

## BACKGROUND

Hypertension prevalence of raised blood pressure in Kenya is estimated at 23.8%.

Hypertension readings of systolic 140-159 and diastolic of 90-99 without risk factors should be confirmed on three separate occasions of at least 6 hours apart for diagnosis to be made as stipulated in Ministry of Health NCD protocol.

The objective of this study is to evaluate the hypertension diagnosis process and to explore challenges associated with delayed diagnosis following initial high BP screening.

## METHODOLOGY

This is a retrospective cohort study where clients reached with hypertension screening between October 2015 and March 2016 were followed up for diagnosis.

Two focus group discussions were also conducted with patients with initial elevated BP who didn't return for subsequent reading.

Data was recorded in manual linkage registers and analysis done for individuals with initially elevated BP who came for subsequent readings to final diagnosis. Descriptive statistical method was used to analyze the data.

Category	Systolic, mmHg	Diastolic, mmHg
Hypotension	Less than 90	Less than 60
Normal	90 – 119	60 – 79
Prehypertension	120 – 139	80 – 89
Stage 1 Hypertension	140 – 159	90 – 99
Stage 2 Hypertension	160 – 179	100 – 109
Hypertensive Crisis	Greater than 180	Greater than 110

Fig1: Levels of high blood pressure readings

## RESULTS

A total of 34,779 people were screened for hypertension between the period of October 2015 – March 2016, of which 17.7% (n=6,150) had an initially high BP.

Table1: Demographic characteristics of gender screening, elevated and diagnosis of hypertension clients

Gender	Screened	Elevated	Diagnosed
Female	21740	4,268	912
Male	13039	1,882	500

- About 32% (n=1,972) of the clients with an initial elevated BP returned for subsequent readings and completed the diagnosis process.
- The prevalence of hypertension was 27% (n=1,667).
- Due to the use of manual records, some of the clients returning for follow-up were captured as new clients further delaying diagnosis.
- Reasons for missing subsequent BP readings as identified during focus group discussions include: long diagnostic process of three readings, long waiting time at the facility, stigma, asymptomatic nature of hypertension and poor health seeking behaviours among people with raised BP.

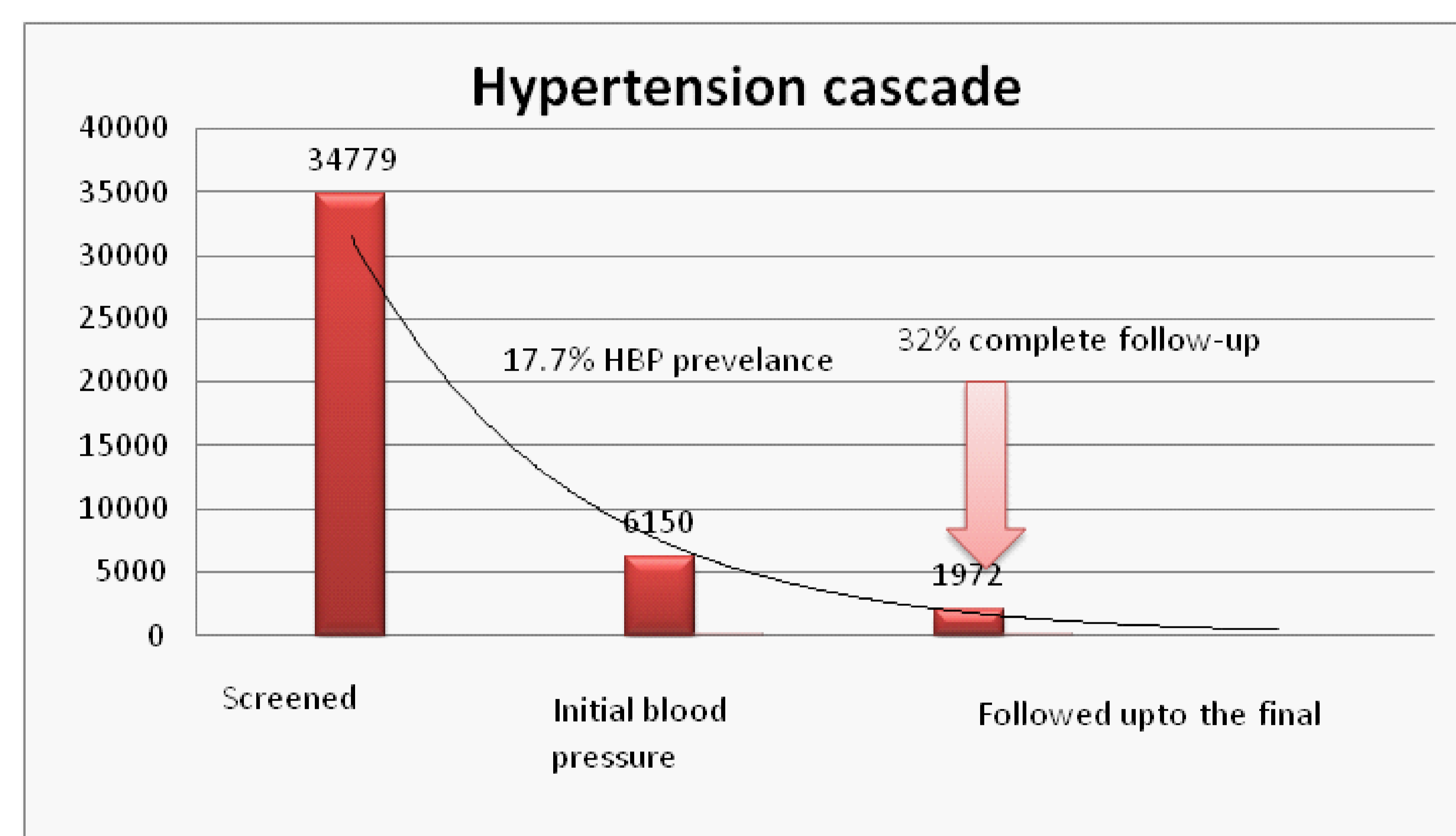


Fig.2: Proportion of clients completing follow-up following initial screening

## CONCLUSION

- There is high attrition rate in the hypertension diagnosis process with about 68% undiagnosed cases.
- Factors identified as contributing to high attrition to hypertension diagnosis include: long diagnostic process of three readings, long waiting time at the facility, stigma, asymptomatic nature of hypertension and poor health seeking behaviours among people with raised BP.

## RECOMMENDATIONS

- Introduce electronic data collection methods to improve data capture
- Develop innovative follow-up mechanisms to reduce attrition after initial BP reading.