A) COMMENTS ON PUBLISHED ARTICLES

Comment on "Cost analysis and sociocultural profile of kidney patients. Impact of the treatment method"

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To the Editor,
We have read with much interest the article by Víctor Lorenzo et al., entitled "Cost analysis and sociocultural profile of kidney patients. Impact of the treatment method"[1], in Nefrología and we wished to make some comments.

Although the primary objective was to "study the financial impact of treatment…" in various methods of treating chronic kidney disease (CKD) and the secondary objective was to "investigate the demographic and sociocultural profile (of the renal population)" and "its possible association with cost and method of treatment", what we find to be truly original in this study is the secondary objective.

The cost analysis used has some old methodological shortcomings (in which we have all engaged in the past), such as confusing the cost with the price. This study accepts as the cost of the haemodialysis (HD) session the price that is paid for the agreement. In cases of a private HD centre, the real cost would be the difference between the price paid by the "paying entity" (in Spain, the Regional Ministry of Health) subtracting the business profit. In a not-for-profit hospital, the cost of HD may be even higher than the price of an agreement or contract-programme.

In the event of hospital admissions, considering how difficult it is to track admissions and hospitalisation periods of dialysis or transplant patients, when we calculate the price paid in accordance with parameters such as complexity, weight and DRG created for a private healthcare system (the US system) and which financially favour surgical activity, we may reach false conclusions such as that vascular access multiplies its price (not so much its cost) if it is carried out with hospital admission instead of in outpatient surgery[2-4].

The prices calculated for DRG (Diagnosis-related Groups) are much higher than the real costs in the act (surgical DRG) of transplantation and lower in the outpatient follow-up. We could say the same of other prices agreed (transport, EPO, etc.) that do not correspond to the real costs and that are influenced by consumption variables of other non-kidney patients who also use EPO and health transport.

We recommend more recent studies that use activity-based costing (ABC) and in our country the study by Sergio Márquez Peláez and Araceli Caro Martínez of the Escuela Andaluza de Salud Pública[4].

With respect to the secondary objective, the correlation between the demographic and sociocultural profile of the renal population and the cost and treatment method is an old topic, but what is really important is not that these variables may influence the cost of each therapy (they do so very little), but rather that they may influence the choice of therapeutic method by the patient or doctor. This brings us to the problem of a lack of equity that is demonstrated in that in certain areas, access to more efficient therapies or those that better rehabilitate the patient is not fully guaranteed. And we see that in this study the parameters of peritoneal dialysis (PD) patients could not be analysed due to a low number. While access to transplantation is limited by the number of organs, access to PD or home HD does not depend on financial resources but rather on other aspects that we all know and that we are not going to mention in this letter.

And lastly, the main original finding of the article, which is the costs of advanced CKD, does not mention whether stage 5 CKD patients were candidates for HD or renal transplantation or were permanently on conservative therapy. This distinction seems essential for an efficient analysis (cost per quality-adjusted life year, QALY), and it would be very interesting to compare with the adjusted efficiency of HD in patients with multiple pathologies, who in our registries we see die during the first year of renal replacement therapy.

The very high morbidity and mortality of stage 4-5 CKD patients, who die in more than 40% of cases without requiring dialysis[5] and have high costs due to their comorbidity[6], makes it essential to carry out CKD cost analyses that are adjusted for age and QALY.

In summary, if in our country the real problems are the sustainability of the healthcare system and equality in the access to effective and efficient therapies by the patient, we must make the effort to analyse the reasons why the most efficient conservative renal therapies and renal replacement therapies are not applied in certain geographic regions or in certain sociocultural groups. Why do we not extend the registries of patients on renal replacement therapy to CKD stages 4 and 5 to really know whether the healthcare cost is efficient or not[7]?

Conflicts of interest

The authors declare that they have no conflicts of interest related to the contents of this article.

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Response to the comment on "Cost analysis and sociocultural profile of kidney patients. Impact of the treatment method"

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To the Editor,
I understand that the originality of the secondary objective is highlighted. However, this is an original study in terms of the analysis having been based on individual data (not overall financial items) and that for the first time stage 4 and 5 chronic kidney disease data and kidney and pancreas transplantation have been presented.

The authors of the letter are right: price is confused with cost and this should have been explained better in the manuscript. It is a price allocated by the Canarian Health System, not a real price. The manuscript of Parra-Moncasi obtained real (public and private) prices and this parameter may be used and data combined.

We the authors, as highlighted in the Discussion, are the first to accept allocations that do not correspond to the real prices and that cannot be extrapolated to other regions. However, our tool was "the best possible", and always the same for comparing therapeutic methods. Likewise, the prices of dialysis appear to be very balanced with respect to other series consulted, which leads us to believe that the deviation from the reality is minimal.

These data help us to understand the enormous differences between the price or cost of dialysis treatment compared with renal transplantation treatment or the enormous savings made by prolonging survival without the need for dialysis. In this regard, I believe that we have contributed original findings, with acknowledged limitations. One of the uses of the study is the cost difference between pre-dialysis (there are no previous cost data based on individual patients) and haemodialysis. Based on this, we can deduce that any measure that delays a patient beginning dialysis, let us say 12 months, could result in savings of 37,000 euros/patient/year. This is a solid argument for enhancing this area (consultant nephrologist, multidisciplinary chronic kidney disease consultations, etc.) with healthcare agents.

Cost allocation has been a major headache for us, both in terms of outpatient studies and hospitalisations for diagnosis-related groups (DRG). However, we understood it to be the best tool available for comparing hospitalisation costs between methods. We did not find data in the literature either. We allocated the corresponding DRG to all methods and as such there was no bias, although the prices were not real. The DRG are a tool for comparison between hospitals or regions, with their limitations, and they are currently the best option. Other studies reviewed make reference to overall items.

We welcome the proposal to expand registries to pre-dialysis stages and advance in the connection with primary care, the consultant nephrologist and conservative alternatives.

Conflicts of interest

The author declares that he has no conflicts of interest related to the contents of this article.

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