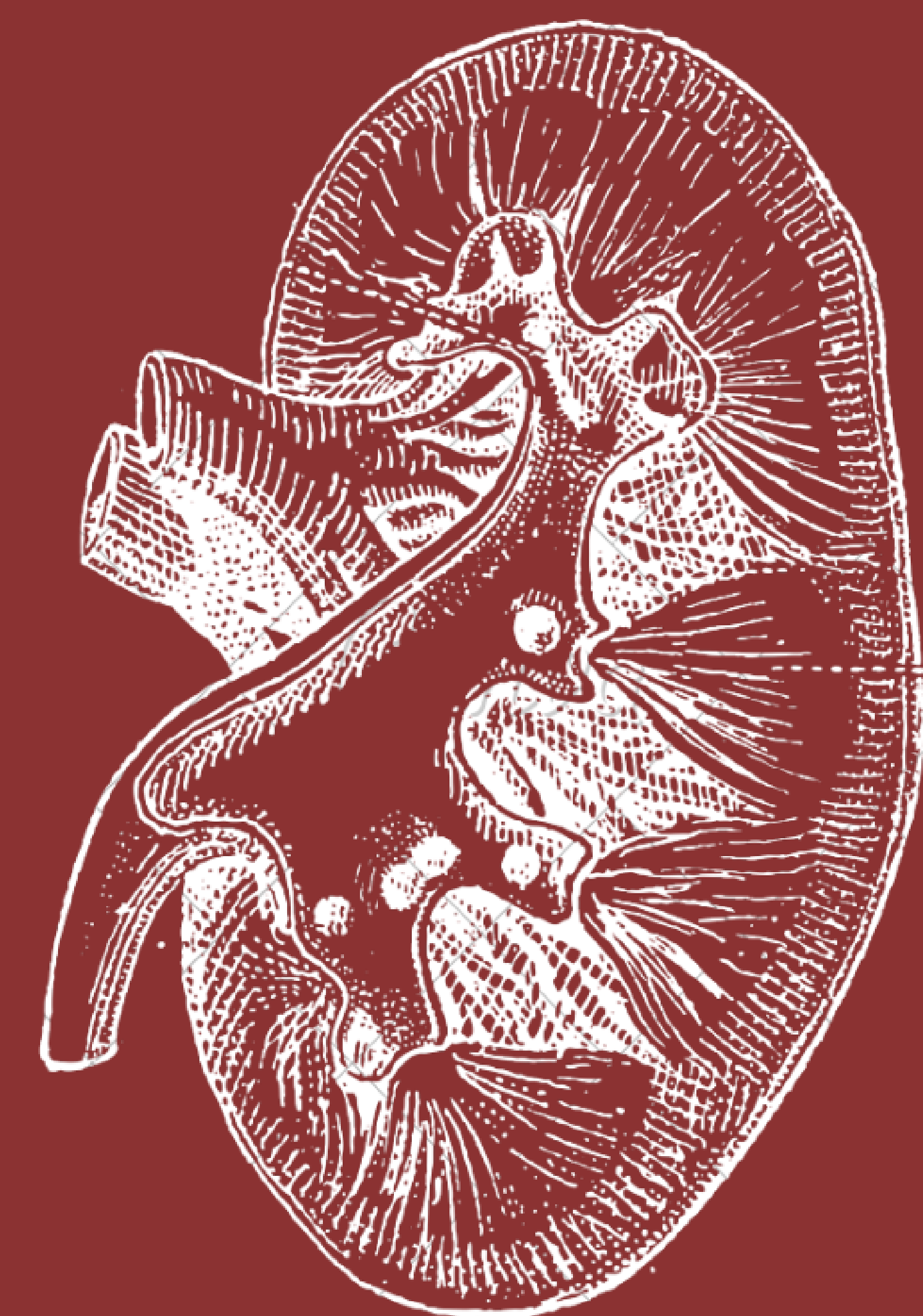


The Trend of Renal Target Organ Damage in Newly Diagnosed Hypertensive Patient: (Jan 1 2008–end of 2017) in Qatif Area, KSA

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Introduction

Background: Hypertension is one of the most common causes target organ damage (TOD). Hypertensive-mediated organ damage is related to an increased risk of vascular disease and death, therefore preventing it should be a treatment goal and a surrogate measure of insufficient blood pressure management. Renal organ damage (ROD) is a common TOD often presenting as a complication of hypertension, more commonly among diabetic patients, and patients with chronic kidney disease (CKD). In hypertensive patients, ROD can lead to CKD or possibly end-stage renal disease (ESRD).

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Objectives

General objectives

To estimate the magnitude of ROD in newly diagnosed hypertension in Qatif, KSA over the last 10 years.

Specific objectives

- To determine the incidence of ROD in newly diagnosed hypertensive patient in Qatif, KSA.
- To study the annual trends of ROD from early 2008, until the end of 2017 in Qatif, KSA.

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Methods

This is a ten-year retrospective cross-sectional study that includes the period from January 1, 2008, through the end of 2017.

Eight centres were selected by systematic random sampling technique from a total of 31 primary health care centres.

Data were collected from patients' files after obtaining consent and approvals from the IRB and MOH.

The study included adult population newly diagnosed with essential hypertension during 2008–2017, whereas participants of secondary hypertension, pregnancy were renal disease were excluded.

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Analysis

A total of 936 cases from the eight selected PHCCs were newly diagnosed with essential hypertension during the study period, of which the eGFR of 141 (15.1%) was not recorded due to either poor documentation or lost follow up.

During 2012, the number of newly diagnosed hypertension patients was highest (figure 1). However, the number of patients with ROD among the screened population was in 2014 (figure 2).

Among newly diagnosed hypertensive patients, a total of 17 patients of ROD with eGFR <60 mL/min were found at the time of diagnosis (1.8%), of these 17 ROD patients, ten were male (58.8%). The majority of screened patients were classified as stage 1 CKD (eGFR > 90 mL/min/1.73m². (figure 3).

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Conclusion

There have been occasions where ROD was detected at the time of hypertension diagnosis. For ten years, from 2008 to 2017, the ROD was directly proportionate with the number of newly diagnosed and recognized hypertension patients.

Figure 1: Incidence of newly diagnosed hypertension per year, Qatif, KSA.

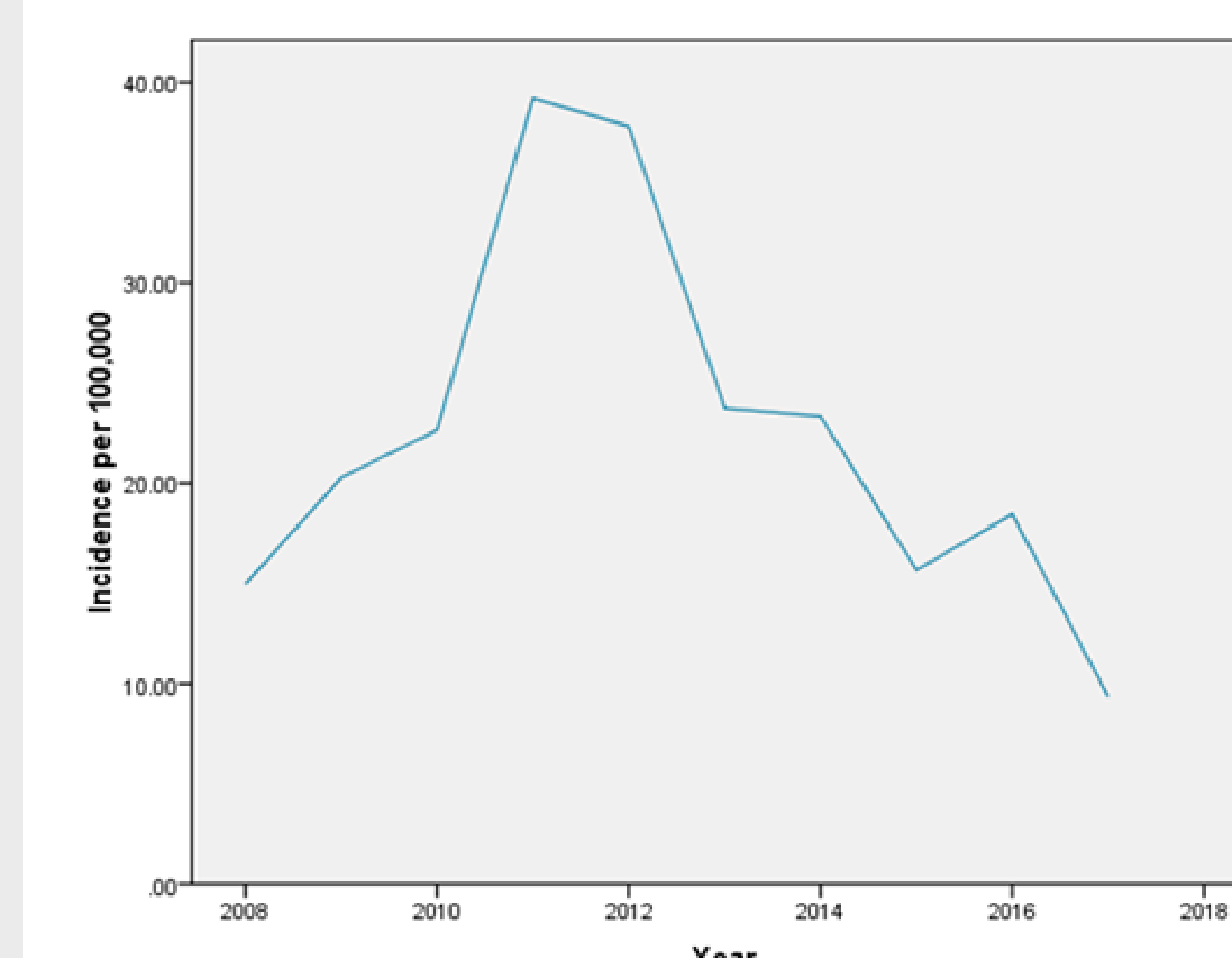
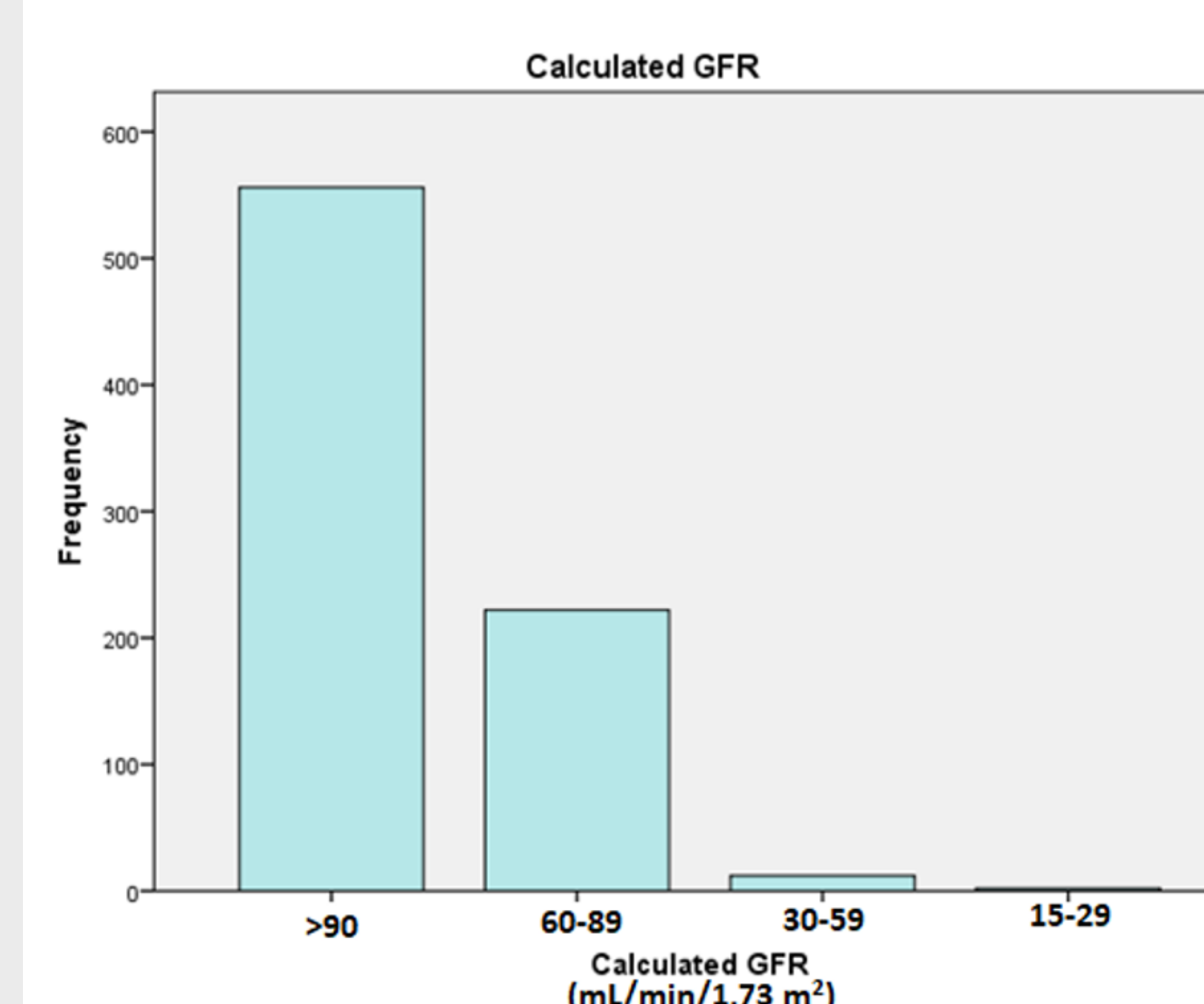


Figure 2: CKD stage distribution among newly diagnosed HTN patients, Qatif, KSA



References

