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Original Research Article

"Study On Risk Factors And Pregnancy Outcome In Pre-Eclamptic Patients: A Study in Sir Salimullah Medical College & Mitford Hospital, Dhaka, Bangladesh"

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Abstract

Introduction: Pre-eclampsia is one of the common complications of pregnancy and contributes significantly to high maternal and perinatal morbidity and mortality, especially in developing countries like Bangladesh. ***Objective:*** The aim of this study is to identify the risk factors and maternal and foetal outcomes of pre-eclampsia patients. ***Methods and Materials:*** This descriptive and observational study with data from the Department of Obstetrics and Gynaecology in Sir Salimullah Medical College and Mitford Hospital, Dhaka, during July 2011 to December 2011. Participants 123 pregnant women with pre-eclampsia included in the study. Main outcome measures Identify the risk factors associated with maternal & fetal complications, maternal and perinatal mortality & morbidity and incidence of pre-eclampsia. The patient with particular reference to age, parity, religion, occupation socioeconomic condition, gestational age, rapid weight gain, family history of hypertension and pre-eclampsia, obesity, new paternity, preexisting vascular disease, thrombophilias, previous history of pre-eclampsia, blurring of vision, pain in epigastrium, or pain in right upper quadrant, diabetes mellitus etc. ***Results:*** The incidence of pre-eclampsia is 4.3% and majority of the patients was found to be of 3rd decade. More than a half (51.2%) two third of the patient were primigravida. Maximum (65.9%) number was found in the gestational age group of 37 to 40 weeks. Lower abdominal pain 15.4%, Swelling of legs 15.4%, Headache 11.4%, less foetal movement 9.76% and Blurring of vision 8.13%. Mild pre-eclampsia was 44.0% and severe pre-eclampsia 56.0%. Fundal height had corresponded with 29 to 34 weeks in 42.0% patients, presentation was cephalic in 84.0%, fetal heart sounds was audible in 87.8% cases. The mean systolic and diastolic blood pressure was 164.76±9.34 mmHg and 101, 83±8.64 mmHg respectively and all patients had cephalic presentation. Fresh still birth was 3.5%, macerated still birth 1.8%, and Prematurity and IUGR were 7.0%. More than one third (36.4%) was low birth weight and male of female ratio of the babies were 1.1:1. According to APGAR score >7, were 51.5% and 81.8% during 1st and 5th minutes after birth respectively and 16.2% babies received neonatal resuscitation. ***Conclusion:*** Pre-eclampsia usually occurs in third trimester, and maternal outcome is better than fetal outcome although the maternal response to the treatment is in positive side.

Keywords: Preeclampsia, proteinuria, diabetes mellitus, gestational diabetes, risk factors for PE.

INTRODUCTION

Pre-eclampsia are a common disorder of pregnancy and a major cause of maternal, fetai and neonatal mortality and morbidity [1]. In Bangladesh the maternal mortality rate is unexpectedly high, i.e. 1.94/1000 live births, among the developing countries [2]. Pre-eclampsia is a multisystem pregnancy induced disorder. The exact etiology of preeclampsia is still unknown, however, many studies have demonstrated that preeclampsia is associated with failure of trophoblastic invasion of the maternal spiral arteries, leading to increased vascular resistance of the uterine arteries and decreased uteroplacental blood flow [3]. Hypertension is a primary sign of the underlying disorder, most often developing after 20 weeks of gestation flow [3]. Hypertension occurs in 7% to 9% of all pregnancies. Pre-eclampsia accounts for about 80% of these cases [4]. Chronic hypertension occurs in approximately 4% to 5% of pregnancies with 21% of these women developing superimposed pre-eclampsia

[5]. Each year worldwide close to 6, 00000 women die due to complications of pregnancy and child birth. More than 99% of these deaths occur in developing countries. And two-thirds of these deaths occur in India, Pakistan and Bangladesh. It has been estimated by World Health Organization (WHO) that worldwide approximately 60,000 women die each year from pre-eclampsia [5, 2]. Development of hypertension and proteinuria in a previously normotensive patient after 20 weeks of gestation is called preeclampsia [6]. Sometimes pre-eclampsia can develop before 20 weeks of gestation, when there are excessive hydatidiform changes in the chorionic villi [4]. Hypertension in pregnancy is defined as diastolic blood pressure of 90mmHg or more or systolic blood pressure of 140 mmHg or more after 20 wks of gestation, in women with previously normal blood pressur [6]. An increase in blood pressure by 30/15 mmHg over first trimester value is a controversial indicator. Proteinuria is defined as the excretion of SOQmg or more protein in a 24 hours specimen or 30mg/dl in a random specimen of urine [7]. Pre-eciampsia occurs in 3%-14% of all pregnancies worldwide [7]. The incidence of Preecampsia in hospital statistics varies widely from 5% to 15%.Pre-eclampsia occurs in about 6% of general population; the incidence varies with geographical location [8]. Predisposing factors are nulliparity, black race, maternal age below 20 or over 35 years, low socio-economic status, multiple gestation, hydatidiform mole, polyhydramnions, non-immune fetal hydrops, twin pregnancy, obesity, diabetes, chronic hypertension and underlying renal disease [8, 9]. Pre-eclampsia is associated with increased mortality and morbidity of both mother and baby [10-12, 1]. Preeclampsia is not a totally preventable disease [3], but it resolves completely in post-partum period in most of the cases. Despite a steady reduction in mortality from this disorder in more developed countries, it remains one of the most common causes of maternal death in developing countries. The disorder starts with a placental trigger followed by a maternal systemic response. Because both this systemic response and the women's reaction to it are inconsistent, the clinical presentation varies in time and substance, with many different organ systems affected. With the increasing understanding of the disease process, there have been advances in management, such as anti-hypertensive therapy and use of magnesium sulphate [13]. Proteinuria is extremely valuable as a prognostic sign in pre-eclampsia. Frequent monitoring of the amount of protein excreted in the urine must be a part of the evaluation of these patients. A significant increase in proteinuria indicates that the disease has worsened [6]. Early detection of risk factors of pre-eclampsia and ensuring proper antenatal care allow early diagnosis of pre-eclampsia (Broughton 2001). Careful treatment and monitoring of maternal and foetal condition will reduce maternal and foetal mortality and morbidity from pre-clampsia [10, 14].

OBJECTIVES OF THE STUDY

General Objective

- To identify the risk factors and maternal and foetal outcomes of pre-eclampsia among patients admitted in the Department of Obs and Gynae in Sir Salimullah Medical College and Mitford Hospital, Dhaka.

Specific Objectives

- To determine the incidence of admitted cases of pre-eciampsia in SSMC and MH
- To explore the risk factors of pre-eciampsia.
- To determine the maternal and foetal complications of pre-eclampsia.
- To evaluate the recent treatment modalities of pre-eclampsia.
- To identify the avoidable factors responsible for complications of pre-eclampsia to reduce mortality from pre-eclampsia.

MATERIALS AND METHODS

This descriptive and observational study with data from the Department of Obstetrics and Gynaecology in Sir Salimullah Medical College and Mitford Hospital, Dhaka, during July 2011 to December 2011. Participants: 123 pregnant women with pre-eclampsia included in the study. Main outcome measures Identify the risk factors associated with maternal & fetal complications, maternal and perinatal mortality & morbidity and incidence of pre-eclampsia.

Inclusion criteria

- Patients with blood pressure 140/90 mm Hg or more with proteinuria after 20 weeks of gestation.
- Chronic hypertension with superimposed pre-eciampsia.

Exclusion criteria

- Patients with blood pressure 140/90 mm Hg or more with no protein in urine.
- Pregnancy less than 20 weeks.
- Chronic renal diseases.

All patients who will fulfill the inclusion criteria were selected for this study. All data was collected by a pre-structured questionnaire. Patients were selected from those who were admitted in the department of Obs and Gynae of SSMC and MH during the study period. Informed written consent was taken from every patient. After discussion about the purpose and procedure of the study a detailed history was taken from the patient with particular reference to age, parity, religion, occupation socioeconomic condition, gestational age, rapid weight gain, family history of hypertension and pre-eclampsia, obesity, new paternity, preexisting vascular disease, thrombophilias, previous history of pre-eclampsia, blurring of vision, pain in epigastrium, or pain in right upper quadrant, diabetes

mellitus etc. Thereafter a complete general examination particularly appearance, blood pressure, odema, feature of severe pre-eclampsia and relevant systemic examinations was carried out carefully. Urinary protein and others laboratory investigations like haematocrit level, serum uric acid, lactate dehydrogenase, serum creatinine, blood urea, coagulation profile, ophthalmoscopic examination was done. Previous checkup reports will also be evaluated to find out any clues in favour of risk factors or diagnosis. Based on history, clinical examinations and investigations report proper treatment was provided. Lastly the incidence, risk factors and outcome was recorded in predesigned data collection sheet.

DATA COLLECTION AND ANALYSIS

The incidence, risk factors and outcome was recorded in tabulated form and analysed by statistical method. All the information was recorded in a pre-designed data collection sheet. The outcomes was analysed with SPSS 16.0. Univariate and-multivariable analyses were used to evaluate the common problems encountered in pre-eclampsia to take appropriate measures to reduce the morbidity and mortality during this period. Pless than 0.05 was consider statistically significant.

OBSERVATIONS AND RESULTS

During the study period, a total of 5347 pregnant women were admitted. Among them, 231 pregnant mothers presented with pre-eclampsia. So the hospital incidence of pce-eclampsia was 4.3%. Out of 231 pre-eclamptic patients, 123 were enrolled for this study [Table-1].

Table-I: Hospital incidence of pre-eclampsia (n=231)

Total number of obstetric patients	Total number of pre-eclamptic patients	Percentage
5347	231	4.3

Table-2: Age distribution of pre eclamptic patients (n=123)

Age (in years)	Number of patient	Percentage
<20	39	31.7
21-25	36	29.3
26-30	33	26.8
31-35	15	12.2
Mean ±SD	'	24.83±5,01
Range (min-max)		(18-35)

The above [Table-2] shows the incidence of preeclampsia in different age groups of study population. Majority that is 39 (31.7%) of pre-eclamptic patients were found in the age group of ^ 20 years. The mean age was 24.83±5.01 years with range from 18 to 35 years.

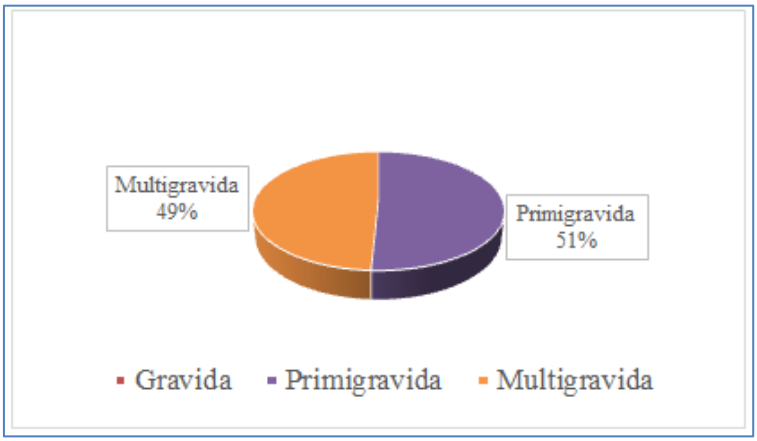

Fig-1: Parity and gravida of study population (n=123)

It was found that more than half of patients (51.2%) were primigravida and (48.8%) were multigravid patients [Figure-1].

Table-3: Gestationsl age among study patients (n=123)

Gestational age (week)	Number of patients	Percentage
<37	42	34.1
>37	81	65.9
Mean±SD	37.2±5.64	
Range (min-max)	(35-40)	

The above [Table-3] shows the gestational age of the study patients. Maximum gestational age was found 81 (65.9%) in >37 weeks. The mean gestational age was found 37.2±5.64 with range from 35 to 40 weeks.

Table-4: Chief complaints of the patients (n=123)

Complaints	Number of patients	Percentage
Headache	14	11.4
No Fetal movement	2	1.63
Lower abdominal pain	19	15.4
Less foetal movement	12	9.76
Blurring of vision	10	8.13
Swelling of legs	19	15.4
Vomiting	4	3.25
PA/ watery discharge	7	5.69
Swelling of vulva	5	4.07
PA/ bleeding	4	3.25
Swelling of face	9	7.32
Pallor	6	4.88
Sevre epigastric pain	6	4.88
General weakness	3	2.44
Respiratory distress	3	2.44

Among the studied patients highest percentage had complaints of swelling of legs and lower abdominal pain 19 (15.4%). Next complains were headache 14 (11.4%) and then it was less foetal movement 12 (9.76%). Other results are depicted in the [Table-4].

Table-5: Classification according to severity of the disease (n=123)

Severity of pre-eclamptic	Number of patients	Percentage
Mild	54	44.0
Severe	69	56.0

It was found that 54 (44.0%) of the studied patients had mild pre-eclampsia and 69 (56.0%) DF them had severe pre-eclampsia [Table-5].

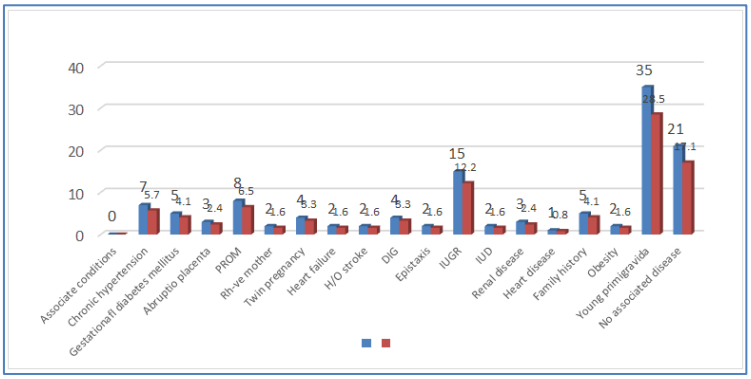

Fig-2: Distribution of associated of clinical conditions (n=123)

Out of total 123 preclamptic patients, 21 (17.1%) had no associated clinical conditions. 7 (5.7%) had chronic hypertension, 5 (4.1%) had gestational diabetes mellitus, 8 (6.5%) had PROM, 15 (12.2%) had IUGR, 3 (2.4%) abruptio placenta, 2 (1.6%) had IUD, 5 (4.1%) had family history, 35 (28.5%) young primigravida associated with pre-eclampsia [Figure-2].

Table-6: Per abdominal findings of the patients (n=123)

Parameters	Number of patients	Percentage
Fundal height (weeks)		
20-28 weeks	39	32.0
29-34	52	42.0
35-40	32	26.0
Lie		
Longitudinal	120	97.6
Transverse	2	1.6
Others	1	0.8
Presentation		
Cephalic	103	84.0
Breech	20	16.0
Foetal heart sound		
Present	108	87.8
Absent	2	1.6

Per abdominal examination revealed that, 52 (42.0%) patient's fundal height had corresponded with 29 to 34 weeks. Presentation was cephalic in 103 (84.0%), fetal heart sounds was audible in 108 (87.8%) cases [Table-6].

Table-7: Mean of systolic and mean of diastolic blood pressure of the patients (n=123)

Blood pressure (mmHg)	Mean±SD	Range (min-max)
Systolic bio9d pressure Diastolic blood pressure	164.76±9.34 101.83±8.64	(140-200) (90-120)

The mean systolic blood pressure was 164.76+9.34 mmHg with range from 140 to 200 mmHg. The mean diastolic blood pressure was 101.83+8.64 mmHg with range from 90 to 120 mmHg [Table-7].

Table-8: Distribution of assessment of fetal movement and amniotic fluid volume (n=123)

Per abdominal examination	Number of patients	Percentage
Volume of the amniotic fluid		
Seems to be adequate	39	39.4
Seem to be less (mild)	42	42.4
Seems to be less (severe)	12	12.1
Seems to be more	6	6.1
Foetal movement		
Present	109	88.6
Less	12	9.8
Absent	2	1.6

The above [Table-8] shows that, most of the patients had amniotic fluid volume seem to be less (mild) 42 (42.4%). In the foetal movement, present was found in 109 (88.6%) and less in 12 (9.8%) patients.

Table-9: Results of bedside heat coagulation test of urine among these patients (n=123)

Heat coagulation test	Number of patients	Percentage
+	27	22.0
++	51	41.5
+++	36	29.3
++++	9	7.3

The above [Table-9] shows that all of the patients had proteinuria. It was "+" in 27 (22.0%) case and was"++++" in 9 (7.3%) cases.

Table-10: Important biochemical findings in the study population (n=123)

Parameters	Number of patients	Percentage
Blood Urea		
<20 mg/dl	96	78.0
>20 mg/dl	27	22.0
Serum creatinine		
<0.8 mg/dl	84	68.0
>0.8 mg/d!	39	32.0
Serum uric acid		
<6 mg/dl	69	56.0
>6 mg/di	54	44.0

The above [Table-10] shows that 27 (22.0%) had blood urea level >20 mg/dl, 39 (32.0%) patients had serum creatinine level £0.8 mg/dl and 54 (44.0%) had serum uric acid level >6 mg/dl.

Table-11: Number (%) of the patients received magnesium sulphate (n=123)

Magnesium sulphate	Number of patients	Percentage
Yes	96	78.0
No	27	22.0

The above [Table-11] shows that 96 (78.0%) patients received magnesium sulphate.

Table-12: Mode of termination of pregnancy/mode of delivery of study population (n=123)

Mode of delivery	Number of patients	Percentage
LUCS	76	62.0
Vaginal delivery	37	30.0
Spontaneous Abortion	10	8.0

It was found that out of t23 patients, 76 (62.0%) delivered by lower uterine caesarian section, 37 (30.0%) patients delivered by vaginal delivery, 10 (8.0%) had spontaneous abortion [Table-12].

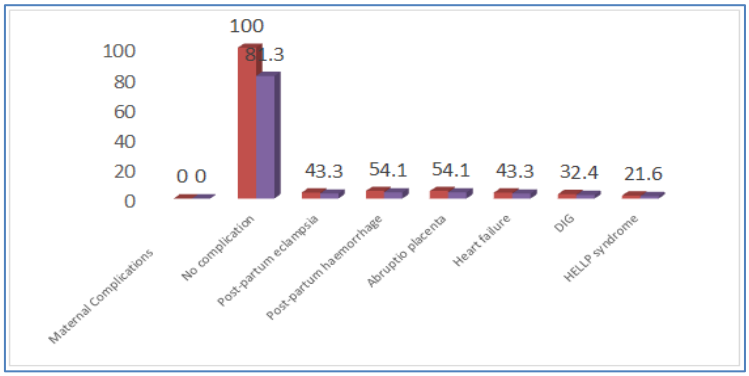

Fig-3: Incidence of maternal complications (n=123)

It was found that out of 123 patients 100 (81.3%) had no complication following delivery, 4 (3.3%) had post-partum eclampsia, 5 (4.1%) had post-partum haemorrhage, 5 (4.1%) had abruption placenta, 4 (3.3%) had heart failure, 3 (2.4%) had DIG and 2 (1.6%) had HELLP syndrome [Figure-3].

Table-13: Maternal outcome of the study population (n=123)

Maternal outcome	Number of patients	Percentage
Clinical improvement after delivery	103	83.7
PPH	5	4.1
Post-partum eclampsia	4	3.3
HELLP syndrome	2	1.6
DIG	3	2.4
Heart failure	4	3.3

The above [Table-13] shows the maternal outcome of the study populatios. Clinical improvement were found in 103 (83.7%), 5 (4.1%) PPH, 4 (3.3%) post-partum eclampsia, 2 (1.6%) HELLP syndrome, 3 (2.4%) DIG and 4 (3.3%) heart failure.

Table-14: Foetal outcome of the pre eclamptic patients (n=113)

Parameters	Number of patients	Percentage
Live birth	99	87.6
Fresh still birth	4	3.5
Macerated still birth	2	1.8
Prematurity	4	3.5
IUGR	4	3.5

Above [Table-14] shows that preeclamptic mothers delivered live born fetuses 99 (87.6%), fresh still birth was 4 (3.5%), macerated still birth 2 (1.8%) and Prematurity and IUGR were 8 (7.0%).

Table-15: Distribution of the parameter of foetal weight and foetal sex (n=99)

Foetal outcome	Number of patients	Percentage
Weight (Kg)		
Extremely low birth weight (ELBW)	3	3.0
Very low birth weight (VLBW)	6	6.1
Low birth weight (LBW)	27	27.3
Normal birth weight	63	63.6
Sex		
Male	57	51.4
Female	54	48.6

Extremely low birth weight (ELBW) means foetal weight is < 1000 grams or 2.2 Ibs Very low birth weight (VLBW) means foetal weight is <1500 grams or 3.3 Ibs Low birth weight (LBW) means foetal weight is < 2500 grams or 5.5 Ibs. Normal birth weight means foetal weight is > 2500 grams or 5.5 Ibs. Maximum babies 63 (63.6%) were of normal birth weight, 3% of babies had extremely low birth weight, 6.1% had very low birth weight and 27.3% were of low birth weight. Male of female ratio of the babies were 1.1:1 [Table-15]

Table-16: Distribution of APGAR score of the newborn babies (n=99)

APGAR score (minute)	Number of patients	Percentage
After 1 minute		
1-3	3	3.0
4-6	45	45.5
27	51	51.5
After 5 minute		
0-3	12	12.1
4-7	6	6.1
>7	81	81.8

Above [Table-16] shows that majority of the newborn babies had APGAR score after 1 minute >7, which was 51 (51.5%). After 5 minutes APGAR score >7, which was observed in 81 (81.8%).

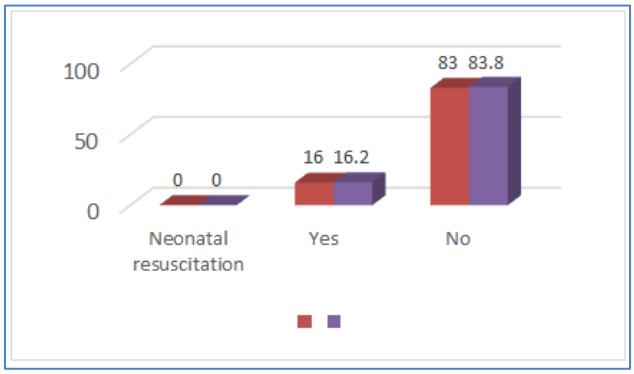

Fig-4: Babies needed neonatal resuscitation (n=99)

The above table shows the number of percentage of babies received neonatal resuscitation was 16 (16.2%) [Figure-4]

DISCUSSION

This descriptive and observational study was carried out with an aim to identify the risk factors and maternal and foetal outcomes of pre-eclampsia arflong patients as well as the incidence of pre-eclampsia; explore the risk factors of pre-eclampsia with maternal and foetal morbidity and mortality. A total of 123 pregnant women with pre-eclampsia 35 to 40 weeks of gestation were included in the study who were admitted in the Department of Obstetrics and Gynaecology in Sir Salimullah Medical College and Mitford Hospital, Dhaka, during July 2011 to December 2011. The present study findings were discussed and compared with previously published relevant studies. In this current study, a total of 5347 obstetrics cases were admitted in the above mentioned hospital during the study period, out of which 231 cases were prelampsia, therefore, the incidence of preeclampsia is 4.3%. The global incidence of preeclampsia has been estimated at 5-14% of all pregnancies. In developing nations, the incidence of the disease is reported to be 4-18% [15]. Worldwide, the incidence of preeclampsia ranges between 2% and 10% of pregnancies. The incidence of preeclampsia, the precursor to eclampsia, varies greatly worldwide. WHO estimates the incidence of preeclampsia to be seven times higher in developing countries (2.8% of live births) than in developed countries 0.4% [16]. The incidence of eclampsia in the developed countries of North America and Europe is similar and estimated to be about 5-7 cases per 10,000 deliveries. Vatten and Skjaerven, mentioned in their study that the incidence of preeclampsia in the United States is estimated to range from 2% to 6% in healthy, nulliparous women [17]. On the other hand, incidence of eclampsia in developing nations varies widely, ranging from 1 case per 100 pregnancies to 1 case per 1700 pregnancies [18]. Rates from African countries such as South Africa, Egypt, Tanzania, and Ethiopia vary from 1.8% to 7.1% [19]. In Nigeria, prevalence ranges between 2% to 16.7% [20]. In this study it was observed that the mean age was 24.83+5.01 years with range from 18 to 35 years and the maximum number was found in the age group of <20 years. In this current study it was observed that the studied patients highest percentage had complaints of swelling of legs and lower abdominal pain 15.4% followed by headach'e 11.4%, less foetal movement 9.76%, Blurring of vision 8.13%, swelling of face 7.32%, PA/ watery discharge 5.69% and Pallor, Severe epigastric pain, swelling of vulva, vomiting, PA/ bleeding, genera, weakness, respiratory distress, no fetal movement varied from 1.0% to 5.0%. Regarding the associated clinical conditions and risk factors in this current study, it was observed that 12.2% IUGR, 6.5% PROM, 5.7% chronic hypertension, 4.1% gestational diabetes mellitus, Twin pregnancy/DIC 3.3% and abruptio placenta, renal disease, rh-ve mother, heart failure, H/O stroke Epistaxis, IUD, family history 5(4.1%), obesity 2(1.6%), young primigravida 35(28.5%) heart disease were within 2.5%. Holzgreve *et al.* mentioned that maternal fetal cell trafficking is significantly disturbed in pregnancies complicated by preeclampsia, with elevated numbers of fetal cells detected in the maternal circulation during these pregnancies [21]. Similarly, Yie *et al*. found almost 50.0% patients had mild preeclampsia and 50.0% had severe pre-eclampsia, which is comparable with the current study [22]. On the other hand [23], showed 60.8% mild pre-eclampsia and 39.2% severe pre-eclampsia. Severe pre-eclampsia was comparatively higher in the current study, which may due to the lack of knowledge about pre-eclampsia in our study patients. Per abdominal examination revealed in this current study those 42.0% patients fundal height had corresponded with 29 to 34 weeks, presentation was cephalic in 84.0% and fetal heart sounds was audible in 87.8% cases. In this present study it was observed that the systolic blood pressure varied from 140 to 200 mmHg and diastolic blood pressure 90 to 120 mmHg. The mean systolic blood pressure was 164.76 ±9.34 mmHg and diastolic blood pressure 101.83±8.64 mmHg. Maximum patients had high systolic and diastolic blood pressure. Similar observations regarding the blood pressure were also made by [24]. Hall and Odendal, had observed the mean systolic and diastoiic blood pressure were 154+16 mmHg and 101±8 mmHg respectively, which support

the current study [25]. In this present series it was 'observed that 22.0% showed levels of proteinuria +, 41.5 percent ++ and 29.3 percent +++ and 7.3 percent Blood urea level >20 mg/dl was in 22.0%, serum creatinine level £0.8 mg/dl in 32.0%, serum uric acid level >6 mg/dl in 44.0% and nearly eighty (78.0%) percent patients received magnesium sulphate. On the other hand, Gartner *et al*. observed 57.0% of the patients were normal vaginal delivery. It was observed in this study that most (81.3%) of the patients had no complain, 3.3% had post-partum eclampsia, 4.1% had post-partum haemorrhage, 4.1% had abruption placenta, 3.3% had Heart failure, 2.4% had DIG and 1.6% had HELLP syndrome. Almost similar observations regarding the maternal outcome were made by [25]. It was observed in this study that Clinical improvement were found in 83.7%, 4.1% PPH, 3.3% post-partum eclampsia, 1.6% HELLP syndrome, 2.4% DIG and 3.3% Heart failure. In this series it was observed that more than one third (36.4%) babies had low birth weight, out of which 3.0% of babies were extremely low birth weight, 6.1% very low birth weight, 27.3% were of low birth weight and 63.6% were of normal birth weight [26], observed mean (±SD) birth weight was 2.8 ±0.8 kg, which is comparable with the current study. In this current study it was observed that male of female ratio was 1.1:1 of the babies were. Hall and Odendai, who had observed in their studies, the APGAR score > 6 found in 94.0% of the new born during 5th minute after birth [25]. In the present study it was observed that APGAR score >7 were 51.5% and 81.8% at 1st and 5th minutes after birth respectively. The results of the current study are comparable with the above mentioned study. In this study it was observed that 16.2% babies received neonatal resuscitation.

CONCLUSION

This study was undertaken to identify the risk factors and maternal and foetal outcomes of pre-eciampsia patients as well as the incidence of pre-eclampsia; .explore the risk factors of pre-eclampsia with maternal and foetal morbidity and mortality. A total of 123 pregnant women with pre-eclampsia 35 to 40 weeks of gestation who were admitted in the Department of Obstetrics and Gynaecology in Sir Salimullah Medical College and Mitford Hospital, Dhaka, during July 2011 to December 2011. The incidence of preeclampsia in this study was 4.3%. Maximum women with pre-eclampsia was belongs to 3rd decade. Majority of the patients were primipara and majority of the patients was between 37 to 40 weeks of gestation. Lower abdominal pain, swelling of legs, Headache, Less foetal movement, IUGR, PROM and Chronic hypertension were more common. Premature rupture of membrane, vaginal/perineal tear and impending eclampsia were more common of the study patients and preterm, IUGR, asphyxia are more frequent fetal complications, however neonatal resuscitation and admission in paediatric department needed for some newborn. Maternal outcome is better than fetal outcome although the maternal response to the treatment is in positive side.

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