.[85] that is 25%.

HELLP syndrome accounts for significant contribution to maternal and perinatal mortality and morbidity. Perinatal mortality is relatively high due to preterm induction of labour and associated complications. Incidence of prematurity is > 50% in these cases. Period of gestation, late referals, associated complications, severity of presentation and NICU facilities all determine the Perinatal mortality. Similarly maternal deaths are more with higher grade, inadequate availability of platelets, lack of ICU facilities, associated other organ failure, late referral and poor response to treatment being the deciding parameters. However, in the present study it was heartening to know that there was no maternal mortality throughout the study period owing to prompt diagnosis and timely management with multidisciplinary treatment approach and the aggressive approach to delivery-i.e., that the fetus is delivered when maternal conditions warrant, regardless of gestational age. Curiel-Balsera et al.,[18] Ngwenya S. et al.[40] and Quah et al.[60] reported 1.5%, 1.7% and 1.3% maternal mortality in their settings, respectively. In other publications maternal mortality was reported as ranging from 0% to 4.3 % for the HELLP syndrome group.[16,86,87]

In the present study age ranged between 18 to 35 years in women who developed HELLP syndrome. More than one third of the women (45.45%) were aged from 26 to 30 years. The mean age was 25.18±3.81 years. These findings suggest that the frequency of HELLP syndrome peaked in the age group between 26 to 30 years that is, young women. The young age of the women observed in the present study can be explained by the socio cultural practice of early marriage in Indian population.

Turgut A et al.[85] reported mean age as 27.7±5.4 years which was slightly high compared to the present study.

In this study 45.45% of the women who developed HELLP syndrome each belonged to primi para and para 1. These findings suggest that, severe preeclampsia was widely prevalent among women with primi para. Turgut A et al.[85] reported 37.8% of the women with primi para which was comparable to the present study. In this study most of the women presented with headache (36.36%) which was consistent with a study by Turgut A et al.[85] where 52.3% of the women presented with features of headache.

The clinical course of women with HELLP syndrome is usually characterized by progressive, but sometimes sudden deterioration of maternal & fetal condition. Once the diagnosis of HELLP syndrome is confirmed. The decision is to be made regarding the need & mode of delivery in a multi disciplinary institute. Traditionally, women with severe preeclampsia, even if remote from term, are delivered expeditiously, regardless of gestational age. In this study most of the women (42.42%) delivered between 37 to 40 weeks and 36.36% of the women delivered between 32 to 36 weeks while 15.15% of the women delivered at gestational age 32 weeks. However the mean gestational age was 36.13±3.39 weeks suggestive of mostly term delivery. The mean gestational age reported by Turgut A et al.[85] was slightly low compared to present study that is, 33.2±3.6 weeks. The labour was induced in 21.21% of the women and the most common indication was severe preeclampsia (57.14%). more two thirds that is, 66.67% of the women had vaginal delivery and 33.33% of the women underwent LSCS suggesting higher rate of vaginal delivery. The rate of vaginal delivery observed in the present study was very high

compared the study by Turgut A et al.[85] who reported rate of vaginal delivery as only 18.9%. The most common indication for LSCS was HELLP syndrome itself (81.82%) followed by fetal distress (18.18%). The lower rate of LSCS in the present study can be attributed to the muiltidisciplinary approach, timely diagnosis, early presentation and prompt administration of magnesium sulphate. Haddad et al. reported several retrospective, case-control, observational, prospective, or randomized trials in which expectant management in women with severe preeclampsia was feasible in well-selected patients without prejudicing maternal safety.[88]

In this study the most common associated complication with HELLP syndrome was abruption noted in 9.09% of the women followed by DIC (3.03%) and abruption with renal failure. (3.03%). In contrast to these observations, Turgut A et al.[23] in their study found that acute renal failure was significantly higher in the HELLP syndrome group. Liu et al.[89] and Martin et al.[16] also found significantly higher acute renal failure in the HELLP group.

In this study it was heartening to known that, all the pregnancies with HELLP syndrome were uneventful (100%) with respect to live births. Again this may be explained by the muiltidisciplinary approach, timely diagnosis, early presentation and prompt administration of magnesium sulphate. These observations were consistent with a retrospective descriptive cohort study by Ngwenya S.[40] where the rate of live births was 78% there were six sets of twins, but, rate of stillbirth was very high that is 22% due to stillbirths. In a study by Abidha PM et al.[67] from Tamil Nadu India, the rate of stillbirths was 10% which was high considered to present study.

In this study as all the pregnancies complicated with HELLP syndrome were uneventful (100%), neonatal outcome was available among 33 babies. 57.58% of the

babies were males and 42.42% were females. More than one third (36.36%) of the babies weighed between 2.500 to 2.999 kg and the mean birth weight was 2.27±0.69 Kgs suggesting normal birth weight. The mean birth weight observed in the present study was considerably high compared to a study by Ngwenya S.[40] where the mean birth weight was 1,906 ±785.8 g and a study by Turgut A et al.[85] who reported mean birth weight as 1.971.2±0.735.5 kgs. Majority of the babies that is 87.88% of the babies required resuscitation. Majority of the neonates had APGAR score of > 7 at 1 minute interval (66.67%) The mean APGAR score at one minute was 6.39±1.06 which was comparable to the study by Turgut A. et al.[85] At 5 minutes interval APGAR score of ≥ 7 was noted in majority of the of the babies (90.91%). The mean APGAR score was 7.91±1.10. In a study by Turgut A. et al., the mean APGAR score at 5 minutes was noted as 8.0±1.2 which was consistent with the present study. In this study Requirement of NICU admission was noted among 18.18% of the babies and the most common cause of NICU admission was meconium stained liquor with fetal distress (50%) on the contrary In a study by Turgut A. et al.[85] the rate of NICU admission was 69.5% and most common cause was hyperbilirubinemia. The complications increased in HELLP syndrome. In this study early nenotal death was noted in 24.24% of the babies.

In the present study it was observed that, in women with HELLP syndrome, the mean platelet count was significantly low (56266.67±35238.12 vs 217117.00±96710.69; p<0.001) and mean SGOT (239.91±38.33 vs 52.64±113.88; p<0.001), SGPT (175.03± 34.09 vs 41.15±85.73; p<0.001) and LDH (690.94±514.77 vs 427.46±263.65; p<0.001) were significantly high in women who developed HELLP syndrome. These findings hints prompt attention in women with preeclampsia

who present with low platelet count and raised SGPT, SGOT, and LDH in order to avoid complications of HELLP.

In the present study it was observed that, the mean platelet count was significantly low (56266.67±35238.12 vs 217117.00±96710.69; p<0.001) and mean SGOT (239.91±38.33 vs 52.64±113.88; p<0.001), SGPT (175.03± 34.09 vs 41.15±85.73; p<0.001) and LDH (690.94±514.77 vs 427.46±263.65; p<0.001) were significantly high in women who developed HELLP syndrome. These findings hints prompt attention in women with preeclampsia who present with low platelet count and raised SGPT, SGOT, and LDH in order to avoid complications of HELLP.

In this study it was also observed that, the mean age (24.77±3.44 vs 27.19±4.92 years; p=0.029) and diastolic blood pressure (102.06±10.56 vs 108.84±9.49 mm Hg p=0.010), platelet count (55896.77±36095.81 vs 213167.74±87944.56 per cumm; p<0.001), was significantly low in women with HELLP syndrome while mean SGOT (239.77±39.42 vs 91.77±202.57; p<0.001) and SGPT (177.58±33.36 vs 54.03±112.05; p<0.001), uric acid (6.85±1.84 vs 5.80±1.84; p=0.028), LDH (690.94±514.77 vs 413.39±240.88; p=0.009) and fibrinogen (360.32±98.88 vs 277.32±99.58; p=0.002) were significantly high in women who developed HELLP syndrome (p<0.05). Hence young women with preeclampsia presenting with low platelet count and diastolic blood pressure, raised SGPT, SGOT, LDH and fibrinogen are at high risk of HELLP syndrome compared to other complications.

It is reported that, the mean age of pregnant women with HELLP syndrome is usually higher than in women with preeclampsia.[48,49] Most white women with HELLP are multiparous.[50] In the post-partum period the HELLP syndrome usually develops

within the first 48 hours in women who have had proteinuria and hypertension prior to delivery.[42] Although variable, the onset of the HELLP syndrome is usually rapid.[51] The majority of women with the HELLP syndrome have had hypertension and proteinuria, which may be absent in 10–20% of the cases.[17] Excessive weight gain and generalized oedema precede the syndrome in more than 50% of the cases.[22,52]

Overall the present study shows 5% incidence of severe preeclampsia and 10.57% incidence of HELLP syndrome in women with severe preeclampsia. With regard to maternal outcome, pregnant women presenting with severe preeclampsia may require induction of labour and more likely to undergo LSCS. The other possible but not significant complications of severe preeclampsia are abruption, eclampsia, pulmonary oedema, renal failure and DIC. With respect to fetal outcome, though not significant there is risk of stillbirth, prematurity, low birth weight, lower apgar score at one minute resulting in NICU admission. Hence high degree of suspicion is the mainstay in diagnosis and prompts multi discilpinary teamwork, immediate and prompt delivery, remains the cornerstone in the management of severe preeclampsia. Though the maternal and perinatal mortalities are high, they can be reduced by timely availability of blood products, ICU facilities and NICU care. However these findings need further validation due to potential limitations of the study. The limitations of the study were smaller subset of proportion of women with HELLP Syndrome which limited us to determine the significant risk factors and single centre study design which limits us to generalize the results on entire population. Further large multicentric studies involving higher subset women with HELLP Syndrome focusing risk factors may provide insights of severe preeclampsia and especially HELLP syndrome. Aggressive treatment for the pregnant women complicated HELLP syndrome appears to decrease the maternal mortality rate. Also, this observation

allows the clinician to be more attentive to clinical and biological disturbances, especially the simultaneous presence of HELLP syndrome and preeclampsia, along with oliguria, ascites, thrombocytopenia, and elevated liver enzymes. Though the maternal and perinatal mortalities are high, they can be reduced by timely availability of blood products, ICU facilities and NICU care.

CONCLUSION

The present study shows 5% incidence of severe preeclampsia and 10.57% incidence of HELLP syndrome in women with severe preeclampsia after excluding medical disorders like chronic hypertension, renal disease and epilepsy and gestational age of < 24 weeks. With regard to maternal outcome, pregnant women presenting with severe preeclampsia may require induction of labour and more likely to undergo LSCS. Though HELLP Syndrome in severe preeclampsia is life threatening, mortality can be prevented by prompt diagnosis and timely management with multidisciplinary treatment approach. The other possible but not significant complications of severe preeclampsia, are abruption, eclampsia, pulmonary oedema, renal failure and DIC. With respect to fetal outcome, though not significant there is risk of stillbirth, prematurity, low birth weight, lower APGAR score at one minute resulting in NICU admission. In all patients who developed complications, a higher SGOT, SGPT and LDH were noted. The mean maternal age, the diastolic blood pressure and platelet count, was significantly low in women with HELLP syndrome as compared to that in other complications while mean SGOT and SGPT, uric acid, LDH and fibrinogen were significantly high in women who developed HELLP syndrome as compared to that in other complications. Also the present study showed that the mean platelet count, was significantly low in women with HELLP syndrome and mean SGOT and SGPT, LDH were significantly high in women who developed HELLP syndrome. Hence women with severe preeclampsia who present with low platelet count and raised SGPT, SGOT, and LDH needs careful monitoring in order to avoid complications.

SUMMARY

Pre-eclampsia, a life threatening complication of pregnancy still remains a significant public health problem in both developed and developing countries contributing to maternal and perinatal morbidity and mortality globally.

The present crosssectional study was performed for the period of one year from January 2016 to December 2016 in the Department of obstetrics and gynaecology, KLES Dr. Prabhakar Kore Hospital and Medical Research Centre, Belagavi. During the study period there were 6236 number deliveries. Among them 597 women (9.57%) developed preeclampsia. Further 350 women had severe preclampsia. Out of which 13 women were excluded due to medical disorders like chronic hypertension, renal disease and epilepsy while 25 women had gestational age of <24 weeks and a total of 312 pregnant women with blood pressure ≥ 160/110 mm Hg suggestive of severe preeclampsia were enrolled. The results and observations are as summarized below.

- The incidence of severe preeclampsia after excluding was medical disorders like chronic hypertension, renal disease and epilepsy and gestational age of <24 weeks was 5%.

- Most of the women were aged from 21 to 25 years (39.10%). The mean age was 26.18±4.45 years.

- Most of the women belonged to primi parity (46.47%).

- The most common clinical presentation was headache (32.05%) followed by nausea (24.68%), Vomiting (13.14%), chest pain (7.69%), right upper quadrant pain (7.37%), blurring of vision (4.49%) and jaundice 1.28%.

- Magnesium sulphate administration was done in 45.83% of the women.

- 24.68% of the women were induced for labour and the most common indication for the induction of labour was severe preeclampsia (47.83%) followed by postdatism (14.49%).

- 53.85% of the women had vaginal delivery and 46.15% of the women underwent LSCS. The most common indication for LSCS was severe preeclampsia 25.00% followed by fetal distress (15.28%).

- Most of the women delivered between 37 to 39+6 weeks (40.06%). The mean gestational age at delivery was 36.31±3.51 weeks.

- 94.04% of the women had live birth, while IUD was noted in 1.57% and early neonatal death in 4.39%.

- 20.51% of the women developed complications and the most common complication was HELLP syndrome (51.56%) and most of the women with HELLP Syndrome had HELLP I (60.91%), followed by HELLP II (27.27%) and HELLP III (12.12%). The other complications noted were abruption (40.63%), eclampsia (6.25%), pulmonary oedema (6.25%), renal failure and DIC (4.69% each).

- Majority of the women had live births (96.15%), while multiple gestation and IUD was noted in 2.24% and 1.60% of the women.

- 26.65% of the babies weighed between 2.500 to 2.999 kg followed by 2.000 to 2.499 Kg (20.38%) and 1.500 to 1.999 kg (19.75%). The mean birth weight was 2.36±0.77 Kgs.

- 84.01% of the babies required resuscitation.

- At 1 minute APGAR score of >7 was noted in 94.98% of the babies. The mean APGAR score at one minute was 6.23±1.13. At 5 minutes APGAR score of ≥ 7 was noted in 84.01% of the babies. The mean APGAR score was 8.01±4.76.

- Requirement of NICU admission was noted in 20.06% of the babies and the most common cause of NICU admission was LBW (39.06%) followed by fetal distress (28.13%).

- Significantly higher SGOT (168.16 ± 160.79 vs 47.74 ± 96.93; $p<0.001$), SGPT (116.42±101.41 vs 39.54±76.64; $p<0.001$) and LDH (557.52±417.66 vs 429.23±266.78; $p=0.022$) was noted in women who developed complications women compared to women with severe preeclampsia while the mean platelet count (132265.63±102760.71 vs 217607.28±97904.19; $p<0.001$) and gestational age (35.21±4.10 vs 36.60±3.28; $p=0.014$) were low.

- The mean platelet count was significantly low (56266.67±35238.12 vs 217117.00±96710.69; $p<0.001$) and mean SGOT (239.91±38.33 vs 52.64±113.88; $p<0.001$), SGPT (175.03± 34.09 vs 41.15±85.73; $p<0.001$) and LDH (690.94±514.77 vs 427.46±263.65; $p<0.001$) were significantly high in women who developed HELLP syndrome compared to women with severe preeclampsia.

- The mean age (24.77±3.44 vs 27.19±4.92 years; p=0.029) and diastolic blood pressure (102.06±10.56 vs 108.84±9.49 mm Hg p=0.010), platelet count (55896.77±36095.81 vs 213167.74±87944.56 per cumm; p<0.001), was significantly low in women with HELLP syndrome compared to women with other complications while mean SGOT (239.77±39.42 vs 91.77±202.57; p<0.001) and SGPT (177.58±33.36 vs 54.03±112.05; p<0.001), uric acid (6.85±1.84 vs 5.80±1.84; p=0.028), LDH (690.94±514.77 vs 413.39±240.88; p=0.009) and fibrinogen (360.32±98.88 vs 277.32±99.58; p=0.002) were significantly high in women who developed HELLP syndrome (p<0.05)

- Most of the women who developed HELLP syndrome were aged between 26 to 30 years (45.45%). The mean age in women who developed HELLP syndrome was 25.18±3.81 years.

- Most of the women who developed HELLP syndrome were were primi (45.45%) and para 1 (45.45%).

- Most common clinical presentation in women who developed HELLP syndrome was headache (36.36%).

- Magnesium sulphate administration was done in 33.33% of the women who developed HELLP syndrome.

- Labour was induced in 21.21% of the women who developed HELLP syndrome while 24.24% of the women had spontaneous labour.

- The most common indication for the induction of labour in women who developed HELLP syndrome was severe preeclampsia (57.14%) followed by HELLP (28.57%).

- Majority (66.67%) of the women who developed HELLP syndrome had vaginal delivery and 33.33% of the women underwent LSCS.

- The most common indication for LSCS was HELLP 81.82% followed by fetal distress (18.18%).

- All the women who developed HELLP syndrome had live births (100%).

- Neonatal outcome was available in 33 babies of women who developed HELLP syndrome

- Of the 33 Babies born to women who developed HELLP syndrome, 36.36% of the babies weighed between 2.500 to 2.999 kg. The mean birth weight was 2.27±0.69 Kgs.

- The requirement of resuscitation was noted in 87.88% of the neonates born to women who developed HELLP syndrome,.

- The requirement of resuscitation was noted in 87.88% of the neonates, at 1 minute APGAR score of >7 was noted in 66.67% of the babies and the mean APGAR score as 6.39±1.06. At 5 minutes APGAR score of ≥ 7 was noted in 90.91% of the babies. The mean APGAR score was 7.91±1.10. The requirement of NICU admission was noted in 18.18% and the most common cause of NICU admission was MSL with fetal distress (50%).

- Out of 33 women with HELLP syndrome, majority (84.85%) of the women had complications of HELLP alone while 9.09% of the women had HELLP with abruption and 3.03% of the women each had HELLP with DIC and HELLP with abruption with renal failure.

Overall the present study shows 5% incidence of severe preeclampsia and 10.57% incidence of HELLP syndrome in women with severe preeclampsia. The other complications noted were abruption, eclampsia, pulmonary oedema, renal failure and DIC.

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ANNEXURE - I - INFORMED CONSENT

"A CROSS SECTIONAL STUDY OF SEVERE PRE ECLAMPSIA AND HELLP SYNDROME IN A TERTIARY CARE HOSPITAL IN BELAGAVI"

Purpose of the study

You are being asked to enroll in this study as you are eligible for participation in this study. If you are diagnosed with severe pre eclmapsia you will be included in this study.

The purpose of this study is to determine the incidence of severe pre eclampsia and HELLP syndrome in severe pre eclampsia. Also the secondary purpose of this study is to find out the incidence of complications occurring in severe hypertensive pregnancies, eg renal failure, cardiac failure, etc and the associated maternal and fetal morbidity and mortality

Procedure

During this study, you will be asked questions regarding your socio-demographic background, history and you are supposed to answer to the best of your knowledge. The principal investigator of the study is Dr._____ under the guidance of Dr. _____.

If you agree to enroll yourself in this study, you will be interviewed regarding your sociodemographic details, present, past and treatment history.

Risks and benefits

The benefits of taking part in this study will be early diagnosis and treatment of severe pre eclampsia and HELLP syndrome so that prompt treatment can be initiated for the same and the condition can be stopped from worsening further. There are no risks involved in taking part in this study.

Alternatives

Taking part in this study is voluntary. You may choose not to take part in this study, or if you decide to take part now, you can later change your mind and withdraw from the study. Your decision will not change the present or future health care or other services that you receive. The study doctor or sponsor may terminate your participation in this study anytime.

Privacy and confidentiality

All information collected about you during the course of this study will be kept confidential to the extent permitted by law. The code numbers will identify you in this research record. Information from this study will be published but your identity will be confidential in any publication. No information about you or information provided by you during the research will be disclosed to other without your written permission except:

1. In emergency to protect your rights and welfare.

2. If required by law.

Financial incentives for participation

You will not be paid /offered any gift/incentives for participating in this study.

Authorization to publish results

The results of this study would be forwarded to the KLE University, Belgaum as a part of requirement towards the completion of MS degree, review and publishing.

Questions

In case you have any questions related to the study, in future or in case of study related injury or illness, you can contact :

- If you have any queries about your rights as a study subject, you may call Dr.Ganga .S. Pilli, Professor, Department of Pathology, Chairman of J. N. Medical College Institutional Ethical Committee of Human Subjects Research, Phone No. 9448863866, at J. N. Medical College, Belgaum.

CONSENT STATEMENT

I voluntarily agree to take part in this study by signing below. I may withdraw at any time. I am not giving up any legal rights by signing this form. My signature below indicates that I have read, or it has been read to me, this entire consent form, and have had all my questions answered.

In case of the queries during the study or in future you may contact following person.

Name of the participant: (signature/thumbprint)

Name of the witness: (signature)

Name of the investigator: (signature)

Date: Place:

Address :

Phone no:

ANNEXURE – II - PROFORMA

A CROSS SECTIONAL STUDY OF SEVERE PRE ECLAMPSIA AND HELLP SYNDROME IN A TERTIARY CARE HOSPITAL IN BELAGAVI

- IP.NO :

1. SUBJECT INFORMATION

- Name :
- Age :
- Address :
- Contact number:
- Education:
- Occupation:

2. CURRENT PREGNANCY

- Gravida
- Para :
- Living :
- Abortion :
- Last menstrual period :
- Estimated date of delivery :
- Period of gestation :
- Ultasound estimated date of delivery :

3. OBSTETRIC HISTORY

- Age at marriage:
- Age at first pregnancy:
- Minimum birth interval for earlier pregnancy:
- History of abortion:
- History of preeclampsia / gestational diabetes mellitus / anemia / isoimmunization / any other infection / antepartum haemorrhage
- Complaints of imminent signs:
- Complaints of abdominal pain, nausea, vomiting, right upper quadrant pain, jaundice
- History of normal vaginal delivery
- History of c section delivery
- History of any conginital disorder in the baby:

4. GENERAL EXAMINATION:

- Date of visit:
- Height:
- Weight:
- Pallor:
- Oedema:

5. VITALS- Pulse: Blood pressure:

6. HEALTH SERVICES USE DURING PREGNANCY:

- Number of times of anc visit:
- Folic acid intake status
- Hematinic supplementation status:

- Calcium supplementation intake status:
- Nutrition status:
- Any anti hypertensive medication taken:
- Magnesium sulphate taken:

7. INVESTIGATIONS:

- **Routine:**

Hemoglobin

Blood group

Platelet count

Peripheral smear

- **Special**

Liver function tests: Total bilirubin

Direct bilirubin

Total proteins

Serum Albumin

Albumin : Globulin ratio

Alanine transaminase (SGOT)

Aspartate Transaminase (SGPT)

Alkaline phosphatase

Renal Function tests: Serum urea

Serum uric acid

Serum creatinine

Urine albumin

Lactate Dehydrogenase

Disseminated Intravascular Coagulation (DIC) Profile:

Prothrombin Time

Activated Partial Thromboplastin Time

Serum fibrinogen

8. INFORMATION ON LABOUR

- Date and time of delivery :
- Type of delivery : spontaneous/ induced/caesearian
- If induced, indication:
- If caesarean section, indication:
- Magnesium sulphate taken:

1. INFORMATION OF THE BABY

- Gestational age :
- Time of birth :
- Sex :
- Weight in kgs :
- Length in cm:
- Did the baby cry after birth :
- Did the baby need resuscitation:
- APGAR score : 1minute : 5minute :
- Mortality

Signature and name of the principal investigator:

ANNEXURE - III - ETHICAL CLEARANCE

K.L.E.UNIVERSITY'S
JAWAHARLAL NEHRU MEDICAL COLLEGE,
NEHRU NAGAR, BELAGAVI-590010 (KARNATAKA-INDIA)
(Accredited 'A' Grade by NAAC)

Website: http//www.jnmc.edu
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Principal: 2471701
Fax No. +91 (0)831 – 2470759

Ref: MDC/DOME/ 398. **Date: 19/11/2015**

To,

PG student in OBG,
J.N.Medical College,
BELAGAVI.

Sub: Institutional Ethical Clearance for the study.

With reference to the above, we wish to inform you that your proposed research project titled **"A CROSS SECTIONAL STUDY OF SEVERE PRE ECLAMPSIA AND HELLP SYNDROME IN A TERTIARY CARE HOSPITAL IN BELAGAVI",** is ethical and justifiable. The proposed research project has been cleared by the JNMC Institutional Ethics Committee on Human Subjects Research.

(Dr. Arathi Darshan)
Member Secretary
JNMC Institutional Ethics Committee
on Human Subjects Research,
J.N.Medical College, Belagavi.

(Dr. Ganga Pilli)
Chairman,
JNMC Institutional Ethics Committee
on Human Subjects Research,
J.N.Medical College, Belagavi.

ANNEXURE - IV - KEY TO MASTER CHART

-	-	Absent
+	-	Present
aPTT	-	Activated partial prothrombin time
BP	-	Blood pressure
bpm	-	beats per minute
Cms	-	Centimeters
CPD	-	Cephalopelvic disproportion
DIC	-	Disseminated intravascular coagulation
END	-	Early neonatal death
F	-	Female
FD	-	Fetal distress
GDM	-	Gestational diabetes mellitus
H/o	-	History of
HELLP	-	Haemolysis elevated liver enzymes low platelets
Ind	-	Induced
IUD	-	Intra uterine death
IUGR	-	Intrauterine growth restriction
Kg	-	Kilogram
LB	-	IUD
LBW	-	Low birth weight
LSCS	-	Lower segment caesarean section
m	-	Male
m	-	meter

mm Hg	-	Millimeters of mercury
MSL	-	Meconium stain liquor
n	-	No
NICU	-	Neonatal intensive care unit
PE	-	Preeclampsia
PT	-	Prothrombin time
res.	-	Resistance
S.IUGR	-	Severe intrauterine growth restriction
SGOT	-	Serum glutamic oxaloacetic transaminase
SGPT	-	Serum glutamic pyruvic transaminase
Sp	-	Spontaneous
y	-	Yes

ANNEXURE - V

MASTER CHART

			Current pregnancy				Clinical presentation and history															Anthropometry			Vitals					Investigations																		Information on labour				Information on labour				Information of the baby											
									Iminent signs																	BP (mmHg)				Routine		Special investigations: Liver function test								Renal function tests					DIC profile					Induction of labour														Apgar score				
Serial number	In patient number	Age (years)	Gravida	Para	Living	Abortion	History of preeclampsia	gestational diabetes mellitus	abdominal pain	nausea	vomiting	Headache	Blurring of vision	Chest pain	right upppr quadrant p	Jaundice	H/o normal vaginal delivery	H/o Caesarean section delivery	H/o congenital disorder in the b	Pallor	Oedema	Height (Cms)	Weight (Kg)	BMI (Kg/m^2)	Pulse(bpm)	Systolic	Diastolic	Antihyprtensive medication in pregnan	Magnesium sulphate taken	Hemoglobin	Platelet count	Total bilirubin	Direct bilirubin	total proteions	Serum Albumin	Albumin Globulin ra	SGOT	SGPT	Alkaline phosphatase	Seurm urea	Serum uric acid	Serum creatinine	Urine albumin	Lactate dehydrogena	PT (sec)	aPTT (sec)	Serum fibrinogen	Time of delivery	Date of delivery	Induction	Mode of delivery	If induced, indication	If caesarean section, indication	Administration of magnesium sulphate	Maternal complications	Gestational age (week/day)	Time of birth	Sex	Weight (Kgs)	Pregnancy outcome	Did the baby cry after birth	Did the baby need resuscitation	1 minute	5minute	Mortality	NICU Admission	Causes of NICU Admission
1	770772	36	Primi	-	-	-	-	-	-	+	-	+	-	-	-	-	+	-	-	-	-	140	60	30.61	84	150	110	-	+	12.8	343000	0.2	0	5.6	3.3	1.8	25	10	206	10	4.2	0.53	1+	224	3.5	2.6	105	12.46 pm	7/11/2016	-	LSCS	-	Failed induction	n	-	32	12.46am	m	2.8	LB	y	y	6	7	n	-	-
2	780752	26	3	2	2		-	-	-	+	-	-	-	-	-	-	+	-	-	-	+	142	54	26.78	88	160	110	+	-	12	343000	0.2	0	5.6	3.3	1.8	25	10	206	10	4.2	0.53	3+	535	9	0.8	231	2.08 am	6/11/2016	Ind	Vaginal	IUD with severe PE	-	n	Abruption	29+5	2.08am	m	0.6	IUD	n	n	-	-	y	-	-
3	757792	25	4	1	1	2	-	-	-	+	-	+	+	-	-	-	-	+	-	-	-	146	62	29.09	84	170	120	+	+	8.6	211000	0.5	0.1	4.7	2.2	0.9	59	19	152	18	5.8	0.6	2+	338	8	0.9	256	7.46pm	2/9/2016	-	LSCS	-	Severe PE	y	Abruption	32	9.46pm	m	1.8	LB	y	y	7	8	y	-	-
4	780787	24	4			3	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	148	56	25.57	74	180	120	-	-	13.2	233000	0.70	0.31	5.70	3.10	1.20	2.00	11.00	271	16	6.3	0.93	trace	456	9	1.2	451	6.56pm	31/8/2016	Ind	Vaginal	IUGR with severe PE	-	n	-	34+3	6.56pm	f	1.3	LB	y	y	6	7	n	-	-
5	769755	25	2	1	0	1	-	-	-	+	-	-	-	-	-	-	-	+	-	-	-	142	65	32.24	84	150	110	-	-	9.9	121000	0.56	0.32	6.1	3.1	1.1	25	71	101	40	4.6	0.61	2+	261	1.01	0.88	318	9.20am	1/11/2016	Sp	Vaginal	-	-	n	-	26	9.20pm	f	0.68	END	n	n	5	6	y	+	prematurity with LBW
6	769655	25	2	1	1		-	-	-	+	-	+	-	-	-	-	-	+	-	-	+	141	57	28.67	88	170	120	-	+	9.3	160000	0.19	0	5.1	2.9	1	29	27	147	12	3.2	0.56	3+	243	0.90	0.78	212	12.31am	28/12/20169	-	LSCS	-	Twins	n	-	35+5	12.31am/12.34am	m	2.9+1.8	Twin	y	y	8	6+7	n	-	-
7	769768	26	Primi	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	150	50	22.22	84	180	110	+	+	13.3	233000	0.70	0.31	5.70	3.10	1.20	2.00	11.00	271	16	6.3	0.93	trace	697	0.8	1.2	256	12.48am	2/11/2016	-	LSCS	-	Severe PE with IUGR	n	-	40+6	12.48am	f	2.4	LB	y	y	7	8	n	-	-
8	780984	18	Primi	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	152	66	28.57	88	160	90	+	-	13.8	152000	0.4	0.1	60	3.1	1.1	61	75	144	28	3.4	0.6	2+	240	1.2	1.1	356	10.00am	4/11/2016	Ind	Vaginal	IUD with severe PE	-	n	Abruption	27+5	10am	f	0.76	IUD	n	n	-	-	y	-	-
9	757099	27	Primi	-	-	-	-	-	-	+	-	+	-	-	-	-	+	-	-	-	-	160	58	22.66	82	140	110	-	+	9.5	114000	0.28	0.12	5.3	3	1.2	201	159	97	4.3	4.6	0.51	3+	545	1.1	0.9	458	11.20pm	30/8/2016	-	LSCS	-	HELLP	y	HELLP, abruption	33+2	11.20pm	m	1.6	LB	y	y	7	8	y	-	-
10	781206	30	2	1	1		-	-	-	+	-	-	-	-	+	-	+	-	-	-	-	153	61	26.06	88	160	110	-	-	11.3	124000	0.32	0.15	5.7	3.2	1.3	16	11	140	14	6.2	0.56	1+	482	9	0.8	398	10.30am	8/11/2016	Sp	Vaginal	-	-	n	-	35+6	10.30pm	f	2.5	LB	n	n	7	9	y	-	-
11	781189	23	3	1	1	1	-	-	-	+	-	+	-	-	-	-	-	+	-	-	+	154	44	18.55	82	160	100	-	+	13.1	343000	0.2	0	5.6	3.3	1.8	25	10	206	10	4.2	0.53	trace	225	8	0.9	458	11.01am	18/10/2016	-	LSCS	-	Previous LSCS with severe PE	n	-	37	11.01am	m	2.4	LB	y	y	7	9	y	-	-
12	747265	33	3	2	2		-	-	+	+	-	-	-	-	+	-	+	-	-	-	-	152	56	24.24	64	160	110	-	-	8.8	160000	0.50	0.10	6.5	3	0.09	14	10	84	22	4.7	0.48	2+	335	0.7	5.2	278	8.19am	22/11/*2016	Sp	Vaginal	-	-	n	Abruption	36+3	8.149am	f	1.4	LB	n	n	5	7	y	-	-
13	773963	33	2			1	-	-	-	+	-	+	+	-	-	-	-	-	-	-	-	156	72	29.59	84	150	110	+	+	12.8	299000	0.25	0	6.6	2.8	0.7	20	18	151	20	5.5	0.63	1+	563	0.9	1.2	363	10.13am	24/11/2016	-	LSCS	-	Severe PE	n	-	35+5	10.13am	f	2.7	LB	y	y	7	11	n	-	-
14	774240	26	Primi	-	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	155	56	23.31	84	150	110	+	+	12	186000	0.21	0	5.8	2.6	0.8	20	14	127	12	5.7	0.53	3+	354	0.8	0.9	256	10.37am	25/11/2016	-	LSCS	-	Severe PE	n	-	39+6	10.37am	m	3.2	LB	y	y	7	8	n	-	-
15	764636	21	5	4	4		-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	156	58	23.83	84	200	120	-	-	8.6	183000	0.27	0.1	5.3	2.7	1	16	36	166	19	8.8	0.64	1+	597	0.9	0.8	258	7.43pm	8/10/2016	Sp	Vaginal	-	-	n	-	36+5	7.43pm	m	1.6	LB	y	y	6	8	n	-	-
16	763824	25	Primi	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	+	159	58	22.94	82	160	110	-	+	13.2	168000	1.67	1.36	6.4	2.7	2.7	233	267	283	52	12.8	1.67	2+	256	0.8	0.9	489	7.55pm	29/9/2016	-	LSCS	-	Failed induction	n	-	37+2	7.55pm	f	2.5	LB	y	y	7	8	y	-	-
17	765432	25	4	1	1	2	-	-	-	+	-	+	-	-	-	-	+	-	-	-	-	158	58	23.23	84	170	110	-	+	11.4	200000	0.16	0.03	4.8	2.6	1.2	34	12	146	35	4.2	0.61	trace	245	0.7	2.3	140	9.55am	29/11/16	-	LSCS	-	Polyhydroamnios and Previous LSCS	n	-	37	9.55am	m	3.9	LB	y	y	7	9	n	-	-
18	763349	20	Primi	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	157	53	21.50	74	160	70	+	+	12.3	226000	0.26	0.1	6.7	3.1	0.9	24	29	188	18	5.5	0.62	3+	289	0.7	1.2	489	12.40pm	27/4/2016	-	LSCS	-	Abruptio placenta	n	-	40+3	12.40pm	m	3.2	LB	y	y	7	9	n	-	-
19	763336	21	2	1	0		-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	156	70	28.76	74	160	100	-	-	8.9	183000	0.27	0.1	5.3	2.7	1	16	36	166	19	8.8	0.64	trace	365	1.2	1.1	258	6.24am	28/12/20169	Ind	Vaginal	Postdatism	-	n	-	37+5	2.25am	m	3.8	LB	y	y	7	9	n	-	-
20	763404	25	2	1	1		-	-	-	+	-	+	-	-	-	-	-	+	-	-	-	159	58	22.94	84	170	110	-	+	8.8	326000	0.64	0.34	6.6	3.6	1.2	108	40	268	22	12.7	0.99	2+	125	0.9	0.9	369	6.22pm	26/9/2016	-	LSCS	-	Severe PE with IUGR	n	-	36+4	6.22pm	f	2.3	LB	y	y	7	9	y	-	-
21	763204	22	3	1	1	1	-	-	-	+	-	-	-	-	-	-	-	-	-	-	+	160	68	26.56	82	160	90	+	-	12.8	233000	0.70	0.31	5.70	3.10	1.20	2.00	11.00	271	16	6.3	0.93	1+	245	0.8	0.8	456	5.10am	26/4/2016	Sp	Vaginal	-	-	n	-	40+1	5.10am	f	2.6	LB	y	y	7	9	n	-	-
22	767214	30	3	2	2		-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	142	57	28.27	88	160	110	-	-	12	127000	0.25	0.08	5.9	3.5	1.5	28	10	110	18	7.8	0.69	3+	697	0.9	0.9	248	9.43am+9.55	29/10/16	Sp	Vaginal	-	-	n	-	32	9.43am+9.55am	f+m	1.3+1.8	Twin	y	y	6+7	6+7	n	-	-
23	769520	24	2	1	1		-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	151	46	20.17	84	150	112	-	-	8.6	152000	0.4	0.1	60	3.1	1.1	61	75	144	28	3.4	0.6	2+	240	0.9	0.9	458	3.28am	30/1/2016	Sp	Vaginal	-	-	n	-	35+5	3.28am	f	2.1	LB	y	y	7	8	n	-	-
24	781232	29	3				-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	142	70	34.72	21	160	90	-	-	13.2	214000	0.28	0.12	5.3	3	1.2	12	9	97	4.3	4.6	0.51	trace	145	0.8	1.2	358	12.34pm	27/10/2016	Sp	Vaginal	-	-	n	-	39+7	12.34pm	f	2.4	LB	y	y	7	8	n	-	-
25	768203	30	5	1	1	2	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	142	49	24.30	84	170	120	+	-	7.2	124000	0.32	0.15	5.7	3.2	1.3	16	11	140	14	6.2	0.56	1+	482	1.2	0.8	363	9.44pm	26/10/2016	Ind	Vaginal	Severe PE	-	n	-	32+5	9.44pm	m	1.7	LB	y	y	6	7	n	-	-
26	768847	28	Primi	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	+	146	50	23.46	84	160	100	-	-	12.2	343000	0.2	0	5.6	3.3	1.8	25	10	206	10	4.2	0.53	2+	225	1.1	1.2	478	9.42pm	25/10/2016	Ind	Vaginal	IUD with severe PE	-	n	Abruption	21+6	9.42pm	m	4.8	IUD	-	-	-	-	y	-	-
27	768698	28	2	1	1		-	-	-	+	-	+	-	-	-	-	+	+	-	-	-	148	71	32.41	84	160	90	-	+	13	126000	0.26	0.1	6.7	3.1	0.9	200	179	188	18	5.5	0.62	1+	635	0.9	1.1	458	10.41am	28/10/2016	-	LSCS	-	HELLP	y	HELLP, Abruption	36+5	10.41am	m	2.5	LB	y	y	4	5	n	-	-
28	765328	37	2	1	1		-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	142	58	28.76	84	180	90	+	-	14	226000	0.7	0.3	6.3	3.4	1.1	15	46	44	44	5.3	1.5	3+	1150	0.9	9	398	8.17am	25/10/2016	Ind	Vaginal	Severe PE	-	n	-	36+6	8.19am	m	2.2	LB	y	y	7	8	n	-	-
29	764750	29	Primi	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	141	58	29.17	74	160	100	-	-	10.7	186000	0.21	0	5.8	2.6	0.8	20	14	127	12	5.7	0.53	2+	260	0.9	8	458	2.15am	4/10/2016	Ind	Vaginal	Severe PE	-	n	Renal failure	39	2.45am	f	2.9	LB	y	y	7	9	n	-	-
30	764398	24	2	1	1		-	-	-	+	-	+	-	-	-	-	-	+	-	-	-	150	62	27.56	82	160	110	-	+	10.3	160000	0.8	0.4	6.7	2.9	0.8	24	32	308	24	3.3	1	trace	482	1.2	0.7	278	1.53am	2/10/2016	-	LSCS	-	Previous LSCS with severe PE	n	-	36+3	1.53pm	m	2.1	LB	y	y	7	9	y	-	-
31	781442	20	Primi	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	+	152	57	24.67	84	160	100	+	-	9.5	231000	0.3	0.14	6.7	3.3	10	25	14	223	16	5.6	0.49	trace	225	1.1	0.9	363	10.57am	1/10/2016	Sp	Vaginal	-	-	n	-	41+6	10.57am	m	3.4	LB	y	y	7	9	n	-	-
32	765905	29	Primi	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	160	59	23.05	84	170	110	-	+	11.3	226000	0.48	0.11	5.4	2.5	0.9	32	14	241	4.3	5.8	0.46	2+	335	1.2	0.8	99	10.23am+10.24am	28/12/20169	-	LSCS	-	Previous LSCS with severe PE	n	-	35+1	10.23am+10.24am	m+f	21.+1.7	Twin	y	y	7+8	8+8	n	-	-
33	766402	24	2	1	1		-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	153	61	26.06	84	160	110	-	-	13.1	189000	0.43	0.16	6.6	3.5	1.1	12	9	164	11	3.3	0.49	3+	563	0.8	0.9	458	3.29pm	15/10/2016	Ind	Vaginal	IUD with severe PE	-	n	-	35+1	3.24pm	f	2.1	IUD	n	n	-	-	y	-	-
34	767329	23	3	1	2	1	-	-	-	+	-	+	-	-	-	-	-	+	-	-	-	154	43	18.13	84	160	100	-	+	8.8	138000	0.55	0.22	5.1	50	1.4	27	13	315	12	5.4	0.63	trace	354	0.9	0.8	498	1.39am	19/10/2016	-	LSCS	-	Previous LSCS with severe PE	n	-	41+2	1.39am	m	3.3	LB	y	y	7	9	n	-	-
35	767932	20	4	3	2		-	-	-	+	-	+	+	-	-	-	+	-	-	-	-	152	54	23.37	78	160	90	-	+	12.8	343000	0.2	0	5.6	3.3	1.8	25	10	206	10	4.2	0.53	1+	1050	0.1	0.8	254	1.47am	18/10/2016	-	LSCS	-	Abruptio placenta	n	-	38+1	1.47am	m	2.3	LB	y	y	7	8	y	+	MSL with FD
36	770269	23	2	1	1		-	-	-	+	-	+	-	-	-	-	+	-	-	-	+	156	54	22.19	84	170	110	+	+	13.3	233000	0.70	0.31	5.70	3.10	1.20	2.00	11.00	271	16	6.3	0.93	trace	418	1.1	0.9	268	3.04am	7/11/2016	-	LSCS	-	Severe PE	n	-	35+2	3.04am	f	1.9	LB	y	y	6	7	y	+	FD
37	770382	22	2			1	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	155	41	17.07	84	160	90	-	-	13.8	127000	0.25	0.08	5.9	3.5	1.5	28	10	110	18	8	0.69	2+	697	0.92	0.80	359	9am	6/11/2016	Ind	Vaginal	Antepartum eclampsia	-	n	-	27+4	9am	m	0.66	END	n	n	8	6	y	+	prematurity with LBW
38	770282	29	Primi	-	-	-	-	-	-	+	-	+	-	-	-	-	+	-	-	-	-	156	70	28.76	88	160	100	+	+	9.5	152000	0.4	0.1	60	3.1	1.1	61	75	144	28	3.4	0.6	3+	316	1.2	1.2	387	1.45am	4/11/2016	-	LSCS	-	Antepartum eclampsia	n	-	34+5	1.45am	f	1.5	LB	y	y	6	7	y	+	LBW with prematurity
39	770484	31	Primi	-	-	-	-	+	-	+	-	+	-	-	-	-	-	-	-	-	-	159	62	24.52	84	180	100	-	+	11.3	214000	0.28	0.12	5.3	3	1.2	12	9	97	4.3	4.6	0.51	3+	1063	1.1	1.1	289	7am	5/9/2016	-	LSCS	-	Severe PE	n	-	37+3	7am	f	3.2	LB	y	y	6	7	n	-	-
40	770410	25	4	2	1	1	-	-	-	+	-	+	-	-	-	-	-	+	-	-	-	158	59	23.63	88	170	110	-	+	13.1	124000	0.32	0.15	5.7	3.2	1.3	16	11	140	14	6.2	0.56	2+	253	0.1	1.1	225	11.45am	5/1/2016	-	LSCS	-	Severe PE	n	Abruption	35	11.45pm	m	1.9	LB	y	y	6	7	y	+	LBW
41	769968	22	Primi	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	+	157	61	24.75	88	150	116	-	+	8.8	343000	0.2	0	5.6	3.3	1.8	25	10	206	10	4.2	0.53	1+	446	0.9	1.2	268	3.34pm	3/11/2016	-	LSCS	-	Failed induction	y	Abruption	37+5		m	2.5	LB	y	y	6	7	y	-	-
42	770035	24	2			1	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	156	62	25.48	84	160	110	-	-	12.8	171000	0.47	0.14	4.3	2.2	1	40	25	224	20	6.6	0.95	trace	378	0.90	0.90	363	7.44am	3/11/2016	Sp	Vaginal	-	-	n	-	39+5	7.44 am	m	2.5	LB	y	y	6	7	n	-	-
43	769914	30	Primi	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	159	53	20.96	88	160	110	+	+	12	160000	0.50	0.10	6.5	3	0.09	14	10	84	22	4.7	0.48	2+	206	0.90	1.01	653	4.20pm	2/11/2016	-	LSCS	-	Fetal distress	n	-	38	4.20pm	f	2.1	LB	y	y	7	8	y	-	-
44	726737	25	3	2	2		-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	160	65	25.39	90	160	100	-	-	8.6	248000	1.27	0.17	6	2.3	0.6	32	14	373	69	3.87	0.56	trace	278	0.8	1.1	364	10.47am	26/3/2016	Sp	Vaginal	-	-	n	-	39+5	10.47am	f	2.64	LB	y	y	6	9	n	-	-
45	727702	25	Primi	-	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	142	64	31.74	92	150	118	+	+	13.2	299000	0.25	0.1	6.6	2.8	0.7	20	18	151	20	5.5	0.63	2+	125	0.8	0.12	359	9.42am	1/4/2016	-	LSCS	-	Fetal distress	n	-	38+4	9.42am	m	3.5	LB	y	y	7	9	n	-	-
46	728029	20	Primi	-	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	-	+	151	48	21.05	96	160	110	-	-	11.4	226000	0.7	0.3	6.3	3.4	1.1	15	46	44	44	5.3	1.5	3+	156	>15	>32	251	7.41am	3/4/2016	Sp	Vaginal	-	-	n	DIC, renal failurfe	37	7.41am	f	2.8	LB	y	y	7	9	n	-	-
47	727659	30	2	1	1		-	-	-	+	+	+	+	-	-	-	-	-	-	-	-	142	60	29.76	84	170	120	-	+	12.3	186000	0.21	0	5.8	2.6	0.8	20	14	127	12	5.7	0.53	1+	278	0.8	0.8	289	6.24am	4/4/2016	-	LSCS	-	Failed induction	n	-	37+1	11.02am	f	2.7	LB	y	y	7	9	n	-	-
48	728329	26	Primi	-	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	142	67	33.23	82	160	110	-	+	8.9	189000	0.2	0.01	6	2.2	0.6	17	10	288	12	3.2	0.44	trace	277	0.8	0.9	458	2.30am	4/4/2016	-	LSCS	-	Failed induction	n	-	40+5	2.30am	f	3.4	LB	y	y	7	9	n	-	-
..	751799	25	3			2	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	146	64	30.02	82	160	100	+	-	8.8	######	0.5	0.1	5.6	2.6	0.9	21	18	96	17	3.4	0.49	trace	482	0.9	0.8	398	1.55am	28/7/2016	Ind	Vaginal	IUD with severe PE	-	n	-	36	1.55am	m	1.7	IUD	n	n	-	-	y	-	-
50	781655	19	Primi	-	-	-	-	-	-	+	+	+	-	-	-	-	+	-	-	-	+	148	46	21.00	82	150	120	-	+	12.8	227000	0.4	0.11	6.1	3.6	1.4	18	21	196	17	5.6	0.58	2+	225	1.2	1.1	458	7.13am	3/82016	-	LSCS	-	Antepartum eclampsia	n	-	31	7.13am	m	1.3	LB	y	y	6	8	y	-	-
51	761671	24	Primi	-	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	142	63	31.24	84	170	110	-	-	12	23400	0.48	0.2	3.5	2.5	2.5	204	162	192	34	9.2	0.79	1+	600	0.9	1.2	278	1.40am	19/9/2016	Sp	Vaginal	-	-	n	HELLP	38	1.40am	m	2.4	LB	y	y	7	9	n	-	-
52	742425	25	2	1	1		-	-	-	+	+	+	-	-	-	-	-	+	-	-	-	141	64	32.19	80	160	100	+	+	8.6	189000	0.32	0.06	5.7	3	1.1	10	5	164	11	3.5	0.32	1+	563	5	0.9	363	12.00am	22/9/2016	-	LSCS	-	Antepartum eclampsia	n	-	39+1	12.00am	m	3.5	LB	y	y	6	8	n	-	-
53	772896	28	2	1	1		-	-	-	+	+	+	-	-	-	-	-	+	-	-	+	150	61	27.11	82	180	110	-	+	13.2	253000	0.24	0	6.8	3.6	1.1	15	10	155	13	5.6	0.73	3+	354	0.8	0.8	269	3.35am	18/11/2016	-	LSCS	-	Previous LSCS with severe PE	y	Abruption	33+2	3.35	f	1.4	LB	y	y	5	6	y	-	-
54	772857	29	2			1	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	152	47	20.34	84	170	110	-	+	7.2	238000	0.25	0.11	4.5	1.8	0.8	61	41	114	18	5.5	0.81	2+	507	3.5	4.2	150	8.30am	17/11/2016	-	LSCS	-	Fetal distress	y	Abruption	34+4	8.30am	m	1.6	LB	y	y	6	7	y	-	-
55	772601	25	Primi	-	-	-	-	-	-	+	+	+	-	-	+	-	-	-	-	-	-	160	60	23.44	84	170	110	+	+	12.2	278000	0.37	0.12	6.5	3.4	1.1	12	10	165	10	3.9	0.50	trace	408	0.8	0.8	369	2.07pm	17/11/2016	-	LSCS	-	Severe PE	n	-	35+2	2.07pm	m	2.4	LB	y	y	7	89	y	-	-
56	771525	24	Primi	-	-	-	-	-	-	+	+	+	+	-	-	-	+	-	-	-	-	153	63	26.91	84	160	110	-	+	13	227000	0.4	0.11	6.1	3.6	1.4	18	21	196	17	5.6	0.58	1+	238	0.9	0.9	354	11.44am	10/11/2016	-	LSCS	-	Failed induction	n	-	37+5	11.44am	f	3	LB	y	y	7	9	n	-	-
57	767328	25	Primi	-	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	-	+	154	61	25.72	84	180	110	+	-	14	252000	0.23	0.15	6.7	3.2	0.9	28	18	258	18	8	0.67	3+	441	0.8	1.2	267	6.00pm	18/10/2016	Sp	Vaginal	-	-	n	-	37+5	6.00pm	f	1.7	LB	y	y	7	9	n	+	LBW
58	765153	21	2	1	0		-	-	-	+	+	+	-	-	-	-	-	+	-	-	-	152	59	25.54	82	166	100	-	+	10.7	23400	0.48	0.2	3.5	2.5	2.5	40	12	192	34	9.2	0.79	2+	361	1.2	1.2	221	8.35am	29/4/2016	-	LSCS	-	Severe PE	n	-	32+3	8.35pm +8.36	m+m	1.6+1.6	Twin	y+y	y+y	5+6	6+7	n	-	-
59	771346	26	Primi	-	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	156	56	23.01	88	160	90	-	-	14.8	162000	0.67	0.46	5.7	2.9	1	111	26	327	14	5.7	0.64	trace	799	1.1	1.1	210	10.26am	9/11/2016	Ind	Vaginal	Severe PE	-	n	-	29	10.26am	f	1.7	LB	n	n	8	4	y	+	MSL with FD
60	771089	21	2	1	1		-	-	-	+	+	+	-	-	-	-	+	-	-	-	+	155	53	22.06	88	160	110	+	-	11.7	277000	0.41	0.17	5.9	3.2	1.2	25	16	197	15	4.6	0.56	trace	589	0.9	0.8	326	8.54am	8/11/2016	Ind	Vaginal	Severe PE	-	n	-	37+1	8.54am	f	2.3	LB	y	y	6	7	n	-	-
61	759146	25	2	1	1		-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	156	56	23.01	84	180	110	-	-	11.4	182000	0.44	0.23	6.00	3.2	1.1	28	21	104	94	5.2	0.50	1+	458	0.8	0.9	310	8.42am	6/9/2016	Sp	Vaginal	-	-	n	-	33+5	8.742am	m	2.5	LB	y	y	6	7	n	-	-
62	759033	24	Primi	-	-	-	-	-	-	+	-	+	-	-	-	-	+	-	-	-	-	159	58	22.94	84	200	110	+	+	11.3	189000	0.32	0.06	5.7	3	1.1	10	5	164	11	3.5	0.32	trace	230	0.87	0.99	400	1.38pm	6/9/2016	-	LSCS	-	Second stage arrest	n	-	39+6	1.35am	f	2.6	LB	y	y	7	8	n	-	-
63	759052	25	2	1	0		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	158	53	21.23	84	160	110	-	-	13.9	231000	0.3	0.14	6.7	3.3	10	25	14	223	16	5.6	0.49	1+	237	0.8	0.8	333	12.02am	5/9/2016	Ind	Vaginal	Postdatism	-	n	-	41+1	12.02am	f	3	LB	y	y	7	9	n	-	-
64	758447	20	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	157	61	24.75	84	170	110	-	-	9.6	226000	0.48	0.11	5.4	2.5	0.9	32	14	241	5.0	5.8	0.46	2+	620	9	0.9	230	8.34am	4/9/2016	Ind	Vaginal	Severe PE	-	n	-	35+6	8.34am	f	1.9	LB	y	y	7	8	n	+	LBW with prematurity
65	758460	25	2	1	0		-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	156	63	25.89	78	150	124	-	-	11.2	189000	0.43	0.16	6.6	3.5	1.1	12	9	164	11	3.3	0.49	1+	239	1.2	0.8	260	9.31am	2/9/2016	Ind	Vaginal	Postdatism	-	n	-	41	9.32am	f	3.2	LB	y	y	7	8	n	-	-
66	757904	20	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	159	59	23.34	82	150	110	+	-	11.8	138000	0.55	0.22	5.1	50	1.4	27	13	315	12	5.4	0.63	1+	303	1.2	0.9	235	11.47am	30/8/2016	Sp	Vaginal	-	-	n	-	35	11.47am	m	1.9	LB	y	y	7	8	n	-	-
67	757816	20	3	2	2		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	160	43	16.80	78	160	90	+	-	8.2	255000	0.3	0.13	7.8	3.3	0.7	14	10	125	2.8	0.43	0.8	2+	260	1.1	0.85	378	2.04m	30/82016	Ind	Vaginal	Severe PE	-	n	-	37	2.04am	m	2.8	LB	n	n	7	5	y	-	-
68	771956	27	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	142	60	29.76	78	170	120	-	+	11.4	######	0.5	0.1	5.6	2.6	0.9	21	18	96	17	3.4	0.49	3+	352	0.87	0.9	242	4.17am	11/11/2016	-	LSCS	-	Fetal distress	n	-	38	4.17am	m	2.2	LB	y	y	6	7	y	-	-
69	771560	24	2	1	1		-	-	-	-	-	+	-	-	-	-	-	+	-	-	+	151	54	23.68	84	160	110	-	-	13.2	205000	0.6	0.5	5.2	2.9	1.2	21	13	211	23	7.7	0.66	2+	445	0.8	0.9	258	10.24am	11/11/2016	Ind	Vaginal	Severe PE	-	n	-	30+5	10.24am	f	1.3	LB	n	n	5	6	y	-	-
70	757592	26	2			1	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	142	49	24.30	74	160	90	-	+	7.2	146000	0.49	0.17	6.6	3.52	0.9	209	171	193	21	5.8	0.66	trace	707	0.8	0.8	360	10.58am	29/8/2016	-	LSCS	-	Fetal distress	n	HELLP, Abruption	38	10.58am	m	2.5	LB	y	y	7	8	y	-	-
71	759069	19	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	140	64	32.65	82	160	100	-	-	12.3	206000	0.56	0.21	6.5	3.7	1.3	13	11	144	11	4.3	0.44	2+	331	0.8	0.8	369	4.17am	6/9/2016	Ind	Vaginal	Severe PE	-	n	-	39	4.07am	m	2.5	LB	y	y	7	9	n	-	-

ANNEXURE - V
MASTER CHART

Serial number	In patient number	Age (years)	Gravida	Para	Living	Abortion	History of preeclampsia	gestational diabetes mellitus	abdominal pain	nausea	vomiting	Headache	Blurring of vision	Chest pain	right uppr quadrant p	Jaundice	H/o normal vaginal delivery	H/o Caesarean section delivery	H/o conginital disorder in the b	Pallor	Oedema	Height (Cms)	Weight (Kg)	BMI (Kg/m²)	Pulse(bpm)	Systolic	Diastolic	Antihyprtensive medication in pregnan	Magnesium sulphate taken
72	772353	23	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	142	59	29.26	82	160	90	+	+
73	778852	26	3	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	146	49	22.99	74	160	90	+	-
74	766935	25	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	148	42	19.17	74	160	90	-	+
75	766975	23	3			2	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	142	64	31.74	82	150	110	-	+
76	766920	29	3	1	1	1	-	-	-	-	-	+	-	-	-	-	+	+	-	-	-	141	68	34.20	82	170	110	-	+
77	766655	32	2			1	-	-	-	+	+	+	-	-	-	-	-	-	-	-	+	150	54	24.00	84	180	110	-	+
78	766742	22	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	152	62	26.84	84	180	120	+	+
79	766783	21	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	160	56	21.88	88	160	100	+	+
80	766701	28	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	153	65	27.77	82	140	120	-	+
81	766711	25	2	1	1		-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	154	57	24.03	84	160	90	-	-
82	766471	23	2	1	1		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	152	50	21.64	74	160	100	-	-
83	766130	30	2		1	1	-	-	-	-	-	+	-	-	-	-	+	+	-	-	-	156	66	27.12	84	140	110	+	+
84	764105	23	2	1	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	155	62	25.81	84	170	100	-	-
85	768454	25	2	1	1		-	-	-	-	-	+	+	-	-	-	+	-	-	-	+	156	61	25.07	82	170	120	+	+
86	768221	25	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	159	44	17.40	82	170	100	-	-
87	765469	26	2	1	1		+	-	-	-	-	-	-	-	-	-	-	+	-	-	-	158	56	22.43	84	160	120	-	-
88	765110	26	2			1	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	157	60	24.34	84	180	110	+	+
89	765305	26	2	1			-	-	-	-	-	+	-	-	-	-	+	+	-	-	+	156	56	23.01	88	150	110	-	+
90	765071	35	2	1			-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	159	58	22.94	84	166	90	-	+
91	765156	26	2	1	1		-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	160	58	22.66	88	180	110	-	+
92	764765	25	2		1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	58	28.76	86	180	120	+	-
93	765201	35	3	2	0		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	151	53	23.24	84	180	110	+	-
94	765741	28	4	2	2		-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	142	60	29.76	84	160	90	-	+
95	767274	25	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	142	58	28.76	84	160	90	-	-
96	767992	25	2	1	1		-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	146	64	30.02	84	160	100	-	+
97	767914	28	2			1	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	148	57	26.02	80	160	90	-	-
98	767525	22	3	2	2		-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	142	46	22.81	88	160	100	+	-
99	764170	25	2	1	1		-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	141	70	35.21	84	160	100	+	+
100	764521	28	2			1	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	150	49	21.78	84	170	110	-	+
101	764771	32	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	152	50	21.64	84	170	110	-	-
102	764776	22	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	160	69	26.95	86	150	118	-	+
103	748213	26	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	153	58	24.78	74	164	76	+	+
104	730382	28	2			1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	154	58	24.46	74	160	90	-	-
105	781476	24	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	152	62	26.84	78	160	90	-	-
106	735645	28	2	1	1		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	156	57	23.42	100	160	90	-	-
107	781850	20	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	155	59	24.56	88	164	80	+	-
108	729423	20	2	1	1		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	156	61	25.07	98	176	120	-	+
109	728287	21	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	159	43	17.01	82	180	100	-	+
110	742841	20	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	158	54	21.63	74	164	100	+	+
111	735120	24	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	157	54	21.91	82	180	116	-	-
112	727803	24	4	3	3		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	156	41	16.85	86	150	116	-	-
113	727749	20	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	159	66	26.11	74	164	76	-	-
114	727495	19	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	160	62	24.22	74	160	90	-	-
115	727496	20	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	59	29.26	78	166	90	-	-
116	727470	24	2	1	1		-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	151	61	26.75	100	166	90	+	+
117	728252	22	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	142	60	29.76	88	164	80	-	+
118	728614	27	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	142	53	26.28	98	176	120	-	-
119	728233	22	2	1	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	146	65	30.49	82	180	100	-	-
120	737220	23	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	148	64	29.22	74	164	100	-	+
121	736066	18	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	+	142	48	23.80	82	180	116	-	+
122	737182	22	2	1	1		-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	141	60	30.18	84	160	90	-	+
123	736982	25	3	1	1	1	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	150	67	29.78	74	160	100	+	+
124	736344	19	Primi	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	152	63	27.27	84	140	116	-	+
125	736719	28	4	2	2	1	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	160	46	17.97	84	170	100	-	+
126	736231	23	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	153	63	26.91	82	170	120	-	+
127	737392	18	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	154	64	26.99	82	170	100	-	+
128	736966	19	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	152	61	26.40	84	160	120	+	+
129	736982	28	3	1	1	1	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	156	47	19.31	84	180	110	-	+
130	736384	19	Primi	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	155	60	24.97	88	150	110	-	-
131	786111	22	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	63	25.89	84	166	90	-	-
132	736404	21	Primi	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	159	61	24.13	78	166	90	-	+
133	736711	20	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	158	59	23.63	100	146	110	+	-
134	736474	28	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	157	56	22.72	88	164	80	-	-
135	736180	21	Primi	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	156	53	21.78	98	176	120	-	-
136	760073	23	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	159	56	22.15	84	170	120	-	+
137	781850	25	3	2	1		-	-	-	-	-	+	-	-	-	-	-	+	+	-	-	160	58	22.66	74	160	110	-	+
138	750207	21	2	1	1		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	142	53	26.28	92	150	110	+	-
139	738689	24	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	151	61	26.75	94	160	100	-	+
140	738365	30	2	1	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	63	31.24	84	170	120	-	-
141	737372	19	Primi	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	142	68	33.72	74	160	110	-	-
142	738040	19	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	151	43	18.86	88	160	100	-	-
143	7371182	22	2	1	1		-	-	-	-	-	+	-	-	-	-	+	+	-	-	+	142	60	29.76	74	160	100	-	+
144	761004	23	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	142	54	26.78	88	160	90	+	+
145	760928	29	2	1	1		-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	146	49	22.99	74	160	100	-	-
146	760472	20	Primi	-	-	-	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	148	64	29.22	84	180	100	-	+

Serial number	Hemoglobin	Platelet count	Total bilirubin	Direct bilirubin	total proteions	Serum Albumin	Albumin Globulin ra	SGOT	SGPT	Alkaline phosphatase	Seurm urea	Serum uric acid	Serum creatinine	Urine albumin	Lactate dehydrogena	PT (sec)	aPTT (sec)	Serum fibrinogen	Time of delivery	Date of delivery	Induction	Mode of delivery	If induced, indication	If caesarean section, indication	Administration of magnesium sulphate	Maternal complications	Gestational age (week/day)	Time of birth	Sex	Weight (Kgs)	Pregnancy outcome	Did the baby cry after birth	Did the baby need resuscitation	Apgar 1 minute	Apgar 5minute	Mortality	NICU Admission	Causes of NICU Admission
72	13.1	253000	0.24	0	6.8	3.6	1.1	15	10	155	13	5.6	0.73	3+	292	0.9	0.9	458	12..58am	16/11/2016	Ind	LSCS	Severe PE	Failed induction	n	-	37+6	12.28am	f	2.3	LB	y	y	7	8	y	-	-
73	7.2	39000	0.47	0.023	4.69	2.1	0.9	210	164	83	25	7.5	0.61	trace	564	0.1	0.80	398	6.24am	6/4/2016	Sp	Vaginal	-	-	n	HELLP	38+3	6.24am	m	2.5	LB	y	y	7	9	n	-	-
74	10.5	187000	0.5	0.1	5.6	2.6	0.9	21	18	96	29	4.8	0.62	1+	278	0.9	1.2	458	9.38am	17/10/2016	Ind	LSCS	Severe PE	Failed induction	n	-	35+6	9.58am	m	2.1	LB	y	y	6	7	n	-	-
75	15.4	168000	1.67	1.36	6.4	2.7	2.7	233	267	283	52	12.8	1.67	2+	533	0.9	1.1	278	12.00am	17/10/2016	-	LSCS	-	Fetal distress	y	Renal failure	36+5	12.04am + 12.05am	f+f	1.7+1.8	Twin	y+y	y+y	5+6	5+6	y	-	-
76	14.3	200000	0.16	0.03	4.8	2.6	1.2	34	12	146	35	6.1	0.61	3+	826	1.1	1.1	363	4.51pm	16/10/2016	-	LSCS	-	Previous LSCS with severe PE	n	-	34+3	4.51pm	f	1.1	LB	y	y	7	8	y	-	-
77	12.1	226000	0.26	0.1	6.7	3.1	0.9	24	29	188	18	5.5	0.62	1+	245	0.8	1.2	263	8.26am	16/10/2016	-	LSCS	-	Imminent eclampsia	n	-	29+6	8.26am	f	0.99	END	y	y	3	4	y	+	prematurity with LBW
78	8.1	183000	0.27	0.1	5.3	2.7	1	16	36	166	19	8.8	0.64	2+	447	1.2	1.1	212	12.17pm	15/10/2016	-	LSCS	-	Antepartum eclampsia	n	-	35+8	12.17pm	f	1.8	LB	y	y	5	7	y	-	-
79	13.7	326000	0.64	0.34	6.6	3.6	1.2	108	40	268	22	12.7	0.99	1+	1250	1.2	9	313	11.20am	15/10/2016	-	LSCS	-	Antepartum eclampsia	n	-	38+2	11.20am	m	2.5	LB	y	y	4	5	n	-	-
80	13	125000	0.34	0.25	6.2	3.4	1.2	17	16	144	18	4.7	0.63	trace	241	0.9	8	320	6.20am	15/10/2016	-	LSCS	-	Fetal distress	n	-	39+4	6.30am	f	1.6	LB	y	y	7	9	y	-	-
81	10.3	173000	1.32	0.54	6	3.3	1.2	982	584	177	29	11	0.85	2+	1463	0.8	0.7	309	12.10am	15/10/2016	Ind	Vaginal	Severe PE	-	n	Pulmonary oedema	38+6	12.10am	m	2.5	LB	y	y	7	7	n	-	-
82	9.4	326000	0.37	0.11	6.1	3	1	24	6	771	10	4.3	0.57	1+	485	0.9	0.9	208	12.00am	14/10/2016	Ind	Vaginal	Severe PE with GDM	-	n	-	37+3	12.00am	m	4.9	LB	y	y	7	9	n	-	-
83	13.1	215000	0.26	0.14	6	3.3	1.2	15	11	230	12	6.1	0.61	3+	448	0.9	0.8	235	10.23am	12/10/2016	-	LSCS	-	Previous LSCS with severe PE	n	-	37	10.23am+10.24am	f	2.9	LB	y	y	7	9	n	+	prematurity
84	8.5	125000	0.34	0.2	6.2	3.4	1.2	17	16	144	19	4.6	0.53	2+	1145	1	0.9	301	9.52pm	30/4/2016	Sp	Vaginal	-	-	n	-	33+6	9.52pm	f	1.3	LB	y	y	7	8	n	-	-
85	11.6	169000	0.37	0.18	5.5	3.2	1.4	25	20	104	25	5.1	0.63	trace	274	1.2	0.8	458	5.13am	24/10/2016	-	LSCS	-	Fetal distress	n	-	38	5.13am	m	1.8	LB	y	y	7	8	y	-	-
86	10.3	223000	0.3	0.1	6.1	2.9	0.9	16	10	158	38	7.8	0.77	trace	298	1.2	0.8	398	6.12am	15/10/2016	Ind	Vaginal	IUGR with severe PE	-	n	-	32	6.25am	m	1.25	LB	y	y	5	6	n	-	-
87	12	40000	0.25	0.13	6.1	3.6	1.4	224	160	125	26	4.3	0.74	1+	775	2.5	2.5	458	6.44am	8/10/2016	-	Vaginal	-	-	n	HELLP	27	6.44am	m	0.81	END	n	n	4	7	n	+	prematurity with LBW
88	13	125000	0.34	0.2	6.2	3.4	1.2	17	16	144	18	4.7	0.63	2+	241	1.2	0.9	278	12.05am	7/10/2016	-	LSCS	-	Severe PE	n	-	36+6	12.50am	m	3	LB	y	y	7	8	n	-	-
89	11.5	389000	0.5	0.2	6.8	3.1	0.8	20	12	469	14	4.7	0.8	trace	1096	0.8	0.9	363	12.58pm	7/10/2016	-	LSCS	-	Fetal distress	n	-	38	2.58pm	m	2.9	LB	y	y	7	9	n	-	-
90	9.6	271000	0.19	0.04	8.1	3.2	0.7	14	24	102	16	3.1	0.53	2+	256	1.2	0.8	408	6.41am	6/10/2016	-	LSCS	-	Abruptio placenta	n	-	38	6.41am	m	2.8	LB	y	y	7	9	n	-	-
91	14	147000	0.21	0.15	5.4	2.5	0.9	22	17	284	15	6.6	0.7	1+	363	1.1	0.8	208	7.44pm+7.45pm	5/10/2016	-	LSCS	-	Antepartum eclampsia	n	-	34+4	7.44pm+7.45pm	f+m	1.4+1.7	Twin	y+y	y+y	6+7	6+7	n	+	Twins with prematurity LBW
92	12.5	158000	0.22	0.14	6.4	3.5	1.2	42	16	207	13	5	0.64	3+	360	0.8	0.9	403	11.30am	4/10/2016	Ind	Vaginal	Severe PE	-	n	-	36+5	11.30am	f	26	LB	y	y	7	9	n	-	-
93	12.8	267000	0.80	0.24	6.3	3.6	1.36	38	24	160	12	5.2	0.64	trace	317	0.7	0.80	448	9.02pm	6/10/2016	Sp	Vaginal	-	-	n	-	37+2	9.02pm	f	2.2	LB	y	y	7	9	n	-	-
94	10.5	157000	0.46	0.08	5.8	3	1	14	19	36	15	6.6	0.46	trace	347	0.8	1.2	425	1.02am	10/10/2016	-	LSCS	-	Severe PE	n	-	36+3	7.07am	m	2.9	LB	y	y	7	8	n	-	-
95	13.3	118000	0.21	0.11	6.5	3.6	1.2	33	13	181	67	11	1.16	2+	757	0.9	1.1	368	8.23pm	18/10/2016	Ind	Vaginal	Antepartum eclampsia	-	n	-	29+2	8.23pm	m	0.85	END	y	y	3	4	y	+	prematurity with LBW
96	12.9	7300	12.23	3.56	5.8	3.2	1.2	400	177	182	10	6.1	0.5	3+	365	0.8	1.1	278	1.04am	20/10/2016	-	LSCS	-	HELLP	y	HELLP	34+5	1.04am	m	2	LB	y	y	7	8	y	-	-
97	7.4	100000	1.16	0.45	5.2	3	1.4	300	181	161	32	7.3	0.8	1+	1006	0.9	1.1	210	2.18pm	21/10/2016	Ind	Vaginal	Severe PE	-	n	HELLP	37+1	2.18pm	f	2.3	LB	y	y	7	8	n	-	-
98	8.4	226000	0.3	0.1	5.8	3.1	1.1	20	12	148	32	3.5	0.55	trace	360	0.9	1.2	203	7.23pm	21/10/2016	Ind	Vaginal	Severe PE	-	n	-	35+1	7.23pm	f	1.8	LB	y	y	7	8	n	+	LBW with prematurity
99	6.5	228000	0.32	0.19	6.41	3.3	1.2	52	32	125	14	7.7	0.56	1+	258	1	0.8	231	12.21pm	1./10/2016	-	LSCS	-	Severe PE	n	-	36+4	12.21pm	m	2.6	LB	y	y	7	9	n	-	-
100	11.2	211000	0.5	0.1	4.7	2.2	0.9	59	19	152	18	5.8	0.6	2+	148	1.2	0.9	205	2.05pm	3/10/2016	-	LSCS	-	Antepartum eclampsia	n	-	32+1	2.05pm	m	1.6	LB	y	y	7	9	y	-	-
101	11.9	218000	0.4	0.1	6.5	3.4	1.1	16	11	170	10	5.3	0.54	1+	283	1.2	0.8	369	5.34pm	4/10/2016	Ind	Vaginal	Severe PE	-	n	-	40+2	5.34pm	m	2.6	LB	y	y	7	9	n	-	-
102	15.4	28000	12.23	3.56	5.8	3.2	1.2	255	177	182	34	7.7	0.94	3+	1895	0.96	0.8	400	11.13am	4/10/2016	-	LSCS	-	HELLP	y	HELLP	36+5	11.15AM	F	2.3	LB	Y	Y	7	9	n	-	-
103	9.2	101000	0.9	0.3	5.1	2	1	210	168	234	34	6.1	0.9	2+	414	0.9	0.9	232	9.44pm	12/7/2016	-	LSCS	-	Fetal distress	n	-	36+4	9.44pm	m	2.5	LB	y	y	7	9	n	-	-
104	15.4	67000	0.19	0.06	6.6	1.8	0.4	225	176	305	40	5.6	0.9	trace	794	0.9	0.9	365	12.45pm	15/4/2016	Ind	Vaginal	HELLP	-	n	HELLP	37+5	12.45pm	f	1.3	LB	y	y	7	8	n	-	-
105	12.1	261000	0.7	0.1	6.4	2.4	0.8	96	84	148	24	4.4	0.7	trace	146	0.9	0.8	485	12.45pm	28/12/20169	-	Vaginal	-	-	n	-	37+5		f	2.1	LB	y	y	6	8	n	+	MSL with FD
106	9.2	28000	12.23	3.56	5.8	3.2	1.2	220	167	182	34	7.7	0.94	2+	482	1.2	0.8	444	1.14am	12/5/2016	-	Vaginal	-	-	n	HELLP	39	1.14am	m	2.5	LB	y	y	7	9	n	-	-
107	15.4	101000	0.9	0.3	5.1	2	1	210	168	234	34	6.1	0.9	1+	225	1.1	0.8	458	8.01pm	9/4/2016	-	Vaginal	-	-	n	-	34	8.05pm	m	780	LB	n	n	8	9	y	-	-
108	8.8	43000	0.12	0.11	4.6	1.4	0.5	216	170	145	14	8.2	1.22	3+	335	1.2	0.9	398	2.45pm	10.4/2016	-	LSCS	-	HELLP	y	HELLP	30+5	2.42pm	m	1.4	LB	y	y	6	7	y	-	-
109	12.6	74000	7.5	0.86	7.5	3.1	0.7	208	172	316	34	6.1	0.9	trace	563	0.8	0.80	458	6.20am	3/4/2016	-	LSCS	-	HELLP	y	HELLP	36+4	6.20am	m	2.6	LB	y	y	7	9	n	-	-
110	9.2	43000	0.12	0.11	4.6	1.4	0.5	221	162	145	10	8.2	1.22	2+	354	0.9	1.2	278	10.24am	17/9/2016	-	LSCS	-	HELLP	y	HELLP	31+5	10.24am	f	1	LB	y	y	5	7	y	-	-
111	12.6	514000	7.5	0.86	7.5	3.1	0.7	85	72	316	34	6.1	0.9	1+	100	0.1	1.1	262	11.29pm	9/8/2016	-	Vaginal	-	-	n	-	38+2	11.29pm	f	2.3	LB	y	y	7	9	n	-	-
112	7.4	319000	0.5	0.25	5	2	0.6	38	16	318	25	5.3	1.1	3+	125	0.8	1.1	369	12.23am	2/4/2016	-	Vaginal	-	-	n	-	35+1	12.23am	m	2	LB	y	y	6	7	n	+	FD
113	10.1	180000	0.07	0	5.9	2.5	0.7	26	12	184	16	4.5	0.38	2+	136	1.2	0.8	358	6.52am	31/3/2016	Ind	Vaginal	Severe PE	-	n	-	40+4	6.52am	f	3.3	LB	y	y	7	9	n	-	-
114	12.8	217000	0.14	0.1	5.7	2.7	0.9	23	16	339	17	5.3	0.54	trace	258	1.2	1.2	333	5.14am	31/3/2016	-	Vaginal	-	-	n	-	40	5.14am	f	26	LB	y	y	7	9	n	-	-
115	11.8	227000	0.5	0.25	5	2	0.6	38	16	318	20	6.3	0.75	trace	275	0.9	1.1	254	3.10am	31/3/2016	Ind	Vaginal	Severe PE	-	n	-	37+2	3.10am	f	1.9	LB	y	y	7	9	n	+	MSL with FD
116	12.8	286000	0.7	0.3	6.6	2.3	0.3	10	12	371	17	4.8	0.3	trace	256	0.8	9	358	10.24apm	1/4/2016	-	LSCS	-	Previous LSCS with severe PE	n	-	39	10.24am	f	3.41	LB	y	y	7	9	n	-	-
117	7.9	215000	0.38	0.09	5.9	2.5	0.7	28	14	243	17	4.2	0.49	2+	338	0.9	8	367	5.15pm	2/4/2016	-	LSCS	-	Abruptio placenta	n	-	37+4	5.15pm	f	242	LB	y	y	7	9	n	-	-
118	10.4	256000	0.12	0.11	4.6	1.4	0.5	51	20	145	13	4.5	0.64	1+	352	0.9	0.7	458	10.15PM	5/4/2016	Sp	Vaginal	-	-	n	-	37+3	10.15pm	f	2.4	LB	y	y	7	9	n	-	-
119	4.6	208000	0.3	0.2	5.8	2.8	0.9	15	12	281	25	5.2	1.1	3+	482	1.2.	0.9	453	12.24pm	4/4/2016	Sp	Vaginal	-	-	n	-	34+3	12.24pm	f	1.7	LB	y	y	7	9	n	+	LBW with prematurity
120	12.6	514000	7.5	0.86	7.5	3.1	0.7	85	72	316	34	6.1	0.9	1+	225	1.1	0.8	458	5.15pm	19/5/2016	-	LSCS	-	Severe PE	n	-	40+6	5.15pm	f	3.2	LB	y	y	7	9	n	-	-
121	9.2	43000	0.12	0.11	4.6	1.4	0.5	226	170	145	10	8.2	1.22	trace	335	0.9	0.9	398	12.15pm	19/5/2016	-	LSCS	-	Fetal distress	y	HELLP, Abruption, Renel failure	35	12.28pm	f	1.7	LB	y	y	7	9	y	-	-
122	12.6	84000	7.5	0.86	7.5	3.1	0.7	232	174	316	34	6.1	0.9	1+	563	0.8	0.8	458	4.40pm	14/3/2016	-	LSCS	-	HELLP	y	HELLP	36+1	4.40am	m	2.8	LB	y	y	7	9	n	-	-
123	7.4	319000	0.5	0.25	5	2	0.6	38	16	318	25	5.3	1.1	trace	354	0.9	1.2	278	12.03am	18/5/2016	-	LSCS	-	Severe PE with IUGR	n	-	35+2	12.03am	m	1.7	LB	y	y	7	4	y	-	-
124	10.1	180000	0.07	0	5.9	2.5	0.7	26	12	184	16	4.5	0.38	2+	859	0.8	1.1	363	10.14am	17/5/216	-	LSCS	-	Failed induction	n	-	34+3	10.14pm	f	1.6	LB	y	y	7	9	y	-	-
125	12.8	217000	0.14	0.1	5.7	2.7	0.9	23	16	339	17	5.3	0.54	1+	128	0.9	0.8	263	12.02am	24/5/2016	-	LSCS	-	Severe PE	n	-	37+4	12.02am	m	2.3	LB	y	y	7	9	n	-	-
126	10.3	173000	1.32	0.54	6	3.3	1.2	982	584	177	29	11	0.85	3+	1245	1.2	0.9	210	4.46pm	21/5/216	-	LSCS	-	Fetal distress	n	-	32	4.46pm	m	1.3	LB	y	y	7	9	y	-	-
127	9.4	326000	0.37	0.11	6.1	3	1	24	6	771	10	4.3	0.57	2+	125	1.1	0.8	203	11.11am	20/5/2016	-	LSCS	-	Severe PE	n	-	40+2	11.11am	f	2.5	LB	y	y	7	9	n	-	-
128	13.1	215000	0.26	0.14	6	3.3	1.2	15	11	230	12	6.1	0.61	1+	129	0.9	0.8	305	12.28pm	19/5/2016	-	LSCS	-	Fetal distress	y	Abruption	35+1	12.28am	f	1.7	LB	y	y	7	9	y	-	-
129	8.5	125000	0.34	0.2	6.2	3.4	1.2	17	16	144	19	4.6	0.53	trace	482	0.8	0.9	315	12.03am	18/5/2016	-	LSCS	-	Severe PE with IUGR	n	-	35+2	12.03am	m	1.7	LB	y	y	7	9	y	-	-
130	11.6	169000	0.37	0.18	5.5	3.2	1.4	25	20	104	25	5.1	0.63	2+	225	0.9	0.80	365	10.14pm	17/5/2016	Ind	Vaginal	Severe PE	-	n	-	34+3	10.4pm	f	1.6	LB	y	y	7	9	n	+	LBW
131	10.3	223000	0.3	0.1	6.1	2.9	0.9	16	10	158	38	7.8	0.77	1+	335	0.8	1.2	425	2.10am	17/5/2016	Sp	Vaginal	-	-	n	-	34	2.10am	m	1.8	LB	y	y	7	9	n	+	LBW
132	12	40000	0.25	0.13	6.1	3.6	1.4	46	60	125	26	4.3	0.74	3+	563	1.2	1.1	458	5.13pm	10/5/2016	-	LSCS	-	Antepartum eclampsia	n	-	39	5.13pm	m	2.2	LB	y	y	7	9	y	-	-
133	13	125000	0.34	0.2	6.2	3.4	1.2	17	16	144	18	4.7	0.63	2+	354	1.2	1.1	398	11.08pm	16/5/2016	Ind	Vaginal	Postdatism	-	n	-	40	11.01pm	m	1.9	LB	y	y	7	9	n	+	LBW
134	11.5	389000	0.5	0.2	6.8	3.1	0.8	20	12	469	14	4.7	0.8	trace	256	0.9	0.8	458	12.05pm	16/5/2016	Sp	Vaginal	-	-	n	-	37+1	12.05pm	f	2.6	LB	y	y	7	9	n	-	-
135	9.6	271000	0.19	0.04	8.1	3.2	0.7	14	24	102	16	3.1	0.53	1+	147	0.8	0.9	278	9.53am	16/5/2016	Sp	Vaginal	-	-	n	-	37	9.53am	m	2.8	LB	y	y	7	9	n	-	-
136	14	147000	0.21	0.15	5.4	2.5	0.9	22	17	284	15	6.6	0.7	2+	189	0.9	1.2	363	10.10am	11/9/2016	-	LSCS	-	Failed induction	n	-	40+4	10.10am	m	3.7	LB	y	y	7	8	n	-	-
137	12.5	158000	0.22	0.14	6.4	3.5	1.2	42	16	207	13	5	0.64	1+	1045	0.9	0.8	256	10.50am	23/8/2016	-	LSCS	-	Fetal distress	n	-	37+1	10.50am	m	440	LB	y	y	4	5	n	+	FD
138	12.8	267000	0.80	0.24	6.3	3.6	1.36	38	24	160	12	5.2	0.64	3+	1189	1.2	1.1	248	2.35pm	25/7/2016	Sp	Vaginal	-	-	n	-	34+2	2.35pm	m	1.8	LB	n	n	7	8	y	-	-
139	10.5	157000	0.46	0.08	5.8	3	1	14	19	36	15	6.6	0.46	2+	247	1.1	0.8	369	1.30pm	26/5/2016	-	LSCS	-	Antepartum eclampsia	n	-	37+7	1.30pm	m	2.6	LB	y	y	7	9	n	-	-
140	13.3	118000	0.21	0.11	6.5	3.6	1.2	33	13	181	67	11	1.16	trace	139	1.2	0.8	358	10.45am	25/5/2016	-	Vaginal	-	-	n	-	36+5	10.45	m	1.5	LB	y	y	7	9	n	-	-
141	12.9	7300	12.23	3.56	5.8	3.2	1.2	245	187	182	10	6.1	0.5	2+	659	0.9	1.2	435	11.11am	20/52016	Ind	Vaginal	Severe PE	-	n	HELLP	40+2	11.11am	f	2.5	LB	y	y	7	8	n	+	MSL with FD
142	7.4	116000	1.16	0.45	5.2	3	1.4	259	181	161	32	7.3	0.8	1+	759	0.8	1.1	435	6.24am	28/12/20169	Ind	Vaginal	HELLP	-	n	HELLP	36+3	12.01am	f	2.3	LB	y	y	7	9	n	-	-
143	8.4	36000	0.3	0.1	5.8	3.1	1.1	261	172	148	32	3.5	0.55	2+	365	0.9	9	487	4.40am	19/5/2016	-	LSCS	-	HELLP	y	HELLP	36	4.40am	m	2.8	LB	y	y	7	9	n	+	MSL with FD
144	6.5	228000	0.32	0.19	6.41	3.3	1.2	52	32	125	14	7.7	0.56	3+	258	0.9	8	482	10.16am	15/9/2016	-	LSCS	-	Antepartum eclampsia	n	-	35	10.16am	m	1.8	LB	y	y	7	8	y	-	-
145	11.2	211000	0.5	0.1	4.7	2.2	0.9	59	19	152	18	5.8	0.6	trace	458	1.2	0.7	282	3.12AM	15/9/2016	Sp	Vaginal	-	-	n	-	36+6	3.12AM	M	2.1	LB	Y	Y	7	9	n	-	-
146	11.9	218000	0.4	0.1	6.5	3.4	1.1	16	11	170	10	5.3	0.54	2+	589	0.9	0.9	386	1.54PM	14/9/2016	Ind	LSCS	Severe PE	Failed induction	n	-	35+6	11.54pm	f	2.7	LB	y	y	7	9	n	-	-

ANNEXURE - V
MASTER CHART

Serial number	In patient number	Age (years)	Current pregnancy: Gravida	Para	Living	Abortion	Clinical presentation and history: History of preeclampsia	gestational diabetes mellitus	Iminent signs: abdominal pain	nausea	vomiting	Headache	Blurring of vision	Chest pain	right uppr quadrant p	Jaundice	H/o normal vaginal delivery	H/o Caesarean section delivery	H/o conginital disorder in the b	Pallor	Oedema	Anthropometry: Height (Cms)	Weight (Kg)	BMI (Kg/m^2)	Vitals: Pulse(bpm)	BP (mmHg): Systolic	Diastolic	Antihyprrtensive medication in pregnan	Magnesium sulphate taken	Investigations: Routine: Hemoglobin	Platelet count	Special investigations: Liver function test: Total bilirubin	Direct bilirubin	total proteions	Serum Albumin	Albumin Globulin ra	SGOT	SGPT	Alkaline phosphatase	Renal function tests: Seurm urea	Serum uric acid	Serum creatinine	Urine albumin	Lactate dehydrogena	DIC profile: PT (sec)	aPTT (sec)	Serum fibrinogen	Information on labour: Time of delivery	Date of delivery	Induction of labour: Induction	Mode of delivery	Information on labour: If induced, indication	If caesarean section, indication	Administration of magnesium sulphate	Maternal complications	Information of the baby: Gestational age (week/day)	Time of birth	Sex	Weight (Kgs)	Pregnancy outcome	Did the baby cry after birth	Did the baby need resuscitation	Apgar score: 1 minute	5minute	Mortality	NICU Admission	Causes of NICU Admission
147	758906	25	2		1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	63	31.24	84	180	110	-	-	15.4	28000	12.23	3.56	5.8	3.2	1.2	263	187	182	34	7.7	0.94	trace	689	1.1	0.8	296	2.52pm	14/9/2016	Sp	Vaginal	-	-	n	HELLP	29+3	2.52pm	f	1.1	END	n	n	5	7	y	+	prematurity with LBW
148	760700	20	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	141	49	24.65	84	160	110	-	+	9.2	101000	0.9	0.3	5.1	2	1	210	168	234	34	6.1	0.9	2+	482	0.8	0.9	458	10.16pm	13/9/2016	-	LSCS	-	Antepartum eclampsia	n	-	28	10.16pm	f	0.94	END	y	y	8	4	n	+	prematurity with LBW
149	760386	28	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	42	18.67	84	170	110	+	-	15.4	267000	0.19	0.06	6.6	1.8	0.4	79	46	305	40	5.6	0.9	1+	225	1.2	0.8	398	10.13pm	13/9/2016	Sp	Vaginal	-	-	n	-	35+2	10.13pm	m	2.3	LB	y	y	7	5	n	-	-
150	760630	20	Primi	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	152	64	27.70	84	180	120	-	+	12.1	261000	0.7	0.1	6.4	2.4	0.8	96	84	148	24	4.4	0.7	3+	335	1.1	0.9	458	5.56pm + 5.58 pm	13/9/2016	-	LSCS	-	Severe PE	n	-	36+5	5.56pm + 5.58pm	f	2.3 + 2.0	Twin	y+y	y+y	7+7	8+8	n	-	-
151	760451	24	3	2	1	1	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	160	61	23.83	84	170	110	-	+	9.2	28000	12.23	3.56	5.8	3.2	1.2	355	117	182	34	7.7	0.94	1+	563	0.8	0.8	278	11.00pm	12/9/2016	-	LSCS	-	Severe PE	n	-	37+1	1100pm	m	2.9	LB	y	y	7	8	n	-	-
152	760936	32	2			1	-	-	-	-	-	+	-	-	-	-	-	+	-	-	+	153	59	25.20	84	160	120	-	+	15.4	101000	0.9	0.3	5.1	2	1	210	168	234	34	6.1	0.9	trace	354	0.9	0.8	363	9.04pm	12/9/2016	-	LSCS	-	Fetal distress	n	-	38+1	9.04pm	f	2.6	LB	y	y	7	8	n	-	-
153	760251	25	2	1	1		-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	154	56	23.61	84	160	110	-	-	8.8	43000	0.12	0.11	4.6	1.4	0.5	271	180	145	14	8.2	1.22	2+	365	0.9	0.9	254	4.35pm	12/9/2016	-	Vaginal	-	-	n	HELLP	39+2	4.35pm	m	2.9	LB	y	y	7	8	n	-	-
154	781991	32	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	152	53	22.94	84	180	110	-	-	9.2	28000	12.23	3.56	5.8	3.2	1.2	210	164	182	34	7.7	0.94	trace	658	0.8	0.80	369	9.40am	10/5/2016	-	Vaginal	-	-	n	HELLP	39+4	9.40am	m	2.1	LB	n	n	6	6	y	-	-
155	733903	23	2	1	1		-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	156	56	23.01	94	156	112	-	-	12.1	161000	0.8	0.1	64	2.1	0.7	84	74	112	26	6.1	0.8	2+	458	1.2	1.2	261	6.24am	28/12/20169	-	Vaginal	-	-	n	-	39+4	39+4	f	2.3	LB	y	n	5	5	n	-	-
156	741305	22	Primi	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	155	58	24.14	82	190	126	+	-	12.2	260000	0.28	0.06	6.8	3.6	0.7	30	34	126	15	3.85	0.7	1+	356	1.2	1.1	290	7.20am	11/6/216	Ind	Vaginal	IUGR with severe PE	-	n	-	36	39+4	f	1.7	LB	y	n	7	9	n	+	IUGR with sever PE
157	781505	25	2	1	1		-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	156	53	21.78	74	156	110	-	-	10.6	324000	0.8	0.2	6.4	2.5	0.7	106	78	111	21	6.6	0.89	3+	321	0.9	1.1	368	6.24am	28/12/20169	-	Vaginal	-	-	n	-	39+4		f	1.9	LB	y	n	4	6	n	+	LBW
158	727488	24	2	1	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	159	61	24.13	84	160	110	-	-	10.5	210000	0.3	0.06	5.6	2	0.8	28	42	130	26	3.2	0.9	2+	1036	0.8	9.1	280	12.03pm	30/3/2016	Ind	Vaginal	Postdatism	-	n	-	36+6	12.03pm	m	1.6	LB	y	n	7	9	n	+	LBW with prematurity
159	725396	31	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	158	63	25.24	84	170	110	-	-	11	215000	0.17	0.1	7.2	2	0.6	22	45	130	20	2.4	0.7	trace	1155	0.9	9	240	1.55pm	31/3/2016	Ind	Vaginal	Severe PE with GDM	-	n	-	33+3	1.55am	m	2.6	LB	y	y	7	9	n	-	-
160	734986	19	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	157	64	25.96	84	180	120	-	-	11.1	211000	0.25	2.01	6.1	2.9	0.9	28	22	180	21	7.9	0.72	1+	280	0.9	0.9	247	2.54am	9/5/2016	Ind	Vaginal	Postdatism	-	n	-	39+2	2.54am	m	1.5	LB	y	y	7	9	n	+	MSL IUGR with FD
161	735023	23	Primi	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	156	43	17.67	84	170	110	-	-	7.4	70000	0.14	0.02	5.6	2	0.6	230	152	3	69	9	0.81	3+	278	9.1	32.8	597	6.24am	28/12/20169	-	Vaginal	-	-	n	HELLP,DIC	39+2		m	1.6	LB	y	n	8	8	n	-	-
162	733586	25	2	1	1		-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	159	60	23.73	74	176	110	-	-	9.4	79000	0.6	0.2	6.4	2.1	0.8	250	158	126	28	5.4	0.8	2+	261	0.92	0.96	264	4.19am	9/5/2016	Sp	Vaginal	-	-	n	HELLP	38+2	4.19am	f	3.2	LB	y	y	7	9	n	-	-
163	735820	22	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	160	54	21.09	84	160	110	+	-	9.4	174000	1.27	0.34	5.6	2.25	0.7	61	18	242	44	9	1.66	2+	1052	1.2	0.8	269	6.31pm	12/5/2016	-	Vaginal	-	-	n	-	38+5	6.31pm	f	2.3	LB	n	n	6	7	y	-	-
164	734984	24	2	1	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	49	24.30	84	160	100	-	-	13.8	174000	0.27	0.09	6.4	3.4	1.1	17	11	178	28	5	0.54	trace	145	1.1	0.9	364	9.35pm	8/5/2016	Sp	Vaginal	-	-	n	-	40	9.35pm	f	3.2	LB	y	y	7	9	n	-	-
165	734725	32	2	1	1		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	151	64	28.07	98	200	90	-	-	13	212000	0.3	0.12	62	3.2	1.1	17	19	86	26	6.1	0.66	1+	365	1.1	0.8	328	9.08pm	6/7/2016	Ind	Vaginal	Postdatism	-	n	Abruption	39+5	9.08pm	f	1.7	LB	y	y	7	9	n	+	IUGR with FD
166	734564	29	2	1	1		-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	142	64	31.74	84	170	110	-	+	13	164000	0.34	0.16	5.7	3	1.1	46	45	260	17	5.3	0.76	2+	258	0.9	0.8	310	11.07am	6/5/2016	-	LSCS	-	Previous LSCS with severe PE	n	-	37	1.07am	f	3.1	LB	y	y	7	9	n	-	-
167	734739	24	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	49	24.30	82	160	100	-	-	13.4	238000	0.43	0.24	6.2	2.4	0.6	17	11	149	12	4.4	0.44	3+	458	0.8	0.9	269	4.26pm	5/5/2016	Ind	Vaginal	Postdatism	-	n	-	38+4	4.26pm	f	2.3	LB	y	y	7	9	n	-	-
168	734191	28	2	1	1		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	146	42	19.70	84	160	120	-	-	11.6	333000	0.22	0.1	6.4	3.2	1	15	18	180	13	4.6	0.5	2+	225	1.2	0.80	489	1.27am	4/5/2016	Ind	Vaginal	Severe PE with increased res.	-	n	-	37	1.27am	f	2.8	LB	y	y	7	9	n	-	-
169	734746	23	4	1	1	2	-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	148	64	29.22	84	160	90	-	+	13.6	344000	0.19	0.12	6.4	2.9	0.8	13	15	180	14	4.8	0.53	1+	335	4.6	1.2	84	5.50am	25/12/2016	-	LSCS	-	Fetal distress	n	-	40+4	5.50am	f	2.5	LB	y	y	7	9	n	-	-
170	782304	27	Primi	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	142	68	33.72	84	160	100	+	+	10	157000	0.14	0.04	7.1	3.7	1.1	12	16	172	24	6	0.6	3+	563	0.9	1.1	256	3.26pm	25/12/2016	-	LSCS	-	Failed induction	n	-	40	3.20pm	f	2.5	LB	y	y	7	9	n	-	-
171	733839	26	2	1	1		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	141	54	27.16	84	160	90	-	-	10.3	489000	0.2	0.1	7.6	3.3	0.8	20	10	198	20	5.7	0.64	2+	354	0.8	1.1	369	11.14am	25/12/2016	Sp	Vaginal	-	-	n	Pulmonary oedema	37+6	11.14am	f	1.9	LB	y	y	7	9	n	+	FD
172	733896	21	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	62	27.56	74	160	110	-	-	12.6	206000	0.39	0.14	4.8	2.9	1.5	38	20	413	19	9.4	0.7	trace	189	0.9	0.8	458	2.05pm	3/5/2016	Sp	Vaginal	-	-	n	-	38+5	2.05pm	m	3.5	LB	y	y	7	9	n	-	-
173	733903	24	2	1	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	152	56	24.24	84	180	110	-	+	9.4	319000	0.56	0.9	4.6	3.1	0.8	25	28	126	21	5.6	0.7	2+	178	1.1	0.9	369	8.09am	2/5/2016	-	LSCS	-	Severe PE	n	-	39+5	8.09pm	f	2.7	LB	y	y	7	9	n	-	-
174	733671	32	5	2	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	160	62	24.22	82	170	100	-	-	11	270000	0.89	0.25	6.9	3.7	1.2	18	11	128	16	3.2	0.59	1+	365	1.2	1.2	254	6.24am	28/12/20169	-	Vaginal	-	-	n	-	39+5		m	2	LB	y	n	6	5	n	+	IUGR with FD
175	733575	23	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	153	57	24.35	86	160	110	-	-	11.1	232000	0.41	0.16	5.7	2.8	1	13	10	129	16	4.9	0.51	3+	258	1.2	1.1	269	12.00pm	1/5/2016	Ind	Vaginal	Severe PE	-	n	-	36	12.00pm	m	2.1	LB	y	y	7	9	n	-	-
176	773305	20	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	154	50	21.08	84	160	110	-	+	11.2	170000	0.41	0.17	5.7	3.2	1.2	15	17	168	10	5.5	0.57	3+	458	0.91	0.64	168	5.56pm	20/4/2016	Ind	LSCS	IUGR with severe PE	Failed induction	n	-	40+2	5.36pm	m	2.5	LB	y	y	7	9	n	-	-
177	773628	24	Primi	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	152	66	28.57	84	160	100	-	+	12.1	220000	0.28	0.12	6.4	3.9	1.6	19	23	18	11	4.9	0.56	2+	241	0.9	0.9	458	7.14am	21/11/16	-	LSCS	-	Anamnios	n	-	38+5	7.14pm	f	2.3	LB	y	y	7	8	n	-	-
178	773683	25	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	65	26.71	98	200	90	+	-	12.4	219000	0.34	0.1	6.6	3.6	1.2	12	10	111	21	5.6	0.6	1+	173	0.8	0.99	444	12.59pm	12/11/2016	Sp	Vaginal	-	-	n	-	37+6	12.59pm	m	2.6	LB	y	y	7	8	n	-	-
179	772905	28	2	1	1		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	155	61	25.39	84	170	110	-	+	11.2	135000	0.37	0.17	6.2	3.4	1.2	17	10	210	14	5.1	0.73	trace	465	0.8	0.8	442	4.11pm	23/11/2016	-	LSCS	-	Previous LSCS with severe PE	n	-	37	4.11pm	f	2.3	LB	y	y	7	9	n	-	-
180	774537	27	2	1	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	44	18.08	82	160	100	-	+	8.4	10200	0.85	0.35	6.3	3.4	1.1	2.36	145	178	41	7.8	0.98	3+	812	0.84	1.19	411	11.26am	27/11/2016	-	LSCS	-	Previous LSCS with severe PE	n	-	33+5	11.23am	f	1.8	LB	n	n	5	4	y	-	-
181	774415	28	2				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	140	56	28.57	84	160	120	-	+	14.6	439000	0.4	0.1	5.8	2.7	0.9	28	19	132	34	7.7	0.89	2+	438	0.81	0.95	459	7.25pm	27/11/2016	-	LSCS	-	Severe PE	n	-	32+1	7.25pm	f	1.2	LB	y	y	7	9	y	-	-
182	773241	28	2	1	1		-	-	-	-	-	-	-	+	-	-	+	-	-	-	-	142	59	29.26	84	160	90	-	-	7.3	63000	0.7	0.34	5	2.9	1.4	248	169	115	18	6.25	0.74	1+	2934	1.2	0.8	256	9.22pm	19/11/2016	Ind	Vaginal	Severe PE	-	n	HELLP	37+1	9.22pm	m	2.8	LB	y	y	7	8	n	-	-
183	772956	25	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	146	56	26.27	84	160	100	-	-	11.8	174000	0.27	0.09	6.4	3.4	1.1	17	11	178	28	5	0.54	1+	433	0.89	1.07	412	2.10am	18/11/2016	Ind	Vaginal	Severe PE	-	n	Abruption	27+6	2.10am	f	1.2	END	n	n	4	6	y	+	prematurity with LBW
184	772268	27	2	1	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	148	58	26.48	84	160	90	-	-	10.3	212000	0.3	0.12	62	3.2	1.1	17	19	86	26	6.1	0.66	1+	255	0.92	0.9	435	11.55pm	1/11/2016	Ind	Vaginal	Severe PE	-	n	-	24+3	11.55pm	m	0.6	END	n	n	8	8	y	+	prematurity with LBW
185	762569	28	2	1	1		-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	142	58	28.76	84	160	110	-	+	10.7	164000	0.34	0.16	5.7	3	1.1	46	45	260	17	5.3	0.76	1+	393	0.86	1.03	431	1.06pm	22/9/2016	-	LSCS	-	Previous LSCS with severe PE	y	Abruption	38+4	1.06pm	m	2.8	LB	y	y	7	9	n	-	-
186	761839	34	4	2	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	141	58	29.17	74	160	110	-	+	13.8	238000	0.43	0.24	6.2	2.4	0.6	17	11	149	12	4.4	0.44	1+	163	0.88	1.06	467	12.10pm	25/12/2016	-	LSCS	-	Previous LSCS with severe PE	n	-	34+5	12.10pm	m	1.9	LB	y	y	7	9	y	-	-
187	762097	20	Primi	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	150	53	23.56	84	180	110	+	+	13	333000	0.22	0.1	6.4	3.2	1	15	18	180	13	4.6	0.5	2+	361	1.1	1.1	369	43.31pm	25/12/2016	-	LSCS	-	CPD	n	-	40+3	4.31pm	m	2.6	LB	y	y	7	9	n	-	-
188	762022	25	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	152	70	30.30	84	160	110	-	+	13	344000	0.19	0.12	6.4	2.9	0.8	13	15	180	14	4.8	0.53	1+	376	0.87	1.01	499	3.50pm	25/12/2016	-	LSCS	-	Antepartum eclampsia	n	-	40+4	3.30pm	m	2.4	LB	y	y	7	9	n	-	-
189	761930	25	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	160	58	22.66	88	160	100	-	+	13.4	157000	0.14	0.04	7.1	3.7	1.1	12	16	172	24	6	0.6	3+	225	1.2	1.63	258	10.49am	25/12/2016	-	LSCS	-	Fetal distress	n	-	35+1		m	3.3	LB	y	y	7	9	n	-	-
190	761660	20	2	1	0		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	153	61	26.06	84	180	120	-	-	11.6	489000	0.2	0.1	7.6	3.3	0.8	20	10	198	20	5.7	0.64	trace	419	0.85	0.58	379	6.30pm	19/9/2016	Ind	Vaginal	Antepartum eclampsia	-	n	-	28	6.30pm	m	0.82	END	n	n	7	5	y	+	prematurity with LBW
191	761737	25	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	154	57	24.03	84	150	116	-	+	13.6	206000	0.39	0.14	4.8	2.9	1.5	38	20	413	19	9.4	0.7	2+	552	0.73	0.91	482	3.44pm	19/9/2016	-	LSCS	-	Antepartum eclampsia	n	-	33+6	3.44pm	f	2.1	LB	y	y	7	8	n	+	Preterm
192	761731	24	2	1	0		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	152	61	26.40	84	170	120	-	+	10	319000	0.56	0.9	4.6	3.1	0.8	25	28	126	21	5.6	0.7	1+	256	0.9	0.8	489	2.48pm	19/9/2016	-	LSCS	-	Abruptio placenta	n	-	39+1	2.48pm	m	3.3	LB	y	y	7	9	n	-	-
193	761675	36	2			1	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	156	59	24.24	82	170	100	-	+	10.3	270000	0.89	0.25	6.9	3.7	1.2	18	11	128	16	3.2	0.59	3+	345	0.8	0.9	482	11.31am	19/9/2016	-	LSCS	-	Fetal distress	n	-	41	11.31am	f	3.8	LB	y	y	7	9	n	-	-
194	760785	28	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	155	56	23.31	86	160	110	+	+	12.6	232000	0.41	0.16	5.7	2.8	1	13	10	129	16	4.9	0.51	3+	325	0.92	0.9	400	12.55pm	18/9/2016	-	LSCS	-	Fetal distress	n	-	36	12.55pm	f	2.3	LB	y	y	7	9	n	-	-
195	761556	21	2			1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	53	21.78	78	160	100	-	-	9.4	314000	0.16	0.12	6.2	3	0.9	15	10	313	10	3.5	0.44	2+	487	1.2	0.8	369	3.12am	18/9/2016	Sp	Vaginal	-	-	n	-	38+5	3.12am	m	3.25	LB	y	y	7	8	n	-	-
196	758815	20	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	159	56	22.15	78	160	110	-	+	11	223000	0.44	0.14	5.5	3.1	1.2	14	10	138	10	2.8	0.55	1+	252	0.92	0.9	459	9.32am	7/9/2016	-	LSCS	-	Severe PE with IUGR	n	-	39	9.32am	f	2.25	LB	y	y	7	8	n	+	FD
197	753841	24	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	158	58	23.23	84	160	110	-	-	11.1	251000	0.5	0.2	5.6	1.9	0.8	18	25	102	24	4.2	0.67	trace	201	1.2	9	256	6.00am	10/8/2016	Ind	Vaginal	IUGR with severe PE	-	n	-	39+3	6.00am	m	3	LB	y	y	7	9	n	-	-
198	755426	34	2	1	1		-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	157	53	21.50	78	160	100	-	+	14.2	254000	1.22	0.19	7	3.7	1.1	28	11	138	10	5.3	0.6	1+	408	0.9	1.2	367	7.59am	17/8/2016	-	LSCS	-	Severe PE with IUGR	y	Abruption	35+2	9.59am	f	1.8	LB	y	y	7	4	y	-	-
199	754037	25	3	2	2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	156	61	25.07	78	160	110	+	+	11	267000	12.18	0.56	5.6	3.1	1	25	28	126	20	5.6	0.7	1+	476	0.8	1.1	310	8.37pm	10/8/2016	-	LSCS	-	Severe PE	y	Abruption	37+3	8.37pm	f	2.7	LB	y	y	7	8	n	-	-
200	754394	25	2			1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	159	63	24.92	82	170	120	-	+	13.2	152000	0.24	0.15	5.9	2.8	0.9	21	28	110	21	6.2	0.65	2+	296	0.9	1.1	303	9.42pm	12/8/2016	-	LSCS	-	Severe PE	y	Abruption	32	9.42pm	m	1.5	LB	y	y	7	8	y	-	-
201	753803	32	3	2	1	1	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	160	61	23.83	82	190	100	-	+	13.4	268000	0.2	0	6	2.5	1	25	30	1.1	18	4.4	0.5	1+	141	0.9	0.8	368	12.20am	10/8/2016	-	LSCS	-	Severe PE with IUGR	n	-	32	12.20am	f	1.1	LB	y	y	6	7	y	-	-
202	753561	25	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	43	21.33	74	150	112	-	-	12	161000	2.09	0.56	5.4	2.7	1	53	26	150	41	6.3	1	2+	1063 +	1.2	0.97	368	4.38pm	9/8/2016	-	Vaginal	-	-	n	-	28+4	4.38pm	f	0.93	END	y	y	4	5	n	+	FD
203	753353	18	Primi	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	+	151	60	26.31	82	180	110	-	-	7.1	137000	0.28	0.09	6.7	3	0.8	98	80	199	13	3.4	0.27	3+	1392 +	0.9	0.94	734	6.58am	8/8/2016	Ind	Vaginal	Severe PE	-	n	-	40	6.58pm	m	2.5	LB	y	y	7	9	n	-	-
204	753039	22	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	54	26.78	78	180	110	+	+	11.4	200000	0.2	0.09	6.8	3.5	1.1	28	24	127	17	5.2	0.53	1+	337	1.1	0.89	443	7.13pm	5/8/2016	-	LSCS	-	Severe PE	n	-	35+6	7.13pm	m	1.6	LB	y	y	7	9	y	+	IUGR
205	752884	30	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	49	24.30	78	190	110	-	-	12.8	90000	0.64	0.25	5.5	2.9	1.1	228	190	171	10	11.9	0.29	2+	750	0.81	0.81	314	11.43pm	4/8/2016	Sp	Vaginal	-	-	n	HELLP	38+6	11.43pm	f	2.3	LB	y	y	7	9	n	-	-
206	752664	21	Primi	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	-	-	-	146	64	30.02	78	200	140	-	+	12.7	151000	0.4	0.17	5.4	3.2	1.5	16	15	144	17	5.6	0.57	3+	486	0.81	0.81	314	10.30pm	4/8/2016	-	LSCS	-	Imminent eclampsia	n	-	38+2	10.30pm	f	2.3	LB	y	y	7	8	n	-	-
207	752672	25	4	2	2	1	-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	148	62	28.31	78	160	90	-	+	7.3	106000	0.15	0.1	6.2	3.1	1	13	17	125	6.3	6.3	3.4	1+	270	1.1	0.8	268	9.55am	4/8/2016	-	LSCS	-	Imminent eclampsia	n	-	35+1	9.55am	f	1.6	LB	y	y	7	8	y	-	-
208	752695	29	3	1		1	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	142	49	24.30	86	180	110	-	+	13.7	200000	0.32	0.15	6.5	3.47	1.1	15	14	182	6.1	7.1	0.7	1+	322	0.91	0.97	445	5.33am	4/8/2016	-	LSCS	-	Severe PE	n	-	27+6	5.33am	f	1.2	LB	y	y	9	5	y	-	-
209	752449	24	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	141	42	21.13	78	160	110	+	+	11.3	262000	0.15	0.09	5.8	3	1.1	21	12	120	21	7.4	0.73	2+	406	0.75	0.69	419	9.07am	3/8/2016	-	LSCS	-	Antepartum eclampsia	n	-	39+1	9.07am	f	2.4	LB	y	y	7	8	n	-	-
210	752416	30	3	2	2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	64	28.44	78	180	110	-	+	13.6	1.58	0.58	0.24	6.8	3.5	1.1	15	18	2.3	12	0.38	0.56	1+	278	1.2	0.9	458	12.26am	3/8/2016	-	LSCS	-	Previous LSCS with severe PE	n	-	40	12.26am	m	2.8	LB	y	y	6	8	n	-	-
211	751958	24	3	2	2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	152	68	29.43	74	170	120	-	+	5.9	106000	0.28	0.09	5.1	2.4	0.9	28	10	181	22	7.9	5.8	trace	1784	0.86	0.8	402	11.44pm	31/7/2016	-	LSCS	-	Abruptio placenta	n	-	38+5	11.44pm	m	2.1	LB	n	n	6	6	y	-	-
212	751849	28	5	3	1	1	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	160	54	21.09	84	210	100	-	-	10.2	367000	0.37	0.12	6.2	3.1	1	25	10	86	10	4	0.49	1+	335	0.88	0.96	445	7.21pm	31/7/2016	Ind	Vaginal	Severe PE	-	n	-	32+6	7.21am	m	1.1	LB	y	y	6	8	n	+	S.IUGR
213	747288	27	2	1	1		-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	153	62	26.49	82	180	120	-	+	10.7	473000	0.2	0.12	6	2.2	0.6	30	19	266	22	6.5	0.78	3+	458	0.8	0.8	415	7.19pm	28/12/20169	-	LSCS	-	Severe PE with IUGR	n	-	35	7.19pm	m	2.1	LB	y	y	7	9	n	+	S.IUGR with LBW
214	751447	28	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	154	56	23.61	82	150	110	-	-	10.8	248000	0.23	0.1	6.3	3.3	1.1	18	29	231	12	62	0.54	1+	290	0.87	0.99	302	11.37am	29/7/2016	Ind	Vaginal	Postdatism	-	n	-	41+2	11.37am	m	50	LB	y	y	7	8	n	-	-

ANNEXURE - V
MASTER CHART

Serial number	In patient number	Age (years)	Current pregnancy: Gravida	Para	Living	Abortion	Clinical presentation and history: History of preeclampsia	gestational diabetes mellitus	Iminent signs: abdominal pain	nausea	vomiting	Headache	Blurring of vision	Chest pain	right uppr quadrant p	Jaundice	H/o normal vaginal delivery	H/o Caesarean section delivery	H/o congenital disorder in the b	Pallor	Oedema	Anthropometry: Height (Cms)	Weight (Kg)	BMI (Kg/m^2)	Vitals: Pulse(bpm)	BP (mmHg): Systolic	Diastolic	Antihyprtensive medication in pregnan	Magnesium sulphate taken
215	772136	28	Primi	-	-	-	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	152	66	28.57	82	170	110	-	-
216	772303	22	2	1	1		-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	156	57	23.42	84	160	110	-	+
217	772278	22	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	155	50	20.81	84	170	100	-	-
218	752577	25	Primi	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	156	66	27.12	82	170	120	-	-
219	782342	36	5	2	2	2	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	159	68	26.90	76	150	120	-	+
220	778434	37	2	1	1		-	-	-	-	-	-	-	-	+	-	-	-	-	-	+	158	61	24.44	78	140	120	-	-
221	782334	32	2	1	1		-	-	-	+	-	-	-	-	+	-	-	-	-	-	-	157	44	17.85	76	160	100	-	-
222	778271	32	2				-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	156	56	23.01	76	160	100	-	+
223	782250	18	Primi	-	-	-	-	-	+	-	+	-	-	+	-	-	-	-	-	-	+	159	63	24.92	76	140	118	-	+
224	776943	32	2	1		1	-	-	-	+	+	-	-	-	-	-	-	+	-	-	+	160	56	21.88	82	160	100	-	+
225	782476	34	3			1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	58	28.76	78	160	100	+	+
226	782458	33	3	1	1		-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	151	58	25.44	76	160	100	-	-
227	778341	30	2	1	1		-	-	+	-	-	-	-	-	+	-	-	-	-	-	+	142	58	28.76	78	160	100	-	-
228	778642	28	Primi				-	-	+	-	-	-	-	+	+	-	-	-	-	-	-	142	53	26.28	76	160	100	-	+
229	778453	29	2	1	1		-	-	+	-	+	-	-	-	-	-	-	+	-	-	-	146	65	30.49	78	160	100	-	-
230	782965	28	Primi	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	148	58	26.48	78	160	100	+	-
231	739441	26	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	64	31.74	76	150	118	-	+
232	783068	32	2	2	1		-	-	-	-	-	-	-	+	-	-	-	-	-	-	+	140	57	29.08	48	140	110	-	-
233	779482	25	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	61	30.25	84	150	110	-	-
234	779576	36	3	2	2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	146	59	27.68	86	150	116	-	-
235	774676	28	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	148	56	25.57	76	150	120	-	-
236	779801	27	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	53	26.28	78	160	90	-	-
237	783099	30	2	1	0		-	-	-	-	-	-	-	+	-	-	-	-	-	-	+	141	56	28.17	90	150	110	+	-
238	783192	23	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	58	25.78	76	170	90	-	-
239	783361	34	2	1	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	152	53	22.94	78	180	90	-	-
240	783361	27	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	160	61	23.83	84	150	110	-	-
241	783493	26	Primi	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	153	63	26.91	86	150	116	-	+
242	783436	35	2	1	1		-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	154	64	26.99	78	146	120	-	-
243	783328	38	3	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	152	43	18.61	76	140	120	-	-
244	783633	33	2	1	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	60	24.65	84	140	116	+	-
245	783684	23	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	155	54	22.48	78	150	114	-	+
246	778766	36	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	49	20.13	84	150	112	-	-
247	783660	34	2	1	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	159	64	25.32	84	144	110	-	+
248	783890	34	4			3	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	158	64	25.64	78	180	100	-	+
249	776410	36	3	1	1	1	-	-	+	-	+	-	-	-	-	-	-	+	-	-	-	157	49	19.88	76	150	116	-	-
250	783839	23	Primi	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	156	42	17.26	78	152	120	-	-
251	784086	28	Primi	-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	-	+	159	64	25.32	76	146	110	+	-
252	778425	33	3	2	2		-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	160	68	26.56	79	150	118	-	+
253	778635	26	Primi	-	-	-	-	-	-	+	+	-	-	-	-	+	-	-	-	-	-	142	54	26.78	76	160	90	-	-
254	776811	26	Primi	-	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	151	62	27.19	76	162	110	-	-
255	778871	26	Primi	-	-	-	-	-	-	+	-	-	-	-	+	-	-	-	-	-	+	142	56	27.77	76	160	90	-	-
256	778879	23	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	65	32.24	78	160	90	-	-
257	784152	28	2			1	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	146	57	26.74	76	160	90	-	+
258	778788	34	2	3	2		-	-	+	-	-	-	-	-	-	+	-	-	-	-	-	148	50	22.83	76	140	114	-	+
259	778542	26	Primi	-	-	-	-	-	+	-	-	-	-	-	-	+	-	-	-	-	+	142	66	32.73	76	162	90	+	-
260	777621	26	Primi	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	141	68	34.20	76	140	110	-	-
261	777576	25	3	1	1	1	-	-	-	+	-	-	-	-	+	-	-	+	-	-	-	150	61	27.11	76	146	118	-	-
262	778356	32	2			1	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	152	44	19.04	76	140	110	-	-
263	778378	27	Primi	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	+	160	56	21.88	76	160	90	-	-
264	776327	26	Primi	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	153	66	28.19	76	150	110	-	-
265	778335	26	Primi	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	154	56	23.61	76	160	100	-	+
266	778204	26	2	1	1		-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	152	58	25.10	82	140	120	-	-
267	771346	25	Primi	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	156	58	23.83	76	140	116	-	-
268	784210	28	Primi	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	+	155	58	24.14	76	160	70	+	-
269	778365	27	Primi	-	-	-	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	156	53	21.78	76	140	118	-	+
270	778225	30	Primi	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	159	70	27.69	76	152	120	-	-
271	778681	21	2	1	1		-	-	-	+	-	-	-	-	+	-	-	-	-	-	-	158	58	23.23	78	160	100	-	-
272	780085	26	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	157	68	27.59	84	156	112	-	-
273	760179	26	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	57	23.42	76	140	110	-	+
274	780381	38	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	159	67	26.50	76	140	110	-	+
275	779535	36	3	2	2		-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	160	57	22.27	68	160	110	+	-
276	779324	28	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	50	24.80	76	160	100	-	-
277	779522	26	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	151	66	28.95	76	150	110	-	-
278	779547	36	3	2	2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	68	33.72	76	150	120	-	-
279	784279	34	3	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	61	30.25	70	160	120	-	+
280	784292	27	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	146	44	20.64	76	140	110	+	+
281	779451	34	3	2	2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	148	56	25.57	76	150	110	-	-
282	779408	28	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	58	28.76	78	142	112	-	+
283	778641	28	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	140	56	28.57	82	176	110	-	-
284	778545	28	2			1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	58	28.76	90	150	110	-	-
285	778643	20	Primi	-	-	-	-	-	-	-	+	-	-	-	+	-	-	-	-	-	+	146	58	27.21	88	156	116	+	+
286	718664	28	3			2	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	148	58	26.48	92	140	110	-	-
287	778427	28	2	1	1		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	142	53	26.28	98	164	100	-	-
288	778819	25	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	141	60	30.18	80	166	90	-	-
289	778813	31	2	1	1		-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	150	58	25.78	90	164	120	-	-
290	778794	25	2	1	1		-	-	-	+	-	-	-	-	+	-	+	-	-	-	+	152	64	27.70	82	166	108	+	-
291	778781	29	2	1	1		-	-	-	+	+	-	-	-	-	-	+	-	-	-	-	160	57	22.27	84	160	90	-	-
292	778306	28	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	153	61	26.06	84	176	100	-	-

Serial number	Investigations – Routine: Hemoglobin	Platelet count	Special investigations – Liver function test: Total bilirubin	Direct bilirubin	total proteions	Serum Albumin	Albumin Globulin ra	SGOT	SGPT	Alkaline phosphatas	Renal function tests: Seurm urea	Serum uric acid	Serum creatinine	Urine albumin	Lactate dehydrogena	DIC profile: PT (sec)	aPTT (sec)	Serum fibrinogen
215	13.4	322000	0.27	0.16	6.5	2.9	0.8	33	20	3964	30	5.5	0.72	2+	450	0.9	0.8	456
216	10.3	188000	0.57	0.21	5.5	2.5	0.8	19	38	408	33	8.6	0.86	2+	704	0.78	0.86	378
217	10.6	255000	0.31	0.06	6.6	3.2	0.09	45	18	240	15	2.5	0.36	3+	256	1.1	0.9	489
218	12	136000	0.27	0.16	6.5	2.9	0.8	33	20	3964	30	5.5	0.72	3+	369	0.86	0.83	339
219	11.8	136000	0.55	0.22	5.1	15	1.4	27	13	315	12	5.4	0.63	trace	303	-0.87	0.99	400
220	12.3	216000	0.26	0.021	6.5	3.7	1.3	13	11	144	11	47.3	0.44	1+	331	0.92	0.96	764
221	7.2	146000	0.09	0.17	0.6	3.12	0.9	16	11	193	21	5.8	0.66	3+	207	1.2	1.2	369
222	1.4	248000	0.5	0.1	5.6	2.6	0.69	21	18	96	17	3.4	0.49	2+	312	0.87	0.9	357
223	9.6	200000	0.4	0.17	3.5	3.2	1.1	78	21	104	94	5.5	0.5	trace	689	1.1	1.1	489
224	11.47	277000	0.41	0.17	5.9	3.2	1.2	25	16	197	15	4.63	0.56	3+	441	0.8	1.2	480
225	7.4	70000	0.14	0.02	5.6	2	0.96	190	299	3	67	9	0.81	1+	380	0.8	0.8	268
226	9.4	238000	0.25	0.11	4.5	7.8	0.8	61	41	114	18	5.5	0.81	2+	548	0.8	1.1	369
227	10.5	710000	0.3	0.6	5.6	2	0.8	78	42	130	20	2.4	0.7	1+	280	0.9	1.2	398
228	7.2	236000	0.25	0.11	4.5	1.8	0.8	61	41	114	18	5.5	0.01	2+	607	1.2	1.1	458
229	14	252000	0.23	0.15	6.7	3.2	0.9	78	18	258	18	8	0.67	3+	441	1.1	0.9	278
230	11.4	226000	0.48	0.11	5.4	2.5	0.9	32	14	241	15	5.3	0.46	trace	670	0.9	0.8	363
231	13.8	127000	0.25	0.08	5.9	3.5	1.5	70	10	110	18	5.6	0.69	1+	697	0.92	0.84	383
232	13.3	233000	0.7	0.31	5.7	3.1	1.2	2	11	227	16	6.3	0.93	1+	498	0.8	0.8	256
233	9.3	160000	0.19	0.2	5.1	2.9	1	79	27	147	12	3.2	0.5	3+	243	0.98	0.78	201
234	7.9	121000	0.56	0.32	6.1	3.1	1.1	25	71	201	40	4.6	6.61	2+	261	1.01	0.88	212
235	11.8	138000	0.55	0.72	5.1	5.6	1.4	77	13	315	12	5.4	0.63	2+	303	0.8	0.8	215
236	9.6	226000	0.48	0.11	5.4	7.5	0.9	32	14	241	5.2	5.8	0.46	trace	620	0.9	1.2	289
237	13.9	231000	0.3	0.14	6.7	3.3	10	25	14	773	16	5.6	0.49	1+	237	1.2	1.1	278
238	8.2	255000	0.3	0.13	7.8	63.63	0.7	14	10	125	2.8	0.43	0.6	3+	260	1.1	9	215
239	15.4	168000	1.67	1.36	6.4	7.7	2.7	233	761	783	52	12.6	167	1+	878	1.1	8	201
240	14.3	200000	0.16	0.03	4.8	7.6	1.2	34	12	146	35	6	0.61	2+	826	3.1	0.7	139
241	10.5	187000	0.77	0.1	5.3	7.7	1	16	30	166	79	4.8	0.62	trace	264	1.9	0.9	299
242	14.3	236000	0.76	0.1	6.7	3.1	0.9	74	79	188	78	55	0.62	2+	568	0.8	0.8	458
243	8.1	183000	0.77	0.1	5.3	7.7	1	16	30	166	19	8.8	0.64	1+	447	0.8	0.9	398
244	13.2	205000	0.69	0.5	5.2	7.9	1.7	21	13	211	23	7.7	0.66	2+	125	1.2	0.8	458
245	9.1	277000	0.3	0.76	4.1	2.2	0.8	30	24	141	38	5.5	0.63	3+	136	1.2	1.2	278
246	13.3	118000	0.27	0.11	6.5	3.6	1.2	33	13	181	67	11	1.16	trace	478	0.9	0.8	363
247	8.8	343000	0.2	0	6.6	3.3	1.8	25	10	200	10	4.2	0.53	1+	446	0.8	1.1	289
248	11.4	248000	0.5	0.7	5.6	2.6	0.9	21	18	96	17	3.4	0.49	3+	312	0.9	0.9	272
249	8.2	255000	0.3	0.13	7.8	3.3	0.7	14	10	175	7.8	0.43	0.63	2+	760	0.9	0.8	245
250	13.9	231000	0.3	0.14	67	3.3	10	25	14	2.23	16	5.6	0.49	trace	237	1.2	1.2	278
251	11.3	189000	0.32	0.06	5.7	3	1.1	10	5	164	4	3.5	0.32	1+	730	1.1	1.1	231
252	13.1	253000	0.24	0.8	6.8	3.6	1.1	15	10	155	13	5.6	0.73	3+	792	0.9	9	201
253	11.5	38900	0.5	0.2	6.8	3.1	0.8	218	162	469	14	4.7	0.8	2+	890	0.8	8	244
254	9.6	271000	0.19	0.04	8.1	3.2	0.7	14	24	102	16	3.1	0.53	trace	568	0.9	0.7	287
255	12	49000	0.15	0.13	6.1	3.6	1.4	246	170	125	26	4.3	0.74	2+	745	0.8	0.9	299
256	13	125000	0.34	0.2	6.2	3.4	1.2	17	16	124	18	4.7	0.63	trace	741	1.2	0.8	203
257	10.3	223000	0.3	0.1	6.1	2.9	0.9	16	10	158	38	7.8	0.77	1+	798	1.1	0.9	236
258	11.6	169000	0.37	0.18	5.5	3.2	1.4	25	20	104	25	5.1	0.63	3+	274	0.8	0.8	458
259	13	12500	0.34	0.75	6.2	3.4	1.2	217	180	144	18	4.7	0.63	2+	641	0.9	1.1	398
260	10.3	173000	1.32	0.54	6	3.3	1.2	982	584	177	29	11	0.85	trace	1463	0.8	0.9	458
261	13.1	215000	0.26	0.14	6	3.3	1.2	15	11	130	12	6.1	0.61	1+	448	1.2	1.2	278
262	8.1	183000	0.24	0.1	5.3	2.7	1	16	36	166	19	8.8	0.64	2+	447	1.1	0.8	363
263	13.7	326000	0.64	0.34	6.6	3.6	1.2	108	40	268	72	12.7	0.99	3+	256	0.8	1.2	369
264	14.3	200000	0.16	0.03	4.8	2.6	12.2	54	12	146	35	0.61	0.4	trace	226	0.9	1.1	258
265	12.1	226000	0.26	0.1	6.7	3.1	0.9	24	79	18	18	5.5	0.62	2+	897	0.87	0.9	242
266	13.2	205000	0.6	0.5	5.2	2.9	1.2	21	13	711	23	7.7	0.66	1+	445	1.2	0.8	246
267	12.3	706000	0.56	0.21	6.5	3.7	1.3	13	11	144	11	4.3	0.44	1+	731	1.1	0.9	222
268	13.1	253000	12.4	0	6.8	3.6	1.1	15	10	155	13	5.6	0.73	3+	792	1.2	0.8	212
269	7.2	39000	147	6.02	4.67	2.41	0.9	158	148	83	25	4.2	101	2+	264	0.9	0.85	370
270	15.4	168000	1.67	1.3	6.1	2.7	2.7	233	267	283	52	17.8	167	trace	533	0.8	1.2	204
271	9.4	174000	1.27	0.34	5.6	2.25	0.7	61	18	242	44	9	1.66	trace	1052	0.9	1.1	218
272	11.3	189000	0.32	0.06	5.7	3	1.1	5	164	318	11	3.5	0.32	2+	230	0.8	0.8	269
273	11.4	182000	0.44	0.23	6	3.2	1.1	28	21	104	94	5.2	0.5	1+	698	0.9	0.9	222
274	11.7	277000	0.41	0.24	5.9	3.2	1.2	25	16	147	15	4.6	0.56	3+	589	0.9	0.9	289
275	14.8	16200	0.67	0.46	5.7	2.9	1	211	176	327	14	4.9	0.64	2+	799	0.8	0.8	247
276	10.7	23400	0.48	0.2	3.5	2.5	2.5	240	182	197	34	9.2	0.79	1+	361	1.2	0.9	269
277	14	252000	0.23	0.15	6.7	3.2	0.9	28	18	258	18	8	0.67	trace	361	1.1	0.9	298
278	13	127000	0.4	0.11	6.1	3.8	1.4	78	18	258	18	8	0.67	1+	441	1.2	0.8	278
279	12.2	278000	0.37	0.1	4.5	1.8	0.8	631	41	114	18	5.5	0.81	3+	408	0.9	4.6	95
280	7.2	233000	0.25	0.11	4.5	1.8	0.8	61	41	114	18	5.5	0.81	1+	507	1.2	1.2	289
281	13.1	124000	0.37	0.15	5.37	3.2	1.3	16	11	140	14	6.2	0.563	trace	253	1.1	1.1	305
282	11.3	214000	0.28	0.12	5.3	3	1.2	12	16	140	14	6.2	0.36	2+	789	1.2	1.1	289
283	11.4	146000	0.6	0.5	5.2	2.9	1.2	16	11	193	21	5.8	0.66	1+	331	0.9	0.8	247
284	13.1	220000	0.3	0.1	5.6	2.5	1.1	15	14	210	21	5.8	0.66	2+	256	11.1	9.9	47
285	11.4	248000	0.6	0.4	5.2	2.7	1.2	21	13	143	21	5.8	0.66	2+	445	0.8	0.8	287
286	13.1	226000	0.3	0.15	5.7	3.2	1.3	16	11	140	14	6.2	0.56	1+	253	0.8	0.9	258
287	10.5	138000	0.49	0.17	6.6	3.52	0.9	28	18	258	15	4.6	0.32	3+	167	0.9	0.9	364
288	10.1	146000	0.49	0.17	6.6	3.52	0.9	21	18	96	17	3.4	0.49	1+	211	1.4	1.1	261
289	8.2	187000	0.9	0.3	4.6	2.1	0.9	45	49	89	13	5.6	0.61	1+	461	1.3	1	210
290	12	160000	1.1	0.7	6.4	2.8	1.4	95	96	194	94	5.2	0.9	2+	438	0.9	0.8	201
291	8.9	217000	0.8	0.1	5.6	21	15	14	102	14	4.1	0.6	0.8	trace	365	0.8	0.8	206
292	11.2	210000	0.5	0.1	4.7	2.2	0.9	59	19	152	18	5.8	0.6	trace	458	0.9	1.2	299

Serial number	Information on labour: Time of delivery	Date of delivery	Induction of labour: Induction	Mode of delivery	Information on labour: If induced, indication	If caesarean section, indication	Administration of magnesium sulphate	Maternal complications	Information of the baby: Gestational age (week/day)	Time of birth	Sex	Weight (Kgs)	Pregnancy outcome	Did the baby cry after birth	Did the baby need resuscitation	Apgar score: 1 minute	5minute	Mortality	NICU Admission	Causes of NICU Admission
215	7.45pm	13/11/2016	Ind	Vaginal	Severe PE	-	n	-	27+5	7.45pm	f	0.74	END	n	n	5	7	y	+	prematurity with LBW
216	3.38pm	14/11/2016	-	LSCS	-	Antepartum eclampsia	n	-	38	3.38pm	m	3.3	LB	y	y	7	9	n	-	-
217	5.11pm	14/11/2016	Sp	Vaginal	-	-	n	-	24+6	5.11pm	f	0.7	END	n	n	4	6	y	+	prematurity with LBW
218	12.10pm	4/8/2016	Ind	Vaginal	IUGR with severe PE	-	n	-	37	12.16pm	f	2.2	LB	y	y	7	8	n	-	-
219	11.10am	25/12/2016	-	LSCS	-	Severe PE with GDM	n	-	40+6	11.10AM	f	1.3	LB	-	n	5	8	y	+	IUGR WITH LBW
220	6.14am	25/12/2016	Sp	Vaginal	-	-	n	-	33+2	6.14am	m	3.3	LB	y	n	5	8	n	-	-
221	6.24am	25/12/2016	Ind	Vaginal	Severe PE with increased res.	-	n	-	37		m	1.8	LB	y	n	6	5	n	+	LBW
222	10.38am	25/12/2017	-	LSCS	-	Severe PE with GDM	n	-	35+5	10.38am	m	2.6	LB	y	n	4	8	n	-	-
223	11.45am	25/12/2016	-	LSCS	-	Severe PE with IUGR	n	-	39+6	11.45zm	m	2.4	LB	y	n	4	8	n	-	-
224	11.13am	28/12/20169	-	LSCS	-	Severe PE	n	-	37+2	11.13am	f	2.3	LB	y	n	3	7	n	-	-
225	11pm	25/12/2016	-	LSCS	-	Severe PE with GDM	n	-	39+1	11pm	m	2.1	LB	y	n	5	8	n	-	-
226	6.06pm	26/12/2016	Sp	Vaginal	-	-	n	-	40	6.06pm	f	2.6	LB	y	n	5	8	n	-	-
227	9.48am	26/12/2016	Sp	Vaginal	-	-	n	-	38+5	9.48am	f	2.6	LB	y	n	5	8	n	-	-
228	6.04am	25/12/2016	-	LSCS	-	Failed induction	n	-	35	8.04am	m	3.02	LB	y	n	5	8	n	-	-
229	1.15pm	24/12/16	Sp	Vaginal	-	-	n	-	38+5	1.15pm	m	3.5	LB	y	n	5	8	n	-	-
230	11.26am	24/12/17	Sp	Vaginal	-	-	n	-	35	11.26am	f	2.6	LB	y	n	4	8	n	-	-
231	9.10pm	24/12/18	-	LSCS	-	Severe PE	n	-	35+6	9.10pm	m	2.5	LB	y	n	5	7	n	-	-
232	11.04am	24/12/2016	Sp	Vaginal	-	-	n	-	38+2	11.04am	f	2.5	LB	y	y	6	7	n	-	-
233	11.22pm	24/12/16	Sp	Vaginal	-	-	n	-	35+1	11.27pm	f	2.9	LB	y	y	7	8	n	-	-
234	6.07am	25/12/2016	Sp	Vaginal	-	-	n	Renal failure	27+6	6.07am	m	3.3	LB	y	y	6	7	n	-	-
235	10.48pm	26/12/2016	Sp	Vaginal	-	-	n	-	38+5	10.48pm	f	2.7	LB	y	n	5	7	n	-	-
236	7.50pm	22/12/2016	Sp	Vaginal	-	-	n	-	35		m	1.8	LB	y	n	8	8	n	+	LBW
237	1.32pm	28/12/20169	Sp	Vaginal	-	-	n	-	35+6	1.32pm	f	2.3	LB	y	n	5	7	n	-	-
238	12.37am	22/12/2016	-	Vaginal	-	-	n	-	38+2	12.37am	m	1.7	LB	y	n	5	7	n	+	IUGR
239	8.04am	23/12/16	Sp	Vaginal	-	-	n	-	35+6	8.04am	m	3.7	LB	y	y	6	7	n	-	-
240	4.36am	23/12/2016	-	Vaginal	-	-	n	-	38+2	4.36am	m	3.6	LB	y	y	5	6	n	-	-
241	12.47pm	22/12/2016	-	LSCS	-	Severe PE	n	-	35+6	12.47pm	f	2.2	LB	y	n	6	8	n	-	-
242	4.02am	28/12/2016	Sp	Vaginal	-	-	n	-	38+2	4.02am	m	1.7	LB	y	n	3	6	n	+	IUGR
243	6.28pm	25/12/2016	-	Vaginal	-	-	n	-	35+1	6.28pm	m	2.6	LB	y	n	5	8	n	-	-
244	8pm	23/12/2016	Sp	Vaginal	-	-	n	-	27+6	8pm	f	2.6	LB	y	n	6	8	n	-	-
245	12.52pm	26/12/2016	-	LSCS	-	Severe PE	n	-	35+1	12.52pm	m	2.7	LB	y	n	4	8	n	-	-
246	12.46pm	7/11/2016	-	Vaginal	-	-	n	-	35+1	12.46pm	m	2.8	LB	y	y	6	7	n	-	-
247	5.06am	28/12/20169	-	LSCS	-	Severe PE	n	-	40+6	5.06am	f	3.79	LB	y	y	7	8	n	-	-
248	11.00am	25/12/2016	-	LSCS	-	Severe PE	n	-	33+2	11.00am	f	2.7	LB	y	n	4	8	n	-	-
249	11.14am	28/12/20169	Sp	Vaginal	-	-	n	-	37	11.14am	m	3.7	LB	y	n	4	8	n	-	-
250	1.15pm	25/12/2016	Sp	Vaginal	-	-	n	-	35+5	1.15pm	m	900gm	LB	y	n	4	8	n	+	LBW with IUGR
251	2.52am	28/12/20169	Sp	Vaginal	-	-	n	-	39+6	2.52am	f	3	LB	y	n	4	9	n	-	-
252	5.35am	28/12/20169	-	LSCS	-	Previous LSCS with severe PE	n	-	37+2	5.35am	F	3.8	LB	y	n	3	7	n	-	-
253	10.12AM	21/12/2016	Ind	Vaginal	IUGR with severe PE	-	n	HELLP	35+5	10.12am	m	3.7	LB	y	y	5	8	n	-	-
254	6.47am	21/12/2016	Sp	Vaginal	-	-	n	-	39+6	6.47am	m	3.7	LB	y	y	5	8	n	-	-
255	1.07pm	23/12/2016	-	Vaginal	-	-	n	HELLP	37+2	1.07am	f	7.5	LB	y	y	5	8	n	-	-
256	10.12am	26/12/2016	Sp	Vaginal	-	-	n	-	38+2	10.12am	m	3.2	LB	y	y	4	8	n	-	-
257	1.03pm	7/11/2016	-	LSCS	-	Severe PE	n	-	35+6	7.03pm	f	3.7	LB	y	y	5	8	n	-	-
258	7.18am	25/12/2016	Sp	LSCS	-	Severe PE	n	-	38+2	7.18am	m	2.6	LB	y	y	4	8	n	-	-
259	9.00am	26/12/2016	Sp	Vaginal	-	-	n	HELLP	35+1	9.00am	m	3	LB	y	y	7	8	n	-	-
260	9.34am	18/12/2016	Sp	Vaginal	-	-	n	-	27+6	9.34am	m	2.7	LB	y	y	6	7	n	-	-
261	6.24am	18/12/2016	-	Vaginal	-	-	n	-	35+6		m	3.1	LB	y	n	7	8	n	-	-
262	11.56pm	25/12/2016	Sp	Vaginal	-	-	n	-	38+2	11.56pm	f	3.1	LB	y	n	4	8	n	-	-
263	11.36pm	25/12/2016	Ind	Vaginal	Severe PE with increased res.	-	n	-	35+1	11.36pm	m	2.5	LB	y	n	6	8	n	+	FD
264	4.52pm	18/12/2016	Sp	Vaginal	-	-	n	-	27+6	4.52pm	m	1.8	LB	y	n	4	8	n	-	-
265	4.28pm	18/12/2016	-	LSCS	-	Severe PE	n	-	36+1	4.28pm	m	3	LB	y	n	4	8	n	-	-
266	11.10pm	25/12/2016	Ind	Vaginal	Severe PE with increased res.	-	n	-	35+2	11.10am	f	2.2	LB	y	y	4	8	n	+	MSL with FD
267	9.12am	26/12/2016	-	Vaginal	-	-	n	-	34+3	9.12am	f	1.9	LB	y	y	5	8	n	-	-
268	6.19pm	18/12/2016	Sp	Vaginal	-	-	n	-	37+4	6.19pm	f	3	LB	y	y	4	8	n	+	FD
269	4.56pm	23/12/2016	-	LSCS	-	Severe PE	n	-	35+1	4.56pm	m	2.2	LB	y	y	4	8	n	-	-
270	6.19am	26/12/2016	Sp	Vaginal	-	-	n	-	34+3	6.19am	f	3	LB	y	y	4	8	n	-	-
271	1.25pm	7/11/2016	Sp	Vaginal	-	-	n	-	37+4	1.25pm	f	1.9	LB	y	8	5	8	n	+	MSL with FD
272	4.44pm	26/12/2016	Sp	Vaginal	-	-	n	-	35+1	4.44pm	f	3	LB	y	y	5	7	n	-	-
273	7.28pm	28/12/2016	-	LSCS	-	Antepartum eclampsia	y	Abruption	35+6	7.28pm	f	2.6	LB	y	y	6	8	n	-	-
274	5.37am	30/12/2016	-	LSCS	-	Severe PE	n	-	38+2	5.37am	m	1.9	LB	y	y	5	7	y	+	IUGR
275	8.33am	25/12/2016	Sp	Vaginal	-	-	n	Pulmonary oedema	35+1	8.33am	m	3.41	LB	y	y	5	8	n	-	-
276	9.16am	25/12/2016	Sp	Vaginal	-	-	n	HELLP	27+6	9.16am	f	1.9	LB	y	y	6	7	n	+	LBW with FD
277	1.22pm	25/12/2016	Sp	Vaginal	-	-	n	-	35+1	1.22pm	f	2.8	LB	y	y	6	7	n	-	-
278	4.50pm	25/12/2016	Sp	Vaginal	-	-	n	Pulmonary oedema	27+6	4.50pm	m	2.5	LB	y	y	7	8	n	-	-
279	6.12pm	25/12/2016	-	LSCS	-	Severe PE	y	DIC	38+2	6.12pm	m	3.3	LB	y	y	6	7	n	-	-
280	3.55am	26/12/2016	-	LSCS	-	Fetal distress	n	-	36+1	3.55am	m	3.7	LB	y	y	6	8	n	-	-
281	1.30pm	22/12/2016	Sp	Vaginal	-	-	n	-	38+2	1.03pm	m	2.7	LB	y	y	5	6	n	-	-
282	5.06pm	4/12/2016	-	LSCS	-	Fetal distress	n	-	35+1	5.06pm	m	3.1	LB	y	y	4	6	n	-	-
283	3.06am	20/12/2016	Ind	Vaginal	Severe PE	-	n	Abruption	27+6	3.06am	f	3	LB	y	y	6	7	n	-	-
284	9.12am	20/12/2016	Sp	Vaginal	-	-	n	DIC, abruption	39+4	9.12am	m	3.7	LB	y	y	5	6	n	-	-
285	9.04am	20/12/2016	Ind	LSCS	Severe PE	Failed induction	y	Abruption	37w+1d	9.04am	f	2.3	LB	y	y	5	7	n	-	-
286	11.00pm	19/12/2016	Ind	Vaginal	Severe PE with GDM	-	n	-	41w	11.00pm	m	2.9	LB	y	y	6	8	n	-	-
287	10.22pm	19/12/2016	Sp	Vaginal	-	-	n	-	39w+4d	10.22	m	4.4	LB	y	y	6	7	n	-	-
288	11.00pm	20/12/2016	-	LSCS	-	Imminent eclampsia	n	-	39w+1d	11.00pm	m	3	LB	y	y	6	7	n	-	-
289	8.57pm	20/12/2016	-	Vaginal	-	-	n	-	37w+1d	8.57pm	f	2.6	LB	y	y	5	7	n	-	-
290	7.24pm	20/12/2016	Ind	Vaginal	Postdatism	-	n	-	40w	7.24pm	m	2.5	LB	y	y	6	7	n	-	-
291	7.11pm	20/12/2016	Sp	Vaginal	-	-	n	-	41w	7.11pm	f	3.4	LB	y	y	6	7	n	-	-
292	6.43pm	20/12/2016	-	Vaginal	-	-	n	-	36w+4d	6.43pm	m	1.4	LB	y	y	5	6	n	+	MSL with FD

ANNEXURE - V
MASTER CHART

Serial number	In patient number	Age (years)	Current pregnancy				Clinical presentation and history															Anthropometry			Vitals				
			Gravida	Para	Living	Abortion	History of preeclampsia	gestational diabetes mellitus	Iminent signs: abdominal pain	nausea	vomiting	Headache	Blurring of vision	Chest pain	right uppr quadrant p	Jaundice	H/o normal vaginal delivery	H/o Caesarean section delivery	H/o conginital disorder in the b	Pallor	Oedema	Height (Cms)	Weight (Kg)	BMI (Kg/m^2)	Pulse(bpm)	BP (mmHg) Systolic	Diastolic	Antihyprtensive medication in pregnan	Magnesium sulphate taken
293	778711	32	2	1	1		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	154	59	24.88	84	168	100	-	+
294	779013	25	3	2	2		-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	152	56	24.24	84	140	110	-	-
295	779194	26	4	2	2	1	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	156	53	21.78	84	180	100	-	-
296	779169	25	3	2	2		-	-	-	+	+	-	-	-	-	-	+	-	-	-	-	155	56	23.31	84	146	110	-	-
297	779069	28	3	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	58	23.83	84	175	100	-	+
298	779146	30	Primi	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	-	159	53	20.96	78	160	100	+	+
299	779026	35	3	2	0		-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	158	61	24.44	84	160	100	-	-
300	779036	32	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	157	63	25.56	84	180	100	-	-
301	779426	27	3			2	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	156	62	25.48	84	146	116	-	-
302	779070	25	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	159	43	17.01	84	150	120	-	+
303	777492	32	Primi	-	-	-	-	-	+	-	+	-	-	-	-	-	-	+	-	-	-	160	60	23.44	74	164	100	-	-
304	778925	23	2				-	-	-	-	+	-	-	-	-	-	-	-	-	-	+	142	54	26.78	84	156	116	-	+
305	779055	29	Primi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	151	49	21.49	74	160	90	-	-
306	779058	28	2	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142	64	31.74	74	180	100	-	-
307	784131	25	2	1	1		-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	142	63	31.24	100	170	100	+	-
308	778861	36	2	1	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	146	68	31.90	70	140	120	-	+
309	776866	34	3	2	2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	148	43	19.63	64	140	118	-	-
310	778825	28	Primi	-	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	-	142	60	29.76	76	144	120	-	-
311	778867	26	Primi	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	-	+	141	54	27.16	68	148	116	-	-
312	784119	28	2	1	1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	49	21.78	76	142	120	-	+

Serial number	Investigations																		Information on labour				Information on labour	
	Routine: Hemoglobin	Platelet count	Special investigations – Liver function test: Total bilirubin	Direct bilirubin	total proteions	Serum Albumin	Albumin Globulin ra	SGOT	SGPT	Alkaline phosphatas	Renal function tests: Seurm urea	Serum uric acid	Serum creatinine	Urine albumin	Lactate dehydrogena	DIC profile: PT (sec)	aPTT (sec)	Serum fibrinogen	Time of delivery	Date of delivery	Induction of labour: Induction	Mode of delivery	If induced, indication	If caesarean section, indication
293	12.6	340000	0.8	0.1	6.5	2.5	1.1	14	18	101	40	5.6	0.9	1+	146	0.9	1.1	343	2.21pm	20/12/2016	-	LSCS	-	Severe PE with IUGR
294	8.8	43000	0.12	0.11	6.4	2.4	0.8	296	350	414	14	8.2	1.22	1+	546	1.9	1.2	156	3.06am	22/12/2016	-	Vaginal	-	-
295		340000	33	0.7	6.4	2.8	1.4	95	96	194	94	5.2	0.9	3+	987	0.8	1.2	369	1.29am	22/12/2016	Sp	Vaginal	-	-
296	9.4	101000	0.9	0.3	5.1	2	1	210	168	234	34	6.1	0.9	2+	414	1.2	0.9	387	8.58pm	22/12/2016	-	Vaginal	-	-
297	7.4	79000	1.56	0.8	6.4	2.1	1.8	156	110	280	28	5.4	1.2	2+	583	1.2	1.1	264	5.50pm	22/12/2016	-	LSCS	-	Fetal distress
298	9.4	79000	0.6	0.2	6.4	2.1	0.8	94	68	126	28	5.4	0.8	1+	261	1.1	0.8	278	4.36pm	22/12/2016	-	LSCS	-	Severe PE with GDM
299	9.4	79000	1.56	0.8	6.4	2.1	1.8	256	120	280	28	5.4	1.2	1+	879	7.1	4.5	101	3.13pm	22/12/2016	Ind	Vaginal	Severe PE	-
300	7.4	700000	0.14	0.02	5.6	2	0.6	90	99	35	6.9	9	0.81	1+	260	0.8	0.9	230	2.34pm	22/12/2016	Ind	Vaginal	Severe PE	-
301	11	215000	0.17	0.1	7.2	2	0.6	22	45	730	20	2.4	0.7	3+	286	0.9	0.46	1.84	11.16am	22/12/2016	-	Vaginal	-	-
302	10.5	210000	0.3	0.06	0.56	2	0.6	22	45	130	26	3.2	0.4	2+	280	0.8	1	195	11.03am	22/12/2016	-	LSCS	-	Previous LSCS with severe PE
303	10.6	324000	0.8	0.2	6.4	2.5	0.7	106	78	1111	21	6.6	0.89	trace	321	1.2	0.8	269	6.24am	25/12/2016	-	Vaginal	-	-
304	12.2	260000	0.28	0.06	6.8	3.6	0.7	30	34	126	15	3.87	0.7	trace	356	0.9	0.95	290	9.45am	22/12/2016	Ind	LSCS	Severe PE	Failed induction
305	12.1	161000	0.8	0.1	6.4	2.1	0.7	84	74	112	26	6.1	0.8	2+	261	1.2	1	208	9.21am	22/12/2016	Ind	Vaginal	IUGR with severe PE	-
306	7.7	45000	0.8	0.09	5.9	2.5	0.7	228	151	243	17	4.2	0.49	1+	568	1.1	0.9	287	8.42am	22/12/2016	Sp	Vaginal	-	-
307	10.4	256000	0.63	0.2	5.8	2.8	0.9	15	72	821	25	5.2	1.1	3+	104	0.8	4.1	212	8.04am	22/12/2016	Ind	Vaginal	IUGR with severe PE	-
308	10.5	157000	0.4	0.08	5	7.9	1	14	19	36	15	6.6	0.46	1+	347	0.8	0.8	253	4.40am	21/12/2016	-	LSCS	-	Severe PE
309	13.3	180000	0.21	0.4	6.5	3.6	1.2	33	13	181	67	11	1.16	2+	757	0.9	0.9	202	3.46am	21/12/2016	Sp	Vaginal	-	-
310	14	147000	0.71	0.15	5.4	2.5	0.9	22	17	284	15	6.6	6.7	1+	363	1.2	0.9	239	6.25am	21/12/2016	Sp	Vaginal	-	-
311	12.8	156000	0.72	0.14	6.4	3.5	1.2	42	16	207	13	5	0.64	3+	360	1.2	0.8	91	5.44am	21/12/2016	Sp	Vaginal	-	-
312	12.8	267000	0.8	0.24	6.3	3.6	1.36	38	24	160	12	5.2	0.64	3+	317	0.8	1.2	239	5.15am	21/12/2016	-	LSCS	-	Severe PE

Serial number	Administration of magnesium sulphate	Maternal complications	Information of the baby										NICU Admission	Causes of NICU Admission
			Gestational age (week/day)	Time of birth	Sex	Weight (Kgs)	Pregnancy outcome	Did the baby cry after birth	Did the baby need resuscitation	Apgar score: 1 minute	5minute	Mortality		
293	n	-	33w+3d	2..26pm	m	2.1	LB	y	y	4	5	n	+	FD
294	n	HELLP	38w+4d	3.06am	f	2.6	LB	y	y	6	7	n	-	-
295	n	-	39w	1.29am	m	2.8	LB	y	y	6	8	n	-	-
296	n	-	40w+2d	8.58pm	f	2.5	LB	y	y	7	8	n	-	-
297	n	-	39w	5.50pm	m	2.3	LB	y	y	7	6	n	-	-
298	n	-	39w+4d	4.36pm	f	3.8	LB	y	y	7	8	n	-	-
299	n	HELLP	36w+1d	3.13pm	m	2	LB	y	y	4	5	n	+	MSL with FD
300	n	-	40w	2.34pm	m	2.8	LB	y	y	6	7	n	-	-
301	n	-	38w+5d	11.16am	m	3.7	LB	6	7	7	8	n	-	-
302	n	-	38w+1d	11.03am	m	2.6	LB	y	y	6	7	n	-	-
303	n	-	38w+1d		m	2.1	LB	y	n	5	9	n	+	MSL with FD
304	n	-	41w+5d	9.45am	m	3.9	LB	y	y	6	8	n	-	-
305	n	-	37w	9.21am	m	1.9	LB	y	y	6	7	n	+	IUGR
306	n	HELLP	40w+1d	8.42am	f	2.5	LB	y	y	7	8	n	-	-
307	n	-	29w+4d	8.09am	f	0.9	END	n	n	4	4	n	+	IUGR
308	n	-	38+2	4.40am	m	2.6	LB	y	y	5	3	n	-	-
309	n	-	36+1	3.46am	f	3.1	LB	y	y	6	5	n	-	-
310	n	-	40w+1d	6.25am	m	3	LB	y	y	5	8	n	-	-
311	n	DIC, abruption	29w+4d	5.44am	m	1.6	LB	y	y	6	8	n	+	FD
312	y	Abruption	38w+1d	5.15am	f	3.5	LB	y	y	5	8	n	-	-