
**Table 2.** LV and types of LV geometry in the studied population

<table>
<thead>
<tr>
<th>LV geometry</th>
<th>HD (n = 15) (%)</th>
<th>CAPD (n = 16) (%)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left ventricular hypertrophy</td>
<td>100</td>
<td>69</td>
<td>0.018</td>
</tr>
<tr>
<td>Left ventricular geometry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal</td>
<td>0</td>
<td>12</td>
<td>0.16</td>
</tr>
<tr>
<td>Concentric remodeling</td>
<td>0</td>
<td>19</td>
<td>0.08</td>
</tr>
<tr>
<td>Eccentric hypertrophy</td>
<td>40</td>
<td>44</td>
<td>0.84</td>
</tr>
<tr>
<td>Concentric hypertrophy</td>
<td>60</td>
<td>25</td>
<td>0.048</td>
</tr>
</tbody>
</table>


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**Adherence to therapy in sub-Saharan non-dialysed Africans with chronic kidney diseases—a real burden**

Sir,

Poor adherence to medication regimens accounts for substantial morbidity, mortality and increased health care costs, especially in developing countries [1]. However, there is little evidence on adherence to therapy in non-dialysed black Africans with chronic renal diseases.

To assess adherence to drugs in patients with chronic renal diseases and to identify major barriers to adherence at the nephrology department of a teaching hospital in Dakar, Senegal. We included 118 patients with chronic renal diseases, followed between November 1st 2005 and January 31st 2006 in this study. Socio-demographic, clinical and therapeutic data were collected from medical records and patient interviews, performed by the same investigator using the same questionnaire. Rate of adherence (ROA) was defined as the percentage of the prescribed doses of the medication actually taken by the patient over a 4-week period and statistical analysis was done with SSPS 11.0. The major obstacles to adherence as reported by patients are noted in the following table 1.

**Table 1.** Barriers to adherence

<table>
<thead>
<tr>
<th>Barriers to adherence</th>
<th>Frequency %</th>
<th>Odds ratios</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complexity of drug regimen</td>
<td>30</td>
<td>3.33</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>High cost of medications</td>
<td>30</td>
<td>3.47</td>
<td>&lt;0.004</td>
</tr>
<tr>
<td>Healthcare system inaccessibility</td>
<td>21</td>
<td>2.65</td>
<td>&lt;0.002</td>
</tr>
<tr>
<td>Lack of information</td>
<td>18</td>
<td>2.35</td>
<td>0.04</td>
</tr>
<tr>
<td>Adverse effects</td>
<td>10</td>
<td>1.654</td>
<td>&lt;0.002</td>
</tr>
<tr>
<td>Auto-medication with phytotherapy</td>
<td>13</td>
<td>3.26</td>
<td>0.005</td>
</tr>
<tr>
<td>Forgetfulness</td>
<td>7</td>
<td>1.37</td>
<td>&lt;0.004</td>
</tr>
</tbody>
</table>

Our results suggest that adherence to therapy is good for the majority of our patients whereas data from the clinical trials where patients are selected and closely followed show that ROA ranges between 43% and 78% [2]. For our study, ROA may be overestimated by self-reporting method of measure [3]. Complexity of drugs regimen and high cost of drugs are the main obstacles to adherence. They have also been reported in populations from different areas [2,4]. Patients with simple dosages (one pill, once daily) have better ROA than patients taking six doses daily [2]. Phytotherapy use is very common in a population with low social security cover and where modern care and drugs are often not accessible to the majority.

In conclusion, non-adherence to therapy is probably underestimated and should be regularly assessed by simple, accurate and inexpensive methods, in routine consultation of patients. Most of the barriers reported by our patients can be solved by improving communication between patients and health providers and accessibility of healthcare system. Costly new strategies comprising behavioural methods and electronic recall devices are often not adapted to clinical practice, particularly in developing countries.

**Conflict of interest statement.** None declared.

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**The scientific standing of present-day medicine focusing on nephrology**

Sir,

In this letter, I would like to reflect on the scientific standing of present-day medicine. We live in an age of opinion polls and counting clicks on websites. Once upon a time if faced with a new idea in medicine, a new therapy or drug, a research article or other ‘scientific publication’, we would wonder: is it scientific? Does it reflect depth of knowledge? Has it been adequately tested? (More recently, the questions may have degenerated: can we afford it, or even: is it potentially lucrative?)
In the most advanced forms of medicine (regenerative, substitutive, genetic, targeted) two problems deserve reflection:

(i) Can medicine today claim the status of a proper science?

(ii) Are the results properly ranked by the impact factor (i.e. the Thomson Scientific Citability Index)?

The first question runs up against an immediate difficulty that science is always changing itself, unerringly shifting the confines of the various disciplines, plumbing the depths of human ignorance and reviewing the benchmarks of our knowledge. Again, what does scientific mean? Is there any property that would allow some, but not all, research to be termed scientific? In what sense can scientific propositions be attributed the value of truth to nature?

One thing to be said for Medicine is that, unlike many other disciplines, it neither simply describes, nor searches for a calculus; it possesses a highly important basis for assessment: it judges by the facts, which can then be tested by their correspondence with reality as seen from medicine’s multidisciplinary angles.

Much of the merit for this can be traced to Nephrology, whose great feats of application (especially dialysis and transplantation) are recognized among the major milestones in the evolution of medicine from Hippocrates to today.

Up to 30–40 years ago, the fact that death of a vital organ no longer spelt death for the individual was ‘miraculous’. Organ replacement (dialysis and/or transplantation) ensured survival. Survival might be good enough (good or spectacular), depending on the replacement programme.

- In terms of clinical and social rehabilitation, transplantation provides the best results, but can be performed in no more than 30% of patients, which creates class I and class II discrimination.
- Dialysis is being applied more and more widely, but the long-term cost/benefit verdict is far from satisfactory.

To reach the status of a proper science, any branch of knowledge must involve a combination of theory and application (the conceptual and procedural knowledge of the present day). Such simultaneous development has only occurred in a few disciplines. One is bacteriology/virology and its clinical pharmacology, which has led to the disappearance of many infectious diseases. This is ‘true progress in medicine’: a winning solution, striking at the cause and completely rehabilitating the patient, at minimal cost to society.

Unfortunately, in the last 30 years the applicative evolution of most medical disciplines, including nephrology, has not always been matched by a parallel evolution in cognitive theory, and the consequences of this gap are quite clear today.

As a direct result, dialysis has witnessed a progressive inbreeding of cognitive science, a progressive recurrence of the drawbacks of applied technology: a satisfactory survival rate in dialysis patients; but in general, rather disappointing in all other expectations (five times higher hospitalization than normal, 60% unemployment and 40% disability rates). Transplantation is still performed via protocols fixed by the clinician according to some alleged pharmacodynamics of the drugs and not to the specific immunological needs of the patient. Other disappointing long-term results may occur: progressive patient–doctor detachment; patient discrimination, social and family difficulties, present frustration and future anxiety.

This mismatch occurring in the evolution of medical knowledge is hardly surprising if one reflects on the grounds on which nephro-thinking has evolved in the last 20 years. In ancient Greece, classical medicine developed in a simultaneous cosmological vision (health and disease as part of a philosophical and environmental whole). From the Renaissance on, the vision became more anthropological (the patient as the prime object or subject). In contrast, modern medicine (including nephrology and its application) has evolved in largely technological stages, in which the gap between theory and application has grown even more evident due to the tendency to advance applicative proposals without any precise cognitive foundation.

And thus, from the reality of 40 years back—survival guaranteed by renal replacement therapy—we come to our present reality: what counts is no longer survival but the quality of life.

How can the scientific standing of nephrology be assessed on its applicative performance? One certainly has reason to doubt whether the results are being properly graded by the impact factor (i.e. the Thomson Scientific Citability Index).

This is not the place to discuss the merits (or ethics) of Thomson Scientific citability. Like all forms of snobbery, it penalizes the outsider, newcomer or plain modest and favours the self-advertising, and the ‘in’ set. It is statistics applied to name-dropping—an unsavory combination, most people might think, but promotion, careers, grants and the funding of whole institutions are coming to depend on it, from Far East to Far West. Equally serious, whereas the catch phrase ‘impact factor’ is on the lips of the majority, how many know how it really works, or who Thomson Scientific are; what their formula is based on, or the fact that a subjective Thomson selection decides both elements of that formula (what journals deserve to be ‘indexed’, and what articles are deemed to be ‘citable’).

Perhaps we would do better, in judging a new medical product, to stick to consideration of its scientific standing, if we can agree on how scientific medicine actually is. Adequate professional, impartial assessment becomes especially important in disciplines—renal replacement is one—where the real impact is on millions of patients worldwide.

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Acute renal failure and chronic lymphocytic leukaemia

Sir,

Renal infiltration is often associated with chronic lymphocytic leukaemia (CLL). However, it is infrequently the direct cause of kidney failure. In CLL, postrenal obstruction with intra-abdominal [1–5] lymphadenopathy and/or increased incidence of uric stones, Bence-Jones proteinuria and/or cryoglobulinaemia can cause kidney failure indirectly [1,5].