



Editorial

World Kidney Day: an opportunity to make kidney health and Nephrology visible

El Día Mundial del Riñón: una oportunidad para visibilizar la salud renal y la Nefrología

David Arroyo^{a,b,*}, Itziar Bueno Zamarbide^{c,d}, Patricia Muñoz Ramos^e, Esther Rodríguez Suárez^e, Maider Ustarroz Alegre^a, Marco Vaca^a, David Conejo Gómez^e, Marta Isabel San Juan^f, Emilio Sánchez Álvarez^{b,g}

^a Servicio de Nefrología, Hospital General Universitario Gregorio Marañón, Madrid, Spain

^b Sociedad Española de Nefrología (S.E.N.), Spain

^c Servicio de Nefrología, Hospital Universitario de Navarra, Pamplona, Spain

^d Sociedad Española de Enfermería Nefrológica (SEDEN), Spain

^e Servicio de Nefrología, Hospital Universitario Infanta Leonor, Madrid, Spain

^f Fundación Renal Iñigo Álvarez de Toledo, Madrid, Spain

^g Servicio de Nefrología, Hospital Universitario de Cabueñes, Gijón, Spain

ARTICLE INFO

Article history:

Received 4 May 2024

Accepted 11 May 2024

Despite the importance of kidney function on the overall health of the body and the high and increasing prevalence of chronic kidney disease (CKD) at national and global level, there is little knowledge about kidney disease in the general population.¹ Greater knowledge would favor better self-care among people with risk factors, greater involvement in screening programs, more funding for research projects and, with all this, more progress in the control of the epidemic of kidney disease with its devastating consequences on cardiovascular function, the need for kidney replacement, survival and quality of life.

History of World Kidney Day (WKD)

In 2006, the International Society of Nephrology and the International Federation of Kidney Foundations (World Kidney Alliance) launched for the first time the World Kidney Day initiative, aiming to increase the visibility of kidney health.² The second Thursday of March was chosen to broaden the impact at a communicative level. This date also coincides with a significant day for nephrology: on March 9, 1960, Scribner, Quinton and Dillard performed the first Scribner shunt, thus starting the chronic hemodialysis programs that have saved so many lives in these 75 years.³

The WKD is updated each year with a specific slogan, which has ranged from more generic topics (Are your kidneys well? in 2006) to specific associated pathologies (Protect your kidneys:

DOI of original article:

<https://doi.org/10.1016/j.nefro.2024.05.004>.

* Corresponding author.

E-mail address: dvdrry@gmail.com (D. Arroyo).

2013-2514/© 2024 Published by Elsevier España, S.L.U. on behalf of Sociedad Española de Nefrología. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

control diabetes in 2010) or directed to specific populations (‘‘Kidneys and Women’s Health’’ in 2018). The 2024 slogan is ‘‘Kidney Health for All – Advancing equitable access to care and optimal medication practice.’’⁴ In addition, specific training and dissemination materials are developed for visual homogeneity worldwide.

From the beginning, the Spanish Society of Nephrology (SEN) has worked together with the Spanish Society of Nephrological Nursing (SEDEN) and non-profit organizations, such as the Association for the Fight Against Kidney Diseases (ALCER) and the Iñigo Álvarez de Toledo Renal Foundation. The different activities are updated on the official WKD website.⁵ Fortunately, we observe that this event is having an increasing impact among the different professionals involved in the care of kidney patients and in the general knowledge of the population.

WKD 2024 activities

The III Solidarity Race ‘‘GET MOVING FOR KIDNEY HEALTH’’

After the success of the two previous editions, the III Edition of the World Kidney Day Run was held on March 10, 2024, a solidarity event whose proceeds are donated to ALCER for the benefit of patients with kidney disease. The event was once again a success in terms of attendance, with a total of 380 registered runners who completed the 5 km course in Madrid, in addition to 59 people who completed the distance remotely with the support of the official application. This data confirms the good reception of the race in successive editions, despite the adverse weather conditions this year.

Dissemination and awareness-raising activities for professionals and the general public

Among the activities aimed at increasing social awareness of health and kidney disease, there have been several interventions in the written and audiovisual media. Specifically, we recorded 191 publications in traditional press, digital, television and radio, with an equivalent advertising value (estimation of the magnitude of appearance in the press comparing the extent of coverage with the same cost for each medium) of 658,150.00 €.

For the first time, the SEN has opened a social media account, on the social network Instagram, a medium that is increasingly used for the dissemination of content. In addition, it has collaborated with several creators of healthcare content with high impact on social networks (@boticariagarcia, @farmaenfurecida, @mienfermerafavorita), who gave voice to kidney health for all their followers. These actions have reached more than 100,000 Instagram accounts.

A photography contest has also been organized on social networks with wide participation. Three new podcasts have been published on topics related to the WKD and kidney health (‘‘Salud renal para todos: Kidney health for all,’’ ‘‘Hemodomi, ilusión para el paciente renal: Home dialysis, excitement for kidney patients’’ and ‘‘La importancia del deporte en la ERC: The importance of sports in CKD’’).⁶ Finally,

Table 1 – Characteristics of the congressional staff who attended Kidney Health Day.

Variable	Result n = 355
Age (years) ^a	50.6 ± 11.2
Female gender ^a	190 (53.5%)
GFR (mL/min) ^a	85.1 ± 20.5
GFR status ^a	
GFR >90 mL/min	148 (41.7%)
GFR 61–90 mL/min	161 (45.4%)
GFR 46–60 mL/min	36 (10.1%)
GFR 31–45 mL/min	8 (2.3%)
GFR ≤30 mL/min	1 (0.3%)
SBP (mmHg) ^b	131.2 ± 17.7
DBP (mmHg) ^b	76.8 ± 10.5
Arterial hypertension ^b :	94 (26.6%)
Systolic diastolic hypertension	151.8 ± 14.9/84.5 ± 11.9
Isolated systolic hypertension	29 (8.2%)
Isolated diastolic hypertension	160.7 ± 16.8/95.9 ± 4.4
Normal-high BP (120–129/80–85 mmHg) ^b	57 (16.1%)
Grade 3 hypertension (≥180/110 mmHg) ^b	149.5 ± 10.6/77.5 ± 9.9
	8 (2.3%)
	135.9 ± 16.5/93.4 ± 3.1
	81 (22.8%)
	132.7 ± 5.0/77.8 ± 7.1
	7 (2.2%)
	189.4 ± 8.4/100.0 ± 7.5

Absolute frequency (relative frequency) for quantitative variables. Mean ± standard deviation for qualitative variables.

eGFR, estimated glomerular filtration rate; DBP, diastolic blood pressure; SBP, systolic blood pressure; HT, hypertension; DBP, diastolic blood pressure.

^a Sample size: 355.

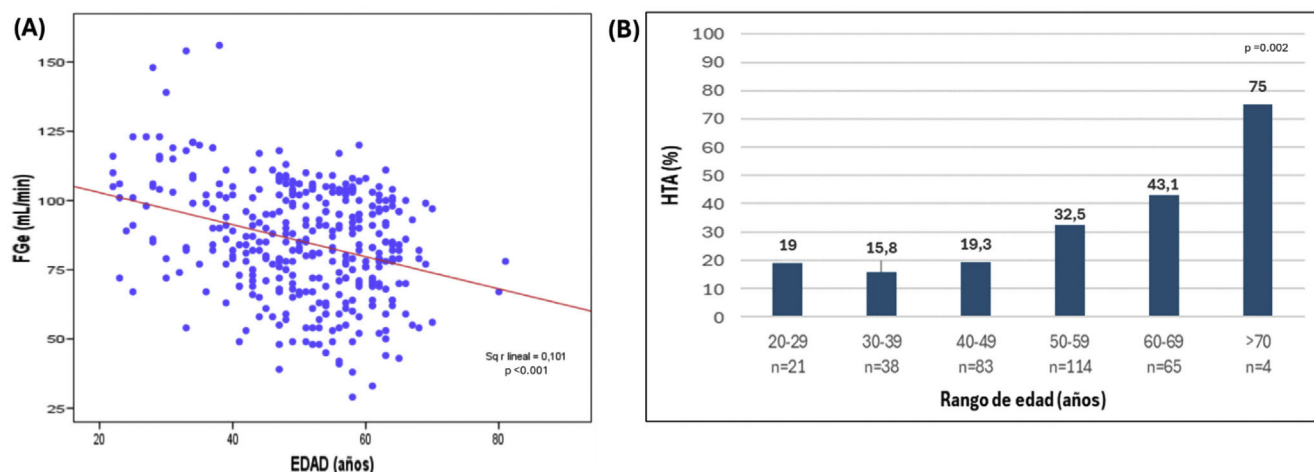
^b Sample size: 325.

ONCE (a non-profit organization for the social inclusion of people with disabilities) issued its March 14 daily lottery ticket with the WKD logo, the SEN logo and the slogan (‘‘Salud renal para todos’’-Kidney health for all).

Initiatives to promote awareness among health care managers and administrations

On March 13, 2024, the event ‘‘Test your Kidney Health’’ was held at the National Congress of Deputies. This was done to increase awareness of the impact of CKD in the population, information leaflets were distributed to all those who attended the event and they were offered screening for arterial hypertension (HTN) and CKD. The measurement of blood pressure (BP) was performed using DBP-1307 blood pressure monitor (Aposan[®], Madrid, Spain) validated by the European Society of Hypertension (ESH). For the estimation of glomerular filtration rate (eGFR), capillary blood creatinine was assessed using the Nova Max Pro[®] Creat-eGFR portable meter (Nova Biomedical[®], Waltha, USA), which calculates eGFR with the CKD-EPI 2021 formula with a sensitivity of 98.9% and a specificity of 85.3%.⁷

Some 355 male and female workers of the Congress of Deputies, of whom 190 (53.5%) were women, participated (Table 1). The mean age was 50.55 ± 11.23 years, with 203 of the attendees (57.1%) over 50 years of age. A total of 45 attendees (12.7%) presented an eGFR less than 60 mL/min, including one person with an eGFR less than 30 mL/min (Fig. 1). The



Abreviaturas: FGe, filtrado glomerular estimado; HTA, hipertensión arterial.

Fig. 1 – Correlation between age and eGFR (A) and between age and blood pressure levels compatible with hypertension (B) among the workers of the Congress of Deputies who attended the Kidney Health Day. eGFR, estimated glomerular filtration rate; HT, hypertension.

prevalence figures of CKD, considered as a GFR < 60 mL/min, coincide with those published in the latest epidemiological studies.^{8,9}

In addition, blood pressure was measured in 325 attendees (91.5%). Of these, 94 people (26.6%) had values of BP figures in the HTN range with a mean systolic BP of 151.78 ± 14.90 and 84.53 ± 11.85 mmHg of diastolic BP (Fig. 1). Seven people (2.15%) presented grade 3 HTN ($\geq 180/110$ mmHg). In addition, another 81 people (22.8%) presented values of BP in the normal-high range (130–139/85–89 mmHg) according to the classification of the latest ESH guidelines.¹⁰

The limitations of the screening program include the following: some participants were already diagnosed with CKD and/or HTN; blood pressure was not measured under optimal conditions of a relaxed environment with three subsequent measurements; the method used for GFR estimation is for screening and has higher variability than laboratory measurement, and furthermore, albuminuria was not measured, so the rate of CKD may have been underestimated.

In any case, this day served to raise awareness among politicians, managers, officials and collaborators about the importance of early diagnosis of CKD, in addition to reinforcing to the spokespersons of the different political groups of the Health Commission the need to implement specific kidney health policies at the national and regional levels.

In addition, as usual, on March 14, an official event was held at the Ministry of Health, with representation from the SEN, SEDEN and ALCER and the presence of political delegates. During the event, the epidemiological impact of kidney disease was emphasized, as well as the measures that need to be promoted by the health administrations and the need to implement measures to guarantee equity in kidney health among the entire national population, in line with the slogan of WKD 2024.

Activities carried out by members and professionals

With the help of the material sent from the SEN, many nephrology services, dialysis centers and health professionals, collectively or individually, developed local and regional actions to collaborate in the aims of WKD.¹¹ Social networks have been filled with references and photographs on the importance of knowing about how kidneys work, the early diagnosis of kidney disease and the prognostic implications of its progression.

Conclusion

The evolution of the prevalence of CKD in Spain makes it a public health problem; however, its silent and transversal nature results in a lack of knowledge about kidney health, both by the general population and by health managers and public officials. It is everyone's responsibility, including health professionals, patients and allies, to promote and participate in initiatives that help to maximize the visibility of kidney health and kidney disease.

REFERENCES

1. GBD Chronic Kidney Disease Collaboration. Global, regional, and national burden of chronic kidney disease, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet*. 2020;395:709–33.
2. Collins AJ, Couser WG, Dirks JH, Kopple JD, Reiser T, Riella MC, et al. World Kidney Day: an idea whose time has come. *Kidney Int*. 2006;69(5):781.
3. Blagg CR. The 50th anniversary of long-term hemodialysis: University of Washington Hospital, March 9th, 1960. *J Nephrol*. 2011;24 Suppl 17:S84–8.
4. Available from: <https://www.worldkidneyday.org>. Último acceso el 18 de marzo de 2024.

5. Available from: <https://www.diamundialdelriñon.com>. Último acceso el 18 de marzo de 2024.
6. Available from: <https://open.spotify.com/show/5wCresb89EnXT1X76dZkTP>. Último acceso el 18 de marzo de 2024.
7. Inker LA, Eneanya ND, Coresh J, et al. New creatinine- and cystatin C-based equations to estimate GFR without race. *N Engl J Med*. 2021;385(19):1737–49.
8. Kidney Disease: Improving Global Outcomes (KDIGO) CKD Work Group. KDIGO 2024 clinical practice guideline for the evaluation and management of chronic kidney disease. *Kidney Int*. 2024;105(4S):S117–314.
9. Gorostidi M, Sánchez-Martínez M, Ruilope LM, Graciani A, de la Cruz JJ, Santamaría R, et al. Chronic kidney disease in Spain: prevalence and impact of accumulation of cardiovascular risk factors. *Nefrologia (Engl Ed)*. 2018;38(6):606–15.
10. Mancia G, Kreutz R, Brunström M, Burnier M, Grassi G, Januszewicz A, et al. 2023 ESH Guidelines for the management of arterial hypertension The Task Force for the management of arterial hypertension of the European Society of Hypertension: Endorsed by the International Society of Hypertension (ISH) and the European Renal Association (ERA). *J Hypertens*. 2023;41(12):1874–2071.
11. Available from: <https://www.youtube.com/watch?v=p1bF-19xlyY>. Último acceso el 18 de marzo de 2024.