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Too Much Medicine
How to increase value and reduce waste in the nephrology setting

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The idea that some medical interventions are unnecessary and that in some of these procedures harm outweighs benefit is as old as medicine itself. In Mesopotamia, 38 centuries ago, Hammurabi proclaimed a law against overzealous surgeons threatening them with the loss of an eye or a hand[1].

Diagnosis drives treatment, and in recent years the term overdiagnosis has been used to describe distinct conditions where diagnosis leads to unnecessary treatment. Overdiagnosis is said to occur when "individuals are diagnosed with conditions that will never cause symptoms or death"[2]. Overtreatment includes treatment of these overdiagnosed conditions, as well as treatment that has limited evidence of benefit.

The BMJ has recently launched the ***Too Much Medicine*** campaign which aims to highlight the threat overdiagnosis and overtreatment pose to human health, and the Portuguese Journal of Nephrology and Hypertension is a willing partner in this initiative.

In this issue of the Journal different perspectives on the diagnosis of chronic kidney disease are presented: Ray Moynihan, a senior research fellow at Bond University, Australia, states that "the widened definition of chronic kidney disease that labels many older people without symptoms as "diseased" (…) is the subject of on-going controversy", and Richard Glassock, one of the most eminent physicians in the field of nephrology and Emeritus Professor of Medicine at the Geffen School of Medicine at the University of California at Los Angeles, claims that "our specialty, Nephrology, has been engaged in this controversy, by contributing a growing number of "overdiagnosed" patients as a direct consequence of a diagnosis and classification system that uses two biomarkers, estimated glomerular filtration rate (eGFR) and proteinuria (albuminuria) to identify chronic kidney disease (CKD)[3] and to determine its likely prognosis. Unfortunately, this schema, now globally adopted, is not calibrated for the expected changes in these biomarkers (especially the eGFR component) that accompany normal aging (renal senescence)". According to these authors, the current definition of CKD is certainly a case of **overdiagnosis**. Meanwhile, Julie R Ingelfinger, on behalf of the World Kidney Day Steering Committee, and focusing on childhood, claims that "early childhood history should be watched closely in order to help detect early signs of kidney disease in time to provide effective prevention or treatment".

In this issue you will also find a comment by António Vaz Carneiro on the SPRINT trial. This trial concluded that, among patients at high risk for cardiovascular events but without diabetes, targeting a lower than usual blood pressure value is associated with improved outcomes even in the elderly. However, Carneiro states that the study was stopped early for benefit and it is well-known that early stopping is a potential threat to the validity of the results. Additionally, and according to Carneiro, a closer look at the study shows that when targeting a lower blood pressure value harm clearly outweighs benefit. There is a long history of medical beliefs supporting the notion the lower the better. Following the publication of this trial, there has been an unwarranted

enthusiasm among physicians, which hyped beliefs among patients, as well as unrealistic expectations among policy makers. Any recommendation coming out supporting the conclusions of this trial will possibly be an example of **overtreatment**. The most wanted results are frequently achieved but do not necessarily become true.

Last but not least, Pedro Ponce in an article on performance measurement in the haemodialysis population states that "unfortunately, most established Key Performance Indicators (KPIs) are not supported by robust scientific evidence", and, therefore, "undue focus on certain KPIs can lead to potential adverse effects. On the other hand, (…) most KPIs do not contribute to change hard outcomes". Indeed, performance measurement as currently implemented in Portugal and in most European countries is possibly the greatest inducer of Too Much Medicine in the dialysis setting.

References

1. Malhotra A, Maughan D, Ansell J, Lehman R, Henderson A, Gray M, Stephenson T, Bailey S. Choosing Wisely in the UK: the Academy of Medical Royal Colleges' initiative to reduce the harms of too much medicine. BMJ 2015;350:h2308
2. Welch HG, Schwartz L, Woloshin S. Overdiagnosed: making people sick in the pursuit of health. Beacon Press, 2012