

The impact of setting up an endocrine hypertension clinic at a tertiary care hospital in Bangladesh

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Abstract

Background: Primary aldosteronism (PA) is currently the most common specifically treatable and potentially curable cause of hypertension. However, it remains underdiagnosed, especially in low-middle-income countries (LMICs) in South Asia. International studies have highlighted the value of dedicated endocrine hypertension services for improving PA detection and management.

Methods: The endocrine hypertension clinic (EHC) was established at the largest tertiary care hospital in Bangladesh in 2022. Consecutive hypertensive patients with a plasma aldosterone-to-renin ratio (ARR) >50 were considered screen-positive and underwent a seated saline suppression test (SST). Patients with post-saline plasma aldosterone concentration (PAC) >170 pmol/L were diagnosed with PA; the remainder were classified as non-PA. Clinical and biochemical outcomes of PA patients were collected longitudinally. Data from patients tested for PA prior to the EHC were retrieved from hospital records.

Result: Between 2012 to 2022, 30 patients were tested for PA and 12 were confirmed to have PA. Between 2022 to 2025, 399 patients underwent PA testing at EHC; 250 patients were screen positive and 119 were biochemically confirmed as PA. The age distribution was similar between pre-EHC and post-EHC patients with a significant female preponderance in the latter. Pre-EHC patients presented with more severe disease, including higher clinic SBP and proportion of uncontrolled blood pressure, lower serum potassium and increased frequency of hypokalemia, more target-organ damage, and higher rates of aldosterone-producing adenoma. EHC patients displayed excellent outcome.

Conclusion: The establishment of the first EHC in Bangladesh has led to a paradigm shift in the detection and management of PA. A simplified, convenient PA management protocol facilitated significant uptake of hypertensive patients with high detection rates and excellent clinical outcomes. Integration of such a PA management model in other institutes across the country, coupled with education, workforce training, and policy support, has the potential to transform hypertension care not only in Bangladesh but also in other resource constrained LMICs. [*J Assoc Clin Endocrinol Diabetol Bangladesh, 2026;5(Suppl 1): S7*]

Keywords: Endocrine hypertension service/clinic, Primary aldosteronism, Low-middle income country (LMIC)

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