

KIDNEY DISEASE IN VERY ELDERLY INPATIENTS.



AGS CAMPO DE GIBRALTAR
Servicio Andaluz de Salud

Hernández Rey J¹, Romero Ramírez E², Moyano Peregrin C².

¹Department of Internal Medicine. ²Department of Nephrology. Hospital Punta de Europa. Algeciras. Spain.

INTRODUCTION AND OBJECTIVES.

Chronic kidney disease (CKD) is a clearly age-related disease, because there's a direct relation between renal function decreasing and aging, and so age is one of the most important factors in equations used to calculate it.

Our aim is to assess the degree of CKD present among very elderly inpatients admitted due to any kind of disease, and also to show hydroelectrolites disorders shown on these patients.

METHODS.

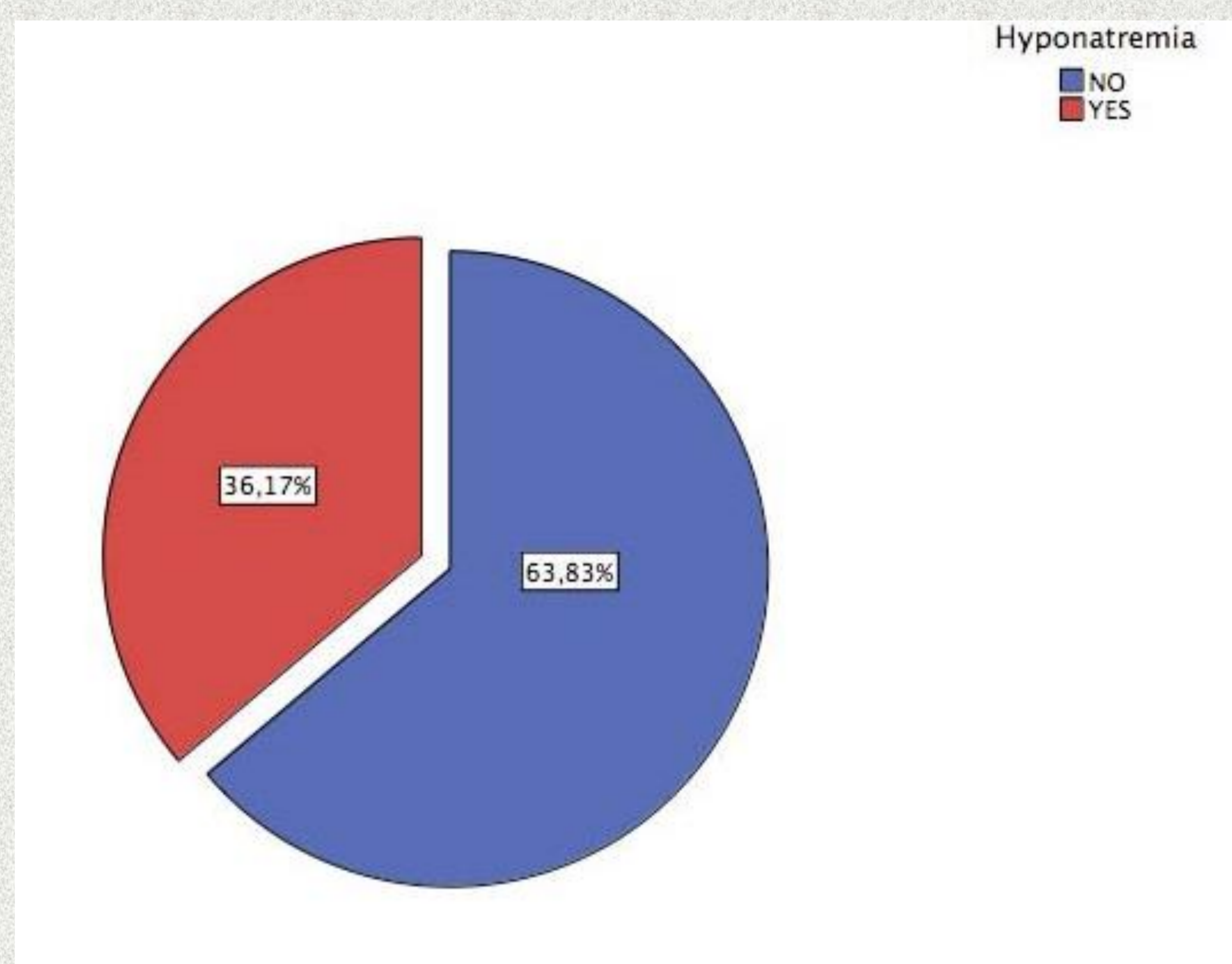
This is an observational retrospective study during 2015. We selected all admissions of patients born before 1921 at any of the hospitals of the Campo de Gibraltar Area. We examined patient demographics, medical history, clinical presentations and laboratory findings of these inpatients at admission. eGFR was calculated using the CKD-EPI formula.

RESULTS.

We obtained 47 patients, of which 37 (78.7%) were women. The table below shows the main analytic results. Hyponatremia was present in 36.2% of our patients at admission. Prevalence of diabetes was quite low (31.9%). The other table shows the distributions of ACE inhibitors, ARBs and diuretics use among these patients.

We find decreased renal function if we estimate GFR using CKD-EPI formula, but probably this overestimates the diagnosis of CKD, by giving age a high weight on this estimation, but even taking this to consider, we can see a slight decrease in renal function considering urea and creatinine. The main cause of the renal damage is most probably nephroangiosclerosis, finding more prevalence of hypertension than diabetes.

It's quite significant the underuse of ACE inhibitors and ARBs from what we should expect from the practice guidelines, and the overuse of diuretics even with a decreased renal function. Polypharmacy is common among these patients. Attending to the electrolyte disorder, hyponatremia keeps to be the most frequent, existing in up to a third of these patients.



CONCLUSIONS.

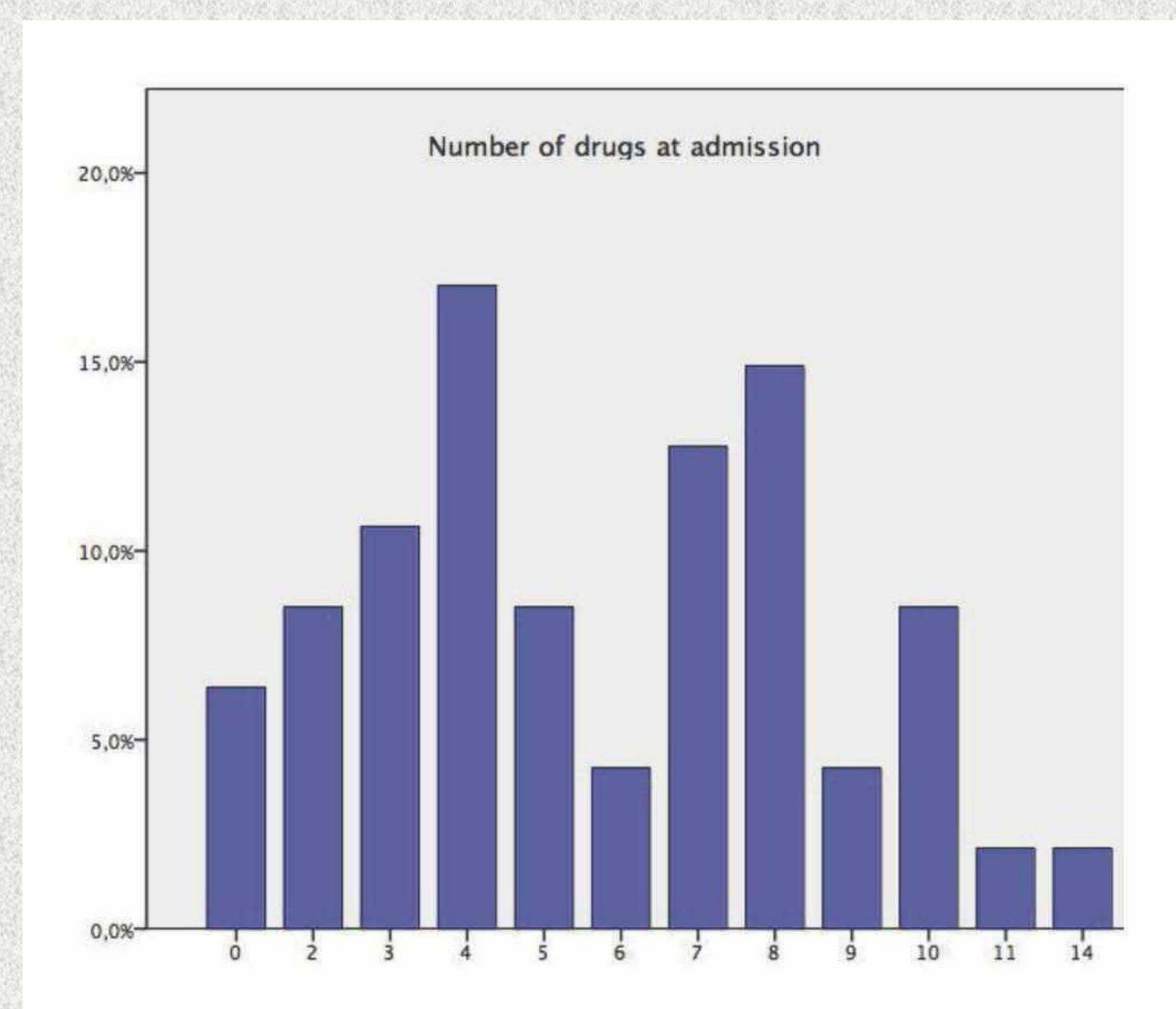
Elderly patients have a high prevalence of CKD, but the available formulas to estimate GFR probably overestimate it.

There is an overuse of diuretics and underuse of ACE inhibitors and ARBs in these patients.

Hyponatremia is a very frequent disorder to consider in elderly patients.

	Men	Women	Total
Gender freq(%)	10 (21,3%)	37 (78,7%)	47 (100%)
Urea (mg/dl)	86,90 ± 63,74	79,56 ± 53,07	80,60 ± 54,19
Na (mEq/l)	137,30 ± 7,83	138,72 ± 6,88	138,476 ± 6,96
K (mEq/l)	4,60 ± 0,97	4,44 ± 0,84	4,47 ± 0,85
Cr (mg/dl)	1,90 ± 1,28	1,13 ± 0,93	1,64 ± 1
CKD-EPI (ml/min/1.73m ²)	43,50 ± 26,05	36,86 ± 17,42	38,06 ± 19,33
Proteins (g/dl)	5,89 ± 0,78	5,91 ± 1,02	5,9 ± 0,94
Total Cholesterol (mg/dl)	140,63 ± 32,17	155,33 ± 43,09	150,81 ± 40
Hb(g/dl)	12,40 ± 2,10	11,94 ± 1,35	12,04 ± 1,50
Hospital stay (days)	9,30 ± 5,69	7,18 ± 5,16	8,11 ± 5,2

	Men	Women	Total
Hypertension	7 (70%)	28 (75.7%)	35 (74.5%)
ACE inhibitors	1 (10%)	9 (24.3%)	10 (21.3%)
ARBs	2 (20%)	12 (32.4%)	14 (29.8%)
Diuretics	5 (50%)	22 (59.5%)	27 (57.4%)



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