

THE COST OF HEMODIALYSIS IN KINSHASA

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BACKGROUND

The use of dialysis in patients with end-stage renal disease (ESRD) requires significant financial resources. Data on the cost of hemodialysis (HD) in developing countries such as DR Congo, are sparse. The aim of this study was to evaluate and assess the determinants of three monthly average direct cost of HD in Kinshasa.

METHODS

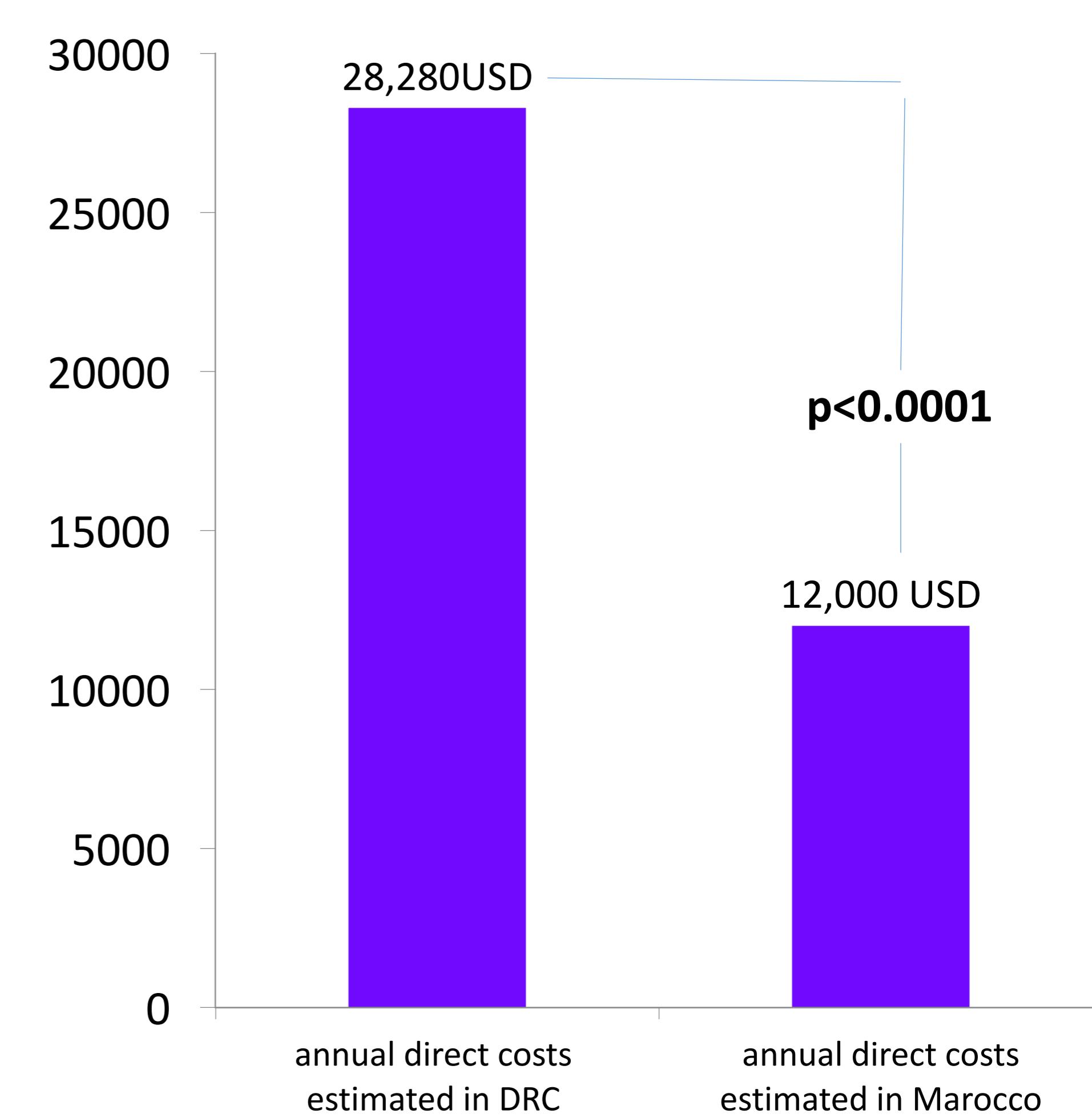
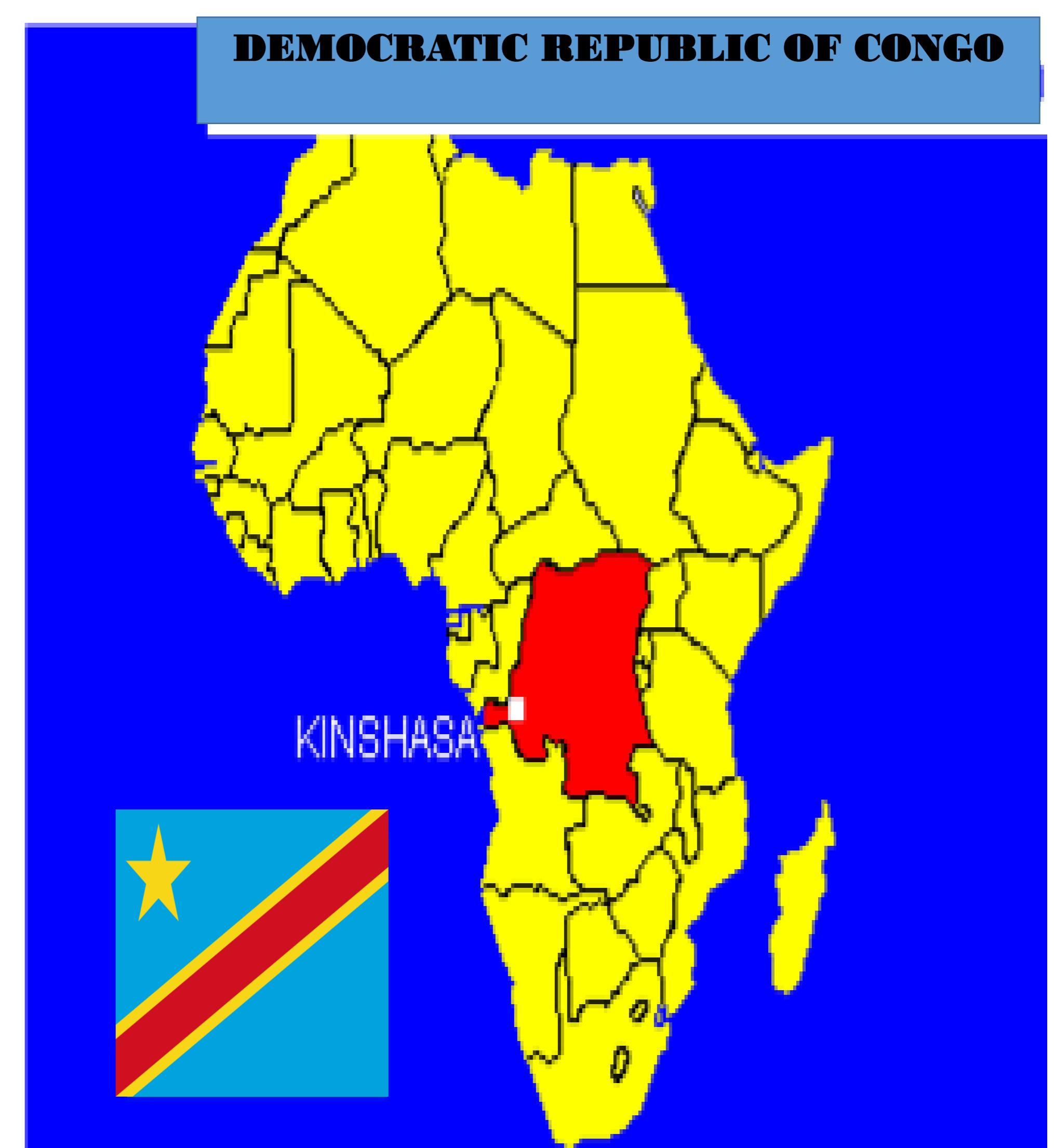
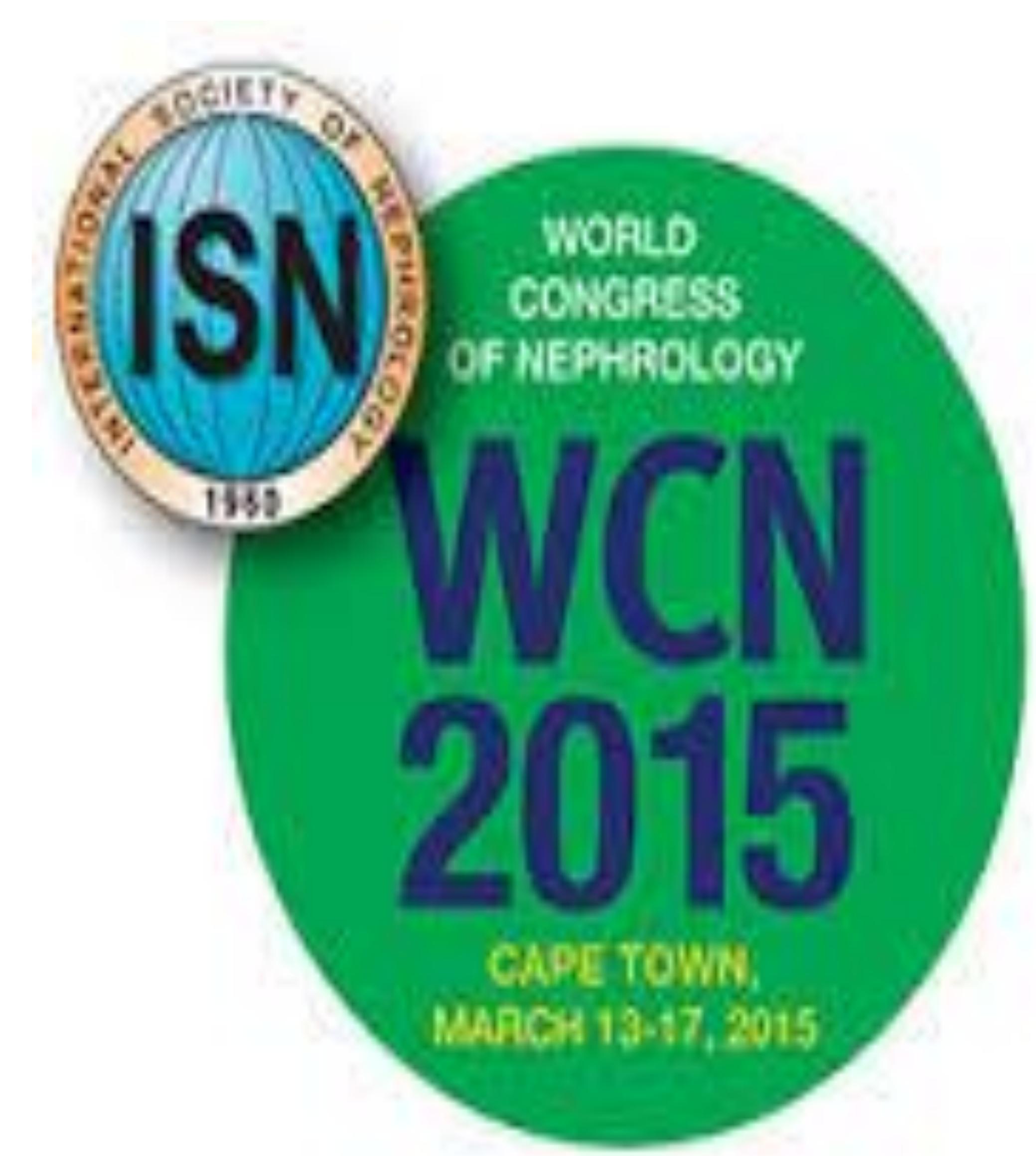
In a prospective cohort study, 92 patients (76.1% men, mean age of 51.9 ± 12.8 years) following up to a maximum of 3 months, were consecutively enrolled between 2 January 2013 to 31 December 2013 from two hemodialysis centers in Kinshasa. We calculated the direct cost [consultation, vascular access, HD sessions, drugs (related to ESRD complications, events of HD session, and comorbidities), laboratory tests and medical imaging investigation]. The cost related to transportation and hospitalization, and the indirect cost have not been considered. Logistic regression was used to identify factors associated to higher direct cost of HD.

RESULTS

The total number of dialysis sessions in two centers for the period studied was 2,265 HD (24.6 ± 8.9 per patient). The mean cost of a dialysis session per patient in Kinshasa was 287 \$ US dollars (USD). The quarterly average direct cost of care in chronic HD per patient was calculated as 7,070 US dollars, and the average annual direct costs estimated at 28,280 USD. The cost of the HD sessions contributed to 82.5% of the direct cost with a quarterly average of 5,830 USD per patient, the drug accounted for 11.3% of the cost with a quarterly average of 802 USD per patient. The labo tests represented 3.9% of the direct cost and the vascular access accounted for 2.1% of this cost. Independent determinants associated to higher direct cost of HD were infection (adjusted HR 4.6; 95% CI [1.05 to 19.85], p = 0.043) and having at least 4 comorbidities (adjusted HR 4.3; 95% CI [1.23 to 14.95], p = 0.022).

CONCLUSION

The cost of hemodialysis in Kinshasa remained significantly higher than other developing countries, but less to developed countries, and still remained inaccessible to the majority of the population. In this context, effort to increase awareness about CKD, early detection and prevention measures for non communicable diseases in a community will help in improving management of both CVD and CKD.



Keywords: Direct cost, Hemodialysis, developing countries, Kinshasa.