

Postpartum Hypertension in a Tertiary Care Hospital: Clinical Presentation, Management, and Short-Term Maternal Outcomes in Bangladesh

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Abstract

Background: Postpartum hypertension is a leading contributor to maternal morbidity and mortality globally, especially in low- and middle-income countries. Severe postpartum hypertension often requires patients to be admitted to intensive care units (ICU) or high-dependency units (HDU) for close monitoring and management. However, data on clinical profile, management pattern, and short-term outcome of postpartum hypertension are still scarce in Bangladesh. **Objective:** To describe the presentation, management, and short-term maternal outcomes of women admitted to ICU/HDU with postpartum hypertension and to identify factors associated with blood pressure control. **Methods:** This prospective observational study was conducted at Ad-Din Women's Medical College Hospital, Dhaka, Bangladesh. Fifty postpartum women with hypertension admitted consecutively to the ICU/HDU were enrolled. Demographic, obstetric, clinical, laboratory, treatment-related, and outcome data were collected using a structured data collection form. The primary outcome was blood pressure control within 24 hours of treatment initiation. Data were analyzed using descriptive statistics, Chi-square or Fisher's exact test, and exploratory binary logistic regression. **Results:** The mean age was 27.04 years $\pm$ 6.07 years, and most women were multiparous (60.0%), delivered by caesarean section (94.0%), and admitted on postpartum day 2 (92.0%). Preeclampsia accounted for 88.0% of cases and eclampsia for 12.0%. Severe hypertension was

present in 58.0% of patients. Overall, 72.0% achieved blood pressure control within 24 hours. Baseline systolic blood pressure was the only independent predictor of 24-hour BP control (AOR = 0.95, 95% CI: 0.91 - 0.99; $p = 0.018$). Most patients improved and were discharged (96.0%), with no maternal deaths. **Conclusions:** Postpartum hypertension necessitating ICU/HDU hospitalisation was mostly linked to preeclampsia and early postpartum onset. Short-term maternal outcomes were favourable, with clinical improvement in the majority of patients and no maternal deaths, following prompt protocol-based antihypertensive therapy; the observational design, however, does not allow these outcomes to be causally attributed to any specific treatment. Timely identification, immediate antihypertensive medication, and vigilant monitoring may enhance maternal outcomes and mitigate hypertension complications.

Keywords

Postpartum Hypertension, Preeclampsia, Eclampsia, High-Dependency Unit, Antihypertensive Therapy, Maternal Outcomes, Bangladesh

1. Introduction

Hypertension affects approximately 5% - 10% of all pregnancies and remains one of the leading causes of maternal and fetal morbidity and mortality worldwide. Effective management of hypertension in pregnancy has been shown to improve maternal and foetal outcomes. But the postpartum period is also important, because blood pressure usually peaks after delivery, and a large proportion of maternal deaths associated with hypertension occur during this time. Serious complications, including stroke, heart failure, and cardiomyopathy, are important contributors to postpartum morbidity and mortality [1].

According to the World Health Organization (WHO), approximately 358,000 women die each year from pregnancy-related complications. Ninety-nine percent of these maternal deaths occur in developing countries such as Bangladesh. Hypertensive disorders, such as pregnancy-induced hypertension, are associated with almost 12% of maternal deaths. Hypertensive disorders accounted for 6.6% of deaths during pregnancy, 9.3% of deaths within 42 days of pregnancy, and 5.4% of deaths between 42 days and 1 year postpartum, as recently reported by the Centers for Disease Control and Prevention (CDC) [2].

Hypertension in pregnancy is defined as blood pressure measurements of systolic blood pressure (SBP) ≥ 140 mmHg and/or diastolic blood pressure (DBP) ≥ 90 mmHg on two measurements at an interval of 4 h. SBP ≥ 160 mmHg and/or DBP ≥ 110 mmHg on two measurements at 15 - 20 min apart define severe hypertension and require immediate treatment to avoid serious complications [3].

Postpartum hypertension is largely driven by the pathophysiological mechanisms underlying hypertensive disorders of pregnancy (HDP), including gestational hypertension and preeclampsia. In normal pregnancy, blood pressure de-

clines during early gestation due to reduced systemic vascular resistance; however, women who develop HDP often exhibit a blunted decline or an early rise in blood pressure, reflecting underlying vascular dysfunction and increased cardiovascular risk. Abnormal placentation, characterized by inadequate trophoblastic invasion and impaired remodeling of the spiral arteries, plays a central role in the development of HDP. This leads to placental ischemia and the release of anti-angiogenic factors such as soluble fms-like tyrosine kinase-1 (sFlt-1) and soluble endoglin (sEng), resulting in endothelial dysfunction, vasoconstriction, and hypertension. Systemic inflammation and altered natriuretic peptide signaling may further contribute to disease progression [1].

Postpartum management of hypertensive disorders of pregnancy focuses on rapid blood pressure control, seizure prevention, and close maternal monitoring. Management relies on oral and intravenous antihypertensive agents, together with magnesium sulfate when indicated. Admission to ICU/HDU for hypertensive disorders of pregnancy is associated with significant maternal morbidity and, in some cases, maternal mortality. Early recognition and standardized management protocols are essential. Evidence from tertiary care settings highlights specific predictors of adverse outcomes and suggests that effective utilization of HDU services can reduce the need for ICU admission while maintaining quality care [4].

2. Methods

2.1. Study Design and Setting

This was a prospective observational study with descriptive and exploratory analytical components, conducted at Ad-Din Women's Medical College Hospital (AWMCH), Dhaka, Bangladesh, from August 2025 to February 2026. AWMCH is a tertiary-level specialised women's healthcare institution providing comprehensive obstetric and gynaecological services. The hospital has dedicated critical care facilities comprising 10 Intensive Care Unit (ICU) beds and 12 High Dependency Unit (HDU) beds for the management of critically ill obstetric patients. The study included postpartum women admitted with hypertensive disorders requiring ICU/HDU-level care during the study period.

2.2. Study Population and Eligibility Criteria

The study population comprised postpartum women admitted to the ICU or HDU with hypertension during the study period. Eligible participants were women aged 18 years or older who were within 6 weeks postpartum and had hypertension, defined as systolic blood pressure ≥ 140 mmHg and/or diastolic blood pressure ≥ 90 mmHg, requiring ICU or HDU admission for the management of postpartum hypertensive complications. Women with known chronic hypertension diagnosed before pregnancy, hypertension due to non-obstetric medical conditions, or incomplete clinical records that prevented adequate data collection were excluded from the study. Eligible women were admitted to the ICU or HDU either directly

from the obstetric operating theatre or labour ward following delivery at AWMCH, transferred from the postnatal wards when hypertension developed or worsened after an initial ward admission, or received as referrals from lower-level facilities. In accordance with the institutional protocol, critical-care admission was indicated by severe hypertension ($\geq 160/110$ mmHg), eclampsia or impending eclampsia, a requirement for intravenous antihypertensive therapy or parenteral magnesium sulfate, or evidence of end-organ dysfunction requiring close monitoring.

2.3. Sample Size and Sampling Technique

A total of 50 postpartum hypertensive women fulfilling the eligibility criteria were included in the study. This was a consecutive sample of all eligible patients admitted during the study period, and participants were enrolled sequentially until the end of the study period. No formal a priori sample-size calculation was performed; the sample size was determined by the number of eligible patients presenting during the fixed study period and therefore represents a convenience, feasibility-based sample. Given the small number of participants and of uncontrolled outcomes ($n = 14$), the logistic regression analysis was pre-specified and interpreted as exploratory and hypothesis-generating rather than confirmatory.

2.4. Data Collection Procedure

Data were collected prospectively using a structured, pre-designed data collection form by the principal investigator. Relevant demographic, obstetric, clinical, laboratory, treatment-related, and short-term outcome information were obtained from patient records, bedside clinical assessment, and routine ICU/HDU monitoring data and recorded systematically. The primary outcome was blood pressure control within 24 hours of treatment initiation.

2.5. Clinical Management Protocol

Patients were managed according to the institutional ICU/HDU protocol for postpartum hypertension. Blood pressure was monitored closely, and severe hypertension was treated promptly using intravenous antihypertensive therapy, primarily labetalol or hydralazine, according to clinical indication and physician judgment. Intravenous labetalol was generally used as the first-line agent for acute severe hypertension, consistent with ACOG, ISSHP, and WHO recommendations, whereas intravenous hydralazine was used when labetalol was contraindicated (for example, in asthma or significant bradycardia) or when an adequate response was not achieved. Oral antihypertensive therapy was initiated or escalated after initial stabilization using dual or multidrug regimens as required, with agents selected from those available at the institution (calcium-channel blockers, beta-blockers, alpha-blockers, and, less frequently, centrally acting agents or angiotensin-receptor blockers). Because treatment was directed by the attending physician according to clinical severity rather than randomly allocated, compar-

isons between agents are susceptible to confounding by indication. Magnesium sulfate was administered when indicated for seizure prophylaxis or treatment of eclampsia. Haemodynamic status, neurological symptoms, urine output, and laboratory parameters were monitored as part of routine critical care management.

2.6. Operational Definitions

Postpartum Hypertension: Systolic blood pressure ≥ 140 mmHg and/or diastolic blood pressure ≥ 90 mmHg occurring within 6 weeks after delivery.

Severe Postpartum Hypertension: Systolic blood pressure ≥ 160 mmHg and/or diastolic blood pressure ≥ 110 mmHg.

Postpartum Preeclampsia: New-onset hypertension occurring after delivery with proteinuria and/or evidence of end-organ dysfunction.

Eclampsia: Occurrence of generalised tonic-clonic seizures in a woman with preeclampsia, not attributable to other identifiable neurological causes.

HELLP Syndrome: Presence of haemolysis, elevated liver enzymes, and low platelet count.

Proteinuria Grading: Urine protein excretion assessed by dipstick and categorised as nil, 1+, 2+, 3+, or 4+.

Blood Pressure Control within 24 Hours: Achievement of blood pressure below 140/90 mmHg within 24 hours of treatment initiation.

Maternal Outcome: Categorised as improved, referred to a higher centre, or death. Improvement was defined as clinical stabilization followed by transfer from ICU/HDU or hospital discharge.

2.7. Statistical Analysis

Data were analysed using SPSS version 20.0. Continuous variables were summarized as mean $\pm$ standard deviation, and categorical variables as frequency and percentage. Patients were grouped according to 24-hour blood pressure control status. Associations between treatment-related variables and blood pressure control were assessed using the Chi-square test or Fisher's exact test, as appropriate. Binary logistic regression was performed as an exploratory analysis to identify independent predictors of 24-hour blood pressure control. Adjusted odds ratios with 95% confidence intervals were reported, and $p < 0.05$ was considered statistically significant. Because the number of outcome events per candidate predictor was low, the multivariable model was regarded as exploratory, and its estimates were interpreted with caution.

2.8. Ethical Considerations

Ethical approval for the study was obtained from the Institutional Review Board of Ad-Din Women's Medical College Hospital, Dhaka, Bangladesh, prior to data collection (IRB approval number: AWMCH/IRB/197/2025). Written informed consent was obtained from all participants before enrolment. The study was con-

ducted in accordance with institutional ethical guidelines and the principles of the Declaration of Helsinki. Patient confidentiality was maintained throughout the study.

3. Results

3.1. Baseline Demographic and Obstetric Characteristics

Table 1 summarizes the baseline demographic and obstetric characteristics of the participants. The mean age was 27.04 years $\pm$ 6.07 years, and most women were multiparous (60.0%). Caesarean section was the predominant mode of delivery (94.0%). Most patients were admitted by postpartum day 2 (92.0%), including 28.0% on day 0 and 64.0% on days 1 - 2. Preeclampsia was the most frequent diagnosis (88.0%), followed by eclampsia (12.0%). In terms of onset, none of the women had chronic hypertension predating pregnancy, as such patients were excluded; the cohort therefore comprised de novo postpartum-onset hypertensive disease and antenatally diagnosed hypertensive disease of pregnancy that persisted into the postpartum period.

Table 1. Baseline demographic and obstetric profile of postpartum hypertensive patients admitted to ICU/HDU (n = 50).

Variable	Category	n (%) / Mean $\pm$ SD
Age (Years)	Mean $\pm$ SD	27.04 $\pm$ 6.07
	Median (IQR)	27 (22 - 31.5)
	Range	18 - 40
Parity Category	Primipara	20 (40.0)
	Multipara	30 (60.0)
Detailed Parity	1st Parity	20 (40.0)
	2nd Parity	11 (22.0)
	3rd Parity	9 (18.0)
	4th Parity	6 (12.0)
	5th Parity	4 (8.0)
Mode of Delivery	LUCS	47 (94.0)
	NVD	3 (6.0)
Postpartum Day at ICU/HDU Admission	Mean $\pm$ SD	1.16 $\pm$ 1.27
	Day 0	14 (28.0)
	Day 1 - 2	32 (64.0)
	Day $\geq$ 3	4 (8.0)
Hypertensive Diagnosis	Preeclampsia	44 (88.0)
	Eclampsia	6 (12.0)

3.2. Clinical Profile at Presentation

Table 2 presents the clinical profile of women with postpartum hypertension at presentation. The mean admission blood pressure was $157.6 \pm 20.0/100.6 \pm 10.2$ mmHg, and severe hypertension was observed in 58.0% of patients. The mean highest recorded blood pressure was $167.8 \pm 18.1/104.2 \pm 7.8$ mmHg. Headache with blurring of vision was the most frequently specified neurological symptom (24.0%), and urine albumin 2+ was the most common proteinuria finding (56.0%). HELLP syndrome was present in 2.0% of patients.

Table 2. Clinical profile at presentation of women with postpartum hypertension (N = 50).

Clinical Variable	Category	n (%) / Mean $\pm$ SD
Blood pressure at admission	Systolic BP (mean $\pm$ SD)	157.6 $\pm$ 20.0 mmHg
	Diastolic BP (mean $\pm$ SD)	100.6 $\pm$ 10.2 mmHg
	Severe Hypertension*	29 (58.0%)
*Highest blood pressure recorded during admission (*Severe hypertension defined as systolic blood pressure $\geq$ 160 mmHg and/or diastolic blood pressure $\geq$ 110 mmHg)	Highest Systolic BP (mean $\pm$ SD)	167.8 $\pm$ 18.1 mmHg
	Highest Diastolic BP (mean $\pm$ SD)	104.2 $\pm$ 7.8 mmHg
Presenting symptoms	Headache	7 (14.0%)
	Blurring of Vision	7 (14.0%)
	Headache with Blurring	12 (24.0%)
	Other Symptoms	24 (48.0%)
Urine albumin	Nil	7 (14.0%)
	1+	1 (2.0%)
	2+	28 (56.0%)
	3+	8 (16.0%)
	4+	6 (12.0%)
Diagnosis at presentation	Preeclampsia	44 (88.0%)
	Eclampsia	6 (12.0%)
HELLP syndrome	Yes	1 (2.0%)
	No	49 (98.0%)

3.3. Oral Antihypertensive Regimens and 24-Hour Blood Pressure Control

Figure 1 presents the distribution of oral antihypertensive regimens and 24-hour blood pressure control among postpartum hypertensive women. The most com-

mon regimen was amlodipine plus atenolol, used in 25 patients (50.0%), followed by prazosin plus amlodipine plus atenolol in 18 patients (36.0%). Overall, 36 patients (72.0%) achieved blood pressure control within 24 hours.

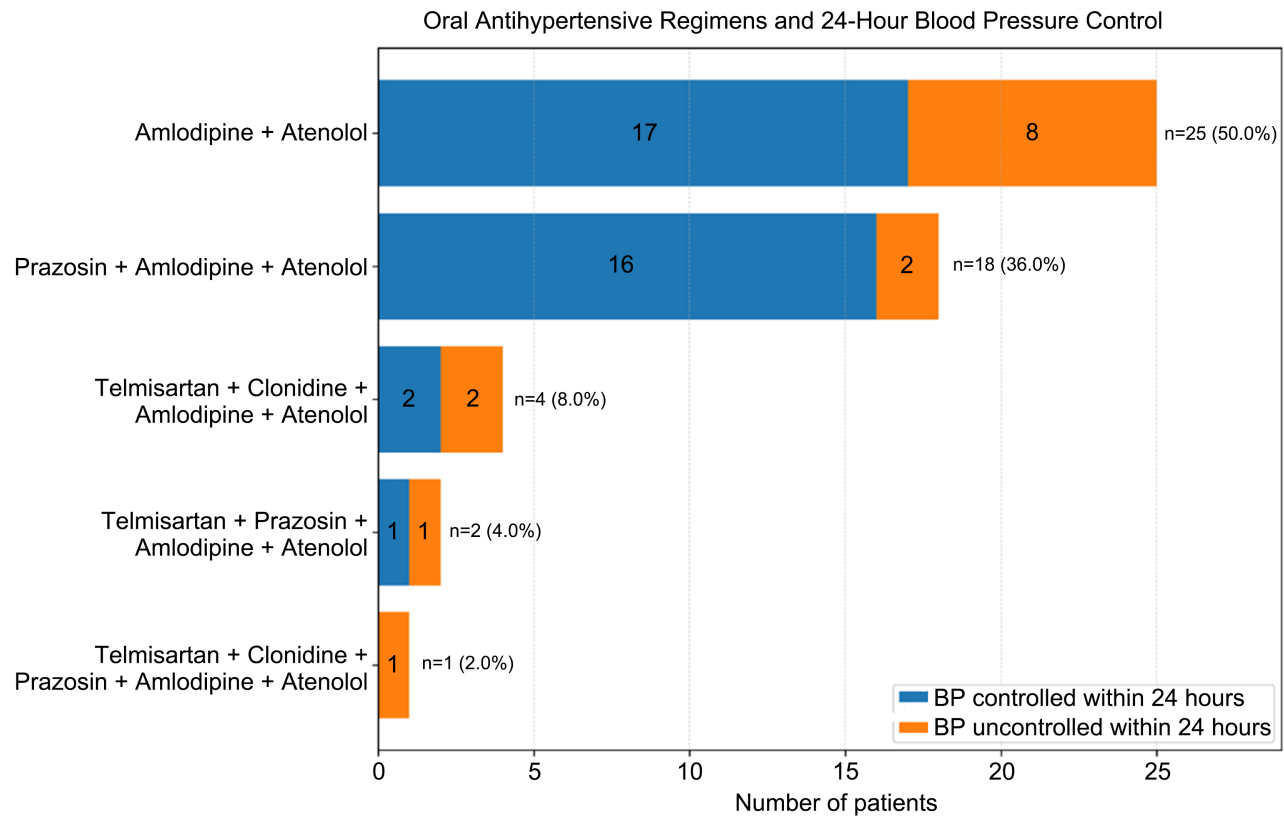


Figure 1. Oral antihypertensive regimens and 24-hour blood pressure control among postpartum hypertensive women (n = 50).

3.4. Treatment Pattern with Clinical Response

Table 3 summarizes treatment patterns according to 24-hour blood pressure control status. Labetalol was the most frequently used intravenous antihypertensive agent (60.0%), followed by hydralazine (30.0%). The highest control rate among oral regimens was observed with prazosin plus amlodipine plus atenolol (88.9%). However, intravenous antihypertensive type, oral regimen, and magnesium sulfate administration were not significantly associated with 24-hour blood pressure control ($p > 0.05$).

Table 3. Treatment pattern with clinical response (n = 50).

Treatment Variable	Category	Total n (%)	BP Controlled within 24 hrs n (%)	BP Uncontrolled n (%)	p-Value
Intravenous Antihypertensive	Labetalol	30 (60.0%)	22 (73.3%)	8 (26.7%)	0.896
	Hydralazine	15 (30.0%)	10 (66.7%)	5 (33.3%)	
	No IV Antihypertensive	5 (10.0%)	4 (80.0%)	1 (20.0%)	

Continued

Oral Antihypertensive Regimen	Amlodipine + Atenolol	25 (50.0%)	17 (68.0%)	8 (32.0%)	0.079
	Prazosin + Amlodipine + Atenolol	18 (36.0%)	16 (88.9%)	2 (11.1%)	
	Telmisartan + Clonidine + Amlodipine + Atenolol	4 (8.0%)	2 (50.0%)	2 (50.0%)	
	Telmisartan + Prazosin + Amlodipine + Atenolol	2 (4.0%)	1 (50.0%)	1 (50.0%)	
	Telmisartan + Clonidine + Prazosin + Amlodipine + Atenolol	1 (2.0%)	0 (0.0%)	1 (100.0%)	
Magnesium Sulphate	Yes	36 (72.0%)	24 (66.7%)	12 (33.3%)	0.295
	No	14 (28.0%)	12 (85.7%)	2 (14.3%)	

3.5. Short-Term Maternal Outcomes

Figure 2 shows the short-term maternal outcomes of postpartum hypertensive patients admitted to the ICU/HDU. Most patients improved and were discharged (96.0%), while 4.0% required referral for further management. No maternal deaths were recorded during the study period.

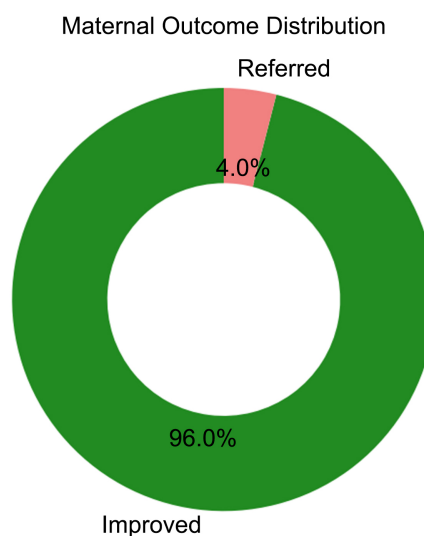


Figure 2. Short-term maternal outcomes of postpartum hypertensive patients admitted to ICU/HDU (n = 50)

3.6. Predictors of 24-Hour Blood Pressure Control

Table 4 shows the predictors of blood pressure control within 24 hours. Baseline systolic blood pressure was the only significant independent predictor; each 1 mmHg increase was associated with lower odds of achieving blood pressure control (AOR 0.95, 95% CI: 0.91 - 0.99; p = 0.018). Age, diagnosis, intravenous anti-

hypertensive type, and oral antihypertensive regimen were not significantly associated with 24-hour blood pressure control.

Given the small sample ($n = 50$) with only 14 uncontrolled outcomes relative to five candidate predictors, this multivariable model is likely to be overfit. The wide confidence intervals for several variables (for example, diagnosis: AOR = 0.16, 95% CI: 0.01 - 2.19) indicate unstable estimates. The regression should therefore be regarded as exploratory and hypothesis-generating, and the associations interpreted with caution.

Table 4. Binary logistic regression analysis for predictors of blood pressure control within 24 hours.

Variable	Category	Adjusted OR	95% CI	p-Value
Age (Years)	Continuous	1.02	0.89 - 1.17	0.770
Baseline Systolic BP (mmHg)	Continuous	0.95	0.91 - 0.99	0.018
Diagnosis	Eclampsia vs Preeclampsia	0.16	0.01 - 2.19	0.168
IV Antihypertensive	Labetalol vs Non-Labetalol	0.69	0.15 - 3.13	0.631
Oral Antihypertensive Regimen	≥ 3 Drugs vs 2 Drugs	2.74	0.56 - 13.36	0.212

3.7. Association between Admission Blood Pressure Severity and Intravenous Antihypertensive Treatment

Table 5 shows the association between admission blood pressure severity and intravenous antihypertensive treatment. Intravenous antihypertensive use differed significantly between non-severe and severe hypertension groups ($p = 0.045$). Hydralazine was more frequently used in patients with severe hypertension, while no-IV management was more common in the non-severe hypertension group.

Table 5. Association between admission blood pressure severity and intravenous antihypertensive treatment pattern ($n = 50$).

Variable	Category	Non-Severe Hypertension, $n = 21$	Severe Hypertension, $n = 29$	p-Value
Intravenous Antihypertensive Therapy	Labetalol	14 (66.7%)	16 (55.2%)	0.045
	Hydralazine	3 (14.3%)	12 (41.4%)	
	No IV Antihypertensive	4 (19.0%)	1 (3.4%)	

4. Discussion

This study evaluated the clinical profile, management strategies, and short-term outcomes of 50 postpartum women admitted to the ICU/HDU with hypertensive disorders of pregnancy in a tertiary care women's hospital in Bangladesh. The results indicated that the majority of patients were young females (mean age 27.04 years $\pm$ 6.07 years), multiparous (60.0%), and presented early in the postpartum period. The majority of the admissions (88.0%) were due to preeclampsia, and the

remaining 12.0% were due to eclampsia. A predominance of young women has been reported in previous studies of severe hypertensive disorders of pregnancy from low- and middle-income countries, consistent with our findings [5].

The cesarean delivery rate was notably high (94.0%), reflecting the predominance of severe preeclampsia and eclampsia requiring expedited delivery for maternal stabilization, consistent with findings from tertiary referral centers [6].

Overall, 92.0% were admitted by postpartum day 2, including 28.0% on day 0 and 64.0% on days 1 - 2. This finding reinforces the early postpartum period as an important period for maternal surveillance, as endothelial dysfunction and haemodynamic changes may persist after delivery, increasing the risk of severe hypertension and associated complications. Therefore, current guidelines recommend ongoing postpartum monitoring for women with hypertensive disorders of pregnancy [7].

The severity of hypertension in this cohort was substantial, with a mean admission blood pressure of $157.6 \pm 20.0/100.6 \pm 10.2$ mmHg, and 58.0% of women met criteria for severe hypertension. Blood pressure profiles are similar in critically ill obstetric patients needing high-dependency or intensive care management. Furthermore, proteinuria was common, with 56.0% having 2+ albuminuria and 28.0% having 3+ or 4+ albuminuria, suggesting considerable renal involvement consistent with severe preeclampsia [8].

Neurological symptoms were common in this cohort, with headache associated with visual disturbance reported in 24.0% of patients. These symptoms are well-known clinical signs of severe preeclampsia and may be a sign of neurological complications, including eclampsia and cerebrovascular events. The existence of these highlights the importance of early recognition, prompt assessment, and early management in order to prevent progression to life-threatening maternal complications in postpartum period [9].

Antihypertensive therapy was intravenous labetalol in 60.0% and hydralazine in 30.0% of patients. Both agents are recommended by ACOG, ISSHP, and WHO guidelines as first-line therapy for acute severe hypertension in pregnancy and postpartum period. Despite higher numerical blood pressure control rates among women receiving labetalol, there was no statistically significant difference between antihypertensive agents, consistent with systematic reviews showing comparable efficacy between labetalol and hydralazine for acute blood pressure control [10].

The combination of amlodipine plus atenolol was the most commonly prescribed oral antihypertensive regimen for the management of postpartum hypertension (50.0%), whereas the combination of prazosin, amlodipine, and atenolol achieved the highest rate of blood pressure control within 24 hours (88.9%). However, no significant association was found between the type of oral antihypertensive regimen and blood pressure control. This suggests that successful management of postpartum hypertension may be more reliant on timely treatment escalation and close clinical monitoring than the specific antihypertensive combination used [11].

Magnesium sulphate was given to 72.0% of participants, which reflects the high prevalence of severe disease. Magnesium sulfate remains the drug of choice for both seizure prophylaxis and treatment, significantly reducing the risk of eclampsia and maternal death [12].

Baseline systolic blood pressure was the only independent predictor of successful blood pressure control in women with postpartum hypertension, with higher initial systolic pressure associated with a lower likelihood of achieving control within 24 hours (AOR = 0.95, 95% CI: 0.91 - 0.99; $p = 0.018$). In contrast, maternal age, hypertensive diagnosis, and antihypertensive treatment regimen were not significantly associated with treatment success. These findings underscore the importance of early detection and prompt management of severe postpartum hypertension to optimize blood pressure control and prevent maternal complications [13].

The majority of women (96.0%) improved clinically and were successfully discharged, with no maternal deaths. Emerging evidence further suggests that tighter postpartum blood pressure control may reduce downstream complications, including emergency readmission [14]. The positive result is probably due to the benefits of early recognition, protocol-driven management, adequate antihypertensive treatment, and close monitoring in ICU/HDU settings. Furthermore, HDU level care might be a good alternative to provide efficient management of severe postpartum hypertension, avoiding unnecessary ICU admission [15] [16].

Limitations: This study has several limitations. It was conducted at a single tertiary centre, which limits the generalisability of the findings to other settings. Participants were enrolled by consecutive (non-random) sampling, and the sample size was small ($n = 50$), reducing statistical power and the precision of the estimates. The multivariable logistic regression had few outcome events relative to the number of predictors and is likely overfitted; it should be viewed as exploratory. Antihypertensive treatment was selected by the attending physician according to clinical severity rather than randomly allocated, so comparisons between agents are subject to confounding by indication. Finally, outcomes were assessed only over a short window (ICU/HDU stay to hospital discharge); data on blood pressure control, readmission, and cardiovascular outcomes beyond the immediate postpartum period were not captured, and longer-term follow-up is needed.

5. Conclusion

Severe postpartum hypertension is a major cause of maternal morbidity requiring ICU/HDU care. Most of the cases in this study were in the early postpartum period and were successfully managed with prompt antihypertensive therapy, magnesium sulfate, and close haemodynamic monitoring. The major finding was that baseline systolic blood pressure was the sole independent predictor of 24-hour blood pressure control. These findings are exploratory and hypothesis-generating, given the modest single-centre sample; larger, multicentre studies are needed to confirm predictors of blood pressure control and to formally evaluate protocol-

based care.

Author Contributions

- 1) Abu Naser Md. Faiaz: Conceptualization, study design, methodology, investigation, clinical data collection, data curation, formal analysis, project administration, supervision, writing—original draft, writing—review and editing, and correspondence with the journal.
- 2) Md. Sirajul Islam: Methodology, investigation, clinical management of participants, data collection, validation, and writing—review and editing.
- 3) Richmond Ronald Gomes: Methodological support, clinical interpretation of the findings, validation, and critical review and revision of the manuscript.
- 4) Fatema Akter Joly: Literature review, data organization, preparation of manuscript sections, and writing—review and editing.
- 5) Afifa Islam: Investigation support, data verification, interpretation of results, and critical review of the manuscript.
- 6) Emtiazur Rahman: Statistical and analytical support, interpretation of findings, and critical revision and final review of the manuscript.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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