

# RESULTS OF THE GREEK FINANCIAL CRISIS AND THE EUROPEAN MIGRANT CRISIS IN DIALYSIS PATIENTS IN GREECE.

G Spanos, C Melexopoulou, E Tzamparlis, E Tsiakas, M Korogiannou, JN Boletis

Department of Nephrology and Renal Transplantation Unit, Laiko General Hospital  
National & Kapodistrian University of Athens, Medical School, Athens, Greece

## OBJECTIVES

As a result of the Greek financial crisis that started late 2009 and the following increase in unemployment rates, the number of patients without health insurance in Greece increased dramatically. In addition, after the 2015 European Migrant Crisis above 57000 refugees/migrants are registered now in the refugee camps in Greece.

Patients with End Stage Chronic Kindey Disease on Haemodialysis (HD) who do not have medical insurance in Greece are currently being dialysed three times per week as emergency admission in a different hospital each day and they are not under the constant medical care of a named nephrologist.

## AIMS

The aim of this study is to investigate the way that uninsured patients (UP) are being dialysed in a tertiary hospital in central Athens and if they are meeting the KDIGO guidelines on dialysis, anaemia, mineral and bone disorder and compare them with patients who have medical insurance are being dialysed in the HD unit of the same hospital.

## METHODS

Data collected retrospectively on the number of patients and emergency HD sessions in a tertiary hospital in central Athens since 2009. Data also collected from uninsured patients (UP) that are being dialysed through emergency admission over the last few months in our hospital.

## RESULTS

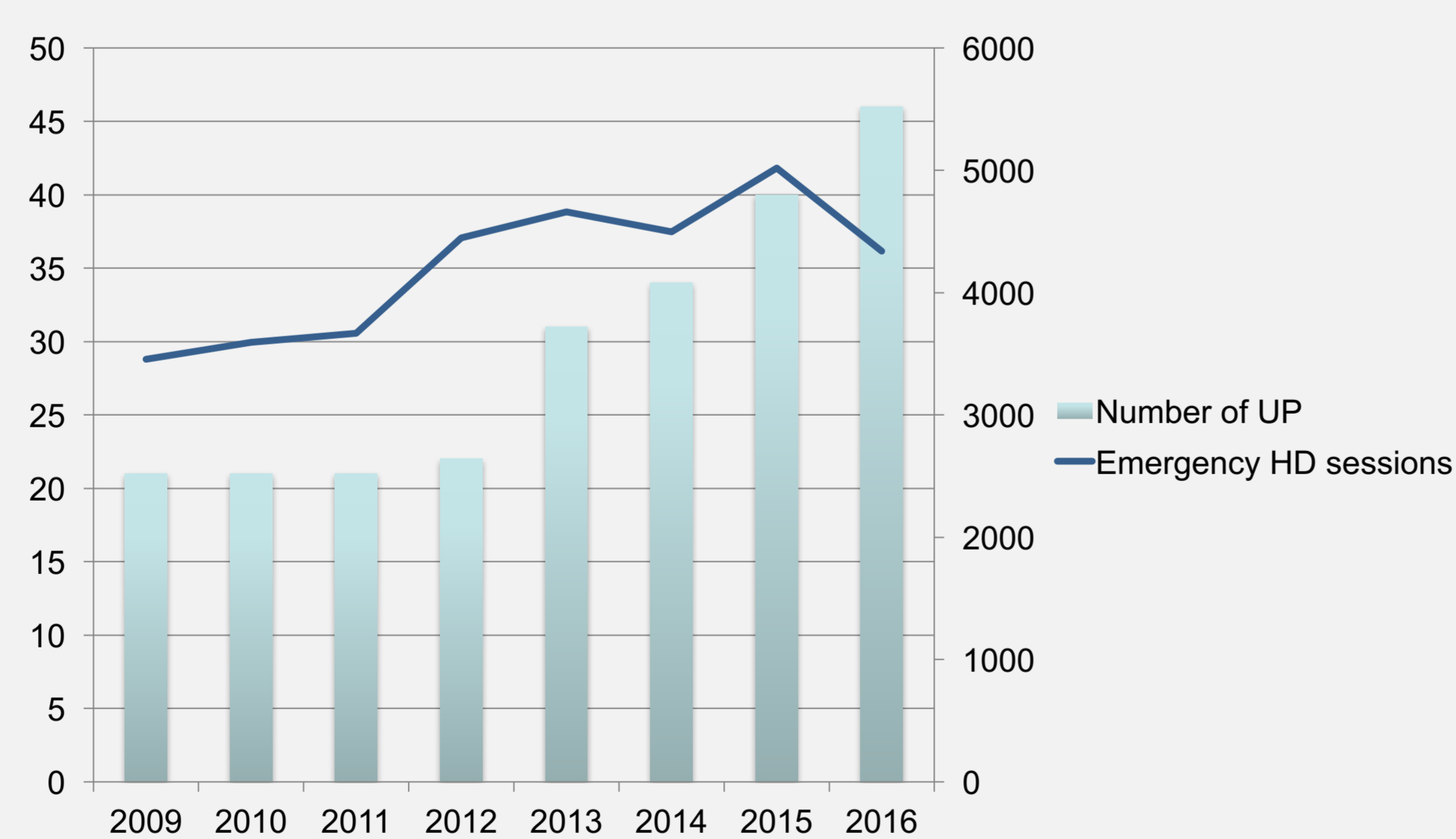
The number of HD sessions of UP has increased dramatically over the last decade; compared to 2007 they doubled in 2011 and tripled in 2016 (graph).

Thirty-one UP patients (53.8% males) were dialysed as emergency admission in two consecutive days in a tertiary hospital in central Athens, age  $51.8 \pm 18.2$  years, 34.6% of whom were refugees. 13% of the patient were dialysed though a temporary central venous catheter (CVC), 48% had a tunnelled CVC, 35% an arteriovenous fistula and 4% an arteriovenous graft. They were on HD for  $2.47 \pm 1.89$  years. They were dialysed for  $3.02 \pm 0.4$  hours per session with a  $kt/v$   $1.19 \pm 0.13$ . Their haemoglobin was  $9.38 \pm 1.42$  g/dL (69% of the patients had haemoglobin below 10 g/dL, 30.7% below 9 g/dL), ferritin  $329.6 \pm 454.2$  ng/mL (80% had a ferritin level below 500 ng/ml), transferrin saturation  $24.71\% \pm 8.86$  (66% had a transferrin saturation below 30%), with 55% of those patients on erythropoiesis-stimulating agent and 9.5% on iv iron. Serum Phosphate was  $5.35 \pm 1.49$  mg/dL with 65.3% above upper normal limit with only 10% of the patiens on phosphate binders, and calcium-phosphorus product  $45.3 \pm 12.4$  mg<sup>2</sup>/dL<sup>2</sup>.

Table: Characteristics uninsured and insured HD patients

	Uninsured patients	Insured patients	p
Age	54 ± 16.4	52.4 ± 19.3	ns
Dialysis Duration	3.01 ± 0.4	4.1 ± 0.3	<0.0001
Heamoglobin	9.5 ± 1.3	11 ± 1.1	<0.0001
Ferritin	312 ± 435	232 ± 210	ns
Transferrin Saturation	25 ± 9.1	30.1 ± 6.1	ns
Serum Phosphate	5.5 ± 1.7	5.1 ± 1.3	ns
Ca-P product	45.2 ± 11.9	47.4 ± 12.1	<0.0001
Kt/v	1.19 ± 0.14	1.38 ± 0.17	<0.0001

Graph: Number of UP and emergency HD sessions in a tertiary hospital in Athens, Greece the last 8 years



## CONCLUSIONS

Uninsured native, migrants and refugee HD patients are currently undertreated in Greece. Action must be taken so that uninsured patients with end-stage renal disease on HD can receive adequate treatment.

## REFERENCES:

- Caulford et al, CMAJ. 2006 Apr 25;174(9):1253-4.  
Moutzouris DA et al, CMAJ. 2007 Apr 10;176(8):1130.

