Abstract: Community pharmaceutical care program- tool for accelerated/malignant hypertension prevention:
analysis from a retrospective cohort study on south Indian sub-population.

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Introduction: Accelerated/Malignant hypertension (A/MH) is a hypertensive emergency, clinically defined by the European society of Hypertension/European society of cardiology (ESH/ESC) as the presence of high BP (180/110 mmHg) associated with target organ damage (TOD) [retina, kidney, heart or brain]. There are no Indian studies reported on need for healthcare policy framework on A/MH prevention contributing to Cardiovascular morbidity.

Purpose: To evaluate the treatment outcomes in hypertensive patients diagnosed with A/MH.

Methodology: Treatment outcomes were analysed for hypertensive cohort patients admitted with essential HTN or hypertensive retinopathy during 2010-2014 with ICD – 10 codes (I.10 and H 35) reported to our 2500 bedded tertiary care teaching hospital. The study patients were non-diabetic and without any other co-morbid illness aged ⩾40years. Blood pressure(BP) control was evaluated by documented past history and in-hospital medication.

Results: Of the documented 480 in-patients diagnosed with essential HTN or hypertensive retinopathy, 37 (7.7%) fit Grade III HTN (ESH/ESC 2013) and/or were diagnosed as A/MH. Male predominance was observed with 62.2%. The Mean Systolic Pressure on admission was found to be 192(±21.6) mmHg and on discharge it was found to be 142(±14.1) mmHg. Out of 37 patients, 37.8% were continued with the same medication after in-patient admission i.e. Amlodipine containing antihypertensive regimen. 13.5% patients were switched to another agent and 13.5% patients were newly diagnosed and treated. 32.4% patients past medication history were unknown. Overall, amlodipine containing antihypertensive regimen were either freshly started or resumed from their medication history in 86.4% patients.

Conclusion: Optimum BP control in-hospital was achieved when previous medications were resumed. Though amlodipine containing dual and triple antihypertensives is in the Essential Medicine list of India 2011, our findings though from a single center, implicate various contentious issues attributable to overall poor health outcomes. Adequately previously reported factors include medication non-adherence, non-availability, affordability, lack of patient education and absence of a comprehensive pharmaceutical care program in the community or in public healthcare centers persisting in Indian healthcare systems. A legislated community health policy comprising a multidisciplinary healthcare team seems to be glaring need. Community pharmacist’s role in hypertension management in preventive cardiology hasn’t been explored much as a cost – effective alternative.