

# The time is now: Paving the way for optimal kidney care for all





## Introduction



This advocacy paper is being released in conjunction with World Kidney Day 2024, featuring the 2024 campaign theme "Kidney Health for All - Advancing equitable access to care and optimal medication practice".

Across the globe, chronic kidney disease (CKD) affects around 700 million people, with 3.1 million deaths attributable to kidney dysfunction, making it the seventh leading cause of mortality worldwide.1 Low- and middle-income countries bear a disproportionate burden of CKD and kidney failure.<sup>2,3</sup> Multiple determinants including socioeconomic, cultural, environmental, and political factors contribute to the disparity in disease burden across the globe. 4,5 In lower resource contexts, access to and affordable and quality kidney care are particularly challenging, contributing to premature deaths of millions of people.6

# Hea For A

Advancing equitable access to care and optimal medication practice





Kidney disease can be prevented through addressing many social determinants of health through achievement of the Sustainable Development Goals, comprehensive public health measures, and implementation of early detection and treatment of the major risk factors for CKD.7 Once established, kidney function can be stabilized with affordable access to quality care.8

Novel therapeutic strategies are game-changers in CKD - progression can be delayed, and the need for dialysis, and cardiovascular complications of CKD, reduced or avoided.9

World Kidney Day calls for a multi-stakeholder approach involving governments, health systems, non-governmental organizations (NGOs), communities, and patients to reduce the existing inequities in access to kidney care and treatment and optimize quality of kidney care for all.



# **Barriers to equitable access** to optimal kidney care and medication practice

Multiple factors impede optimal access to kidney care worldwide. These fall into six major categories: disease-related, patient-related, clinicianrelated, socio-economic factors, health systems, and policy-related.



#### Disease-related

**Asymptomatic onset of CKD Disease complexity** Polypharmacy (use of multiple medications at a time)



- · High prevalence of multi-morbidity (e.g., hypertension, diabetes, and cardiovascular disease).
- · Large pill burdens, risk of adverse drug events, drug interactions.



#### **Patient-related**

**Poor health literacy** Insufficient self-care

and empowerment

Mistrust in the healthcare system

Misinformation

- Delay in seeking care.
- · Low level of awareness of CKD diagnosis.
- · Suboptimal engagement in shared decision-making with healthcare providers.
- · Challenges in understanding medical information, following treatment plans, and effectively communicating with healthcare providers.
- Suboptimal adherence to the prescribed regimen, encompassing medications, lifestyle changes, and attendance at follow-up appointments.
- Reliance on alternative therapies lacking scientific evidence.



#### Clinician-related

Inadequate diagnosis and control of common risk factors for CKD

CKD knowledge gaps among physicians

Time pressure

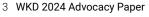
Insufficient number of nephrologists

Low physician-patient density



- · Lack of guidelines or suboptimal implementation of clinical guidelines.
- Complexity of care for patients with advanced CKD
- · High patient load and increased risk of clinician burnout.
- · Administrative burden associated with some medication prescriptions.







## Socio-economic factors

Lack of Universal Health Coverage (UHC) and out-of-pocket expenses

**Poverty** 

Unemployment

**Food insecurity** 

**Education** 

Racial and gender discrimination

Geography

- Reduced access to diagnosis and treatment, exacerbating health inequalities, and increasing the risk of premature mortality in people with CKD.
- Limited access to nutritious foods and lifestyle choices necessary to prevent and manage CKD and related conditions.
- · Challenges in access to care in remote regions.

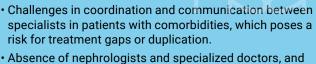


### **Health systems**

Care fragmentation

Missed opportunities for early detection of CKD

Lack of renal registries



- Absence of nephrologists and specialized doctors, ar unavailability of telemedicine services.
- · Inadequate capacity building strategies.
- Insufficient attention paid to treatment innovation and quality of care.
- Insufficient resource allocation for prevention strategies, screening, and treatment.
- Higher healthcare costs due to late diagnosis.
- · Incomplete data for policy and advocacy.



### **Policy-related**



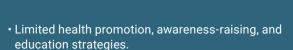
Lack of or non-implementation of national NCDs strategies

Lack of or non-implementation of CKD-specific policies

Lack of integration of CKD screening and management in other disease programs

Lack of focus on prevention





 Missed opportunities to identify synergies across public health strategies.

• Lack of adequate financing for kidney health.



# What can be done: Policy solutions

Despite its high global prevalence and mortality and the substantial societal and economic burden it imposes, CKD remains largely overlooked on the global and national health agendas.

CKD also poses a significant economic burden on health systems. Costs increase exponentially as CKD progresses. This is due to the financial demands of kidney replacement therapy (KRT), comprising dialysis and transplantation), as well as the accumulation of comorbidities and complications over time which require additional care.<sup>10</sup>

Early-stage CKD is typically asymptomatic. Targeted early screening of those at high-risk (people with diabetes, hypertension, cardiovascular disease, and obesity) offers the potential to significantly reduce morbidity and mortality from CKD and its complications. However, only 25% of countries have CKD detection programs based on national policies or guidelines.<sup>6</sup>

Recent advancements in therapeutics provide unprecedented opportunities to treat CKD and to reduce the risk of the associated cardiac complications and progression to kidney failure. Robust evidence shows that the use of renin angiotensin aldosterone system inhibitors (RASi) in combination with sodium glucose cotransporter 2 inhibitors (SGLT2i)] can delay the need for kidney replacement therapy (KRT) for several years.9 This is crucial in places where access to KRT is limited. Prescription rates of these medications are unacceptably low. Global collaborative efforts should strive to guarantee the availability, accessibility, and affordability of such medications to all patients in need, irrespective of their geographic location or socioeconomic status.





#### Area of focus

#### Responses

# CKD as a global health priority



- Implementing policies aimed at CKD prevention:
  - Addressing the commercial determinants of health (unhealthy foods and drinks, alcohol, and tobacco).
  - Implementing active lifestyle policies.
  - Supporting awareness-raising campaigns about kidney disease.
  - Implementing public health policies to optimize maternal and child health.
  - Implementing multisectoral public policies to reduce risk of acute kidney injury (e.g. access to clean water, vaccinations, infection control, road safety).
  - Addressing climate change.
- Collecting robust data to understand local burden of CKD by setting up renal registries or equivalent tools, based on resources and infrastructure available.
  - For considerations and practical guidance on how to set up renal registries, consult the ISN Sharing Expertise to Support the Set-up of Renal Registries (SharE-RR) Toolkit.<sup>11</sup>
- Ensuring sustainable financing for kidney care.
- Including kidney care in national priority setting exercises.
- Integrating **CKD screening** and care in **global policy responses** to other disease programs (e.g., maternal health, HIV, TB, and other NCDs).
- · Achieving the UN Sustainable Development Goals (SDGs).12

#### **Early detection**



- Diabetes.

- Hypertension.
- Cardiovascular disease.
- Obesity.
- Family history of kidney disease.
- History of acute kidney injury.
- Medical conditions associated with impaired kidney function (e.g., systemic lupus erythematosus (SLE), HIV).
- Environmental exposure to nephrotoxins.
- Individuals born with low birth weights or pre-term.
- Women with history of preeclampsia. [See footnote\*].

#### What to screen for:

- Blood pressure.
- Body Mass Index (BMI).
- Diabetes.
- **Kidney function** via a blood test measuring serum creatinine (and serum cystatin C if available).
- Kidney injury via urine albumin-to-creatinine ratio or urine dipstick for blood or protein in the urine.

For further information, consult the following resources: ISN-KDIGO CKD early detection toolkit, 13 WHO HEARTS technical package, 14 WHO Hypertension Guidelines, 15 and WHO Global Diabetes Compact. 16

<sup>\*</sup>Preeclampsia is a multisystem progressive disorder characterized by the new onset of hypertension and proteinuria or the new onset of hypertension plus end-organ dysfunction (with or without proteinuria). It typically presents after 20 weeks of gestation or postpartum.

#### Area of focus

#### Responses

### Optimal therapeutic management



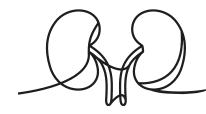
- Raising physician and patient awareness about CKD and its risk factors.
- · Supporting implementation of CKD guidelines.
- · Improving access to lifestyle and dietary advice.
- Enhancing prescription of available medications and facilitate their access in lower-income settings.
- Ensuring affordability and quality of available medications.
- Essential medications (included in the 2023 WHO Model List of Essential Medicines)<sup>17</sup> and diagnostics required for kidney care to be provided under UHC.

Quote from patient: "My medications are not covered by UHC or insurance policies, I cannot afford to take the most effective medications as recommended by my doctors. I decide not to take the medication, settle for less expensive option, or start to ration the regular dose."

#### **Quality of care** and medications



- Enhancing the training of the healthcare workforce.
- Ensuring availability of accurate diagnostics.
- · Guaranteeing reliable infrastructure.
- Regulating and monitoring drug manufacturing and quality standards.
- Using **technology** to reduce time constraints, overcome guideline overload, and ensure personalized approaches (e.g., telemedicine, electronic health records, team-based nudges, decision support tools).18
- Using innovation platforms to improve patient-clinician communication.
- · Implementing the use of 'combined clinics' with on-site nephrologistcardiologist-endocrinologist collaboration.
- Enhancing the use of polypills<sup>2</sup> [See footnote].<sup>20</sup>
- Improving clinician-patient ratio.
- Task shifting from specialists to non-specialist healthcare workers, such as nurses and technicians.



<sup>&</sup>lt;sup>2</sup>A polypill is a medication that combines multiple drugs into a single pill or capsule, with the aim of simplifying the medical regimen and reducing medication-induced adverse effects.

## **Conclusion**

Addressing the global barriers to optimal kidney care is imperative for ensuring the well-being of individuals affected by kidney disease and their caregivers. The multifaceted challenges outlined in this advocacy paper underscore the urgent need for comprehensive solutions that encompass policy actions, health systems reforms, education, and awareness-raising activities to ensure that all people at risk of CKD are screened early and receive optimal education and care to stabilize kidney function and save lives.



## References

<sup>1</sup>https://www.healthdata.org/data-tools-practices/interactive-visuals/gbd-compare

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<sup>13</sup>https://www.theisn.org/initiatives/toolkits/ckd-early-screening-intervention/#Quick-Guide-and-Infographics%20

<sup>14</sup>https://iris.who.int/bitstream/handle/10665/252661/9789241511377-eng.pdf?sequence=1&isAllowed=y&ua=1

<sup>15</sup>https://www.who.int/news-room/fact-sheets/detail/hypertension#:~:text=Hypertension%20is%20diagnosed%20 if%2C%20when,days%20is%20≥90%20mmHg.

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World Kidney Day (WKD) is the global campaign that aims at increasing awareness of the importance of our kidneys to our health and reduces the impact of kidney disease and its associated problems worldwide. WKD is a joint initiative of the International Society of Nephrology and the International Federation of Kidney Foundations that was started in 2006 and has not stopped growing ever since.

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