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**2018**

UNITED NATIONS HIGH-LEVEL  
MEETING ON NCDs

# A CALL TO ACTION ON KIDNEY DISEASE



# Introduction

The 2018 United Nations High-Level Meeting on Non-Communicable Diseases (UN HLM on NCDs) is a vital opportunity to review – at the highest political level – the recent progress achieved by member states and the need for renewed action and collaboration to address the global NCD crisis.

Kidney disease - the 11th leading cause of death globally – is a rapidly growing health burden and poses a significant health care challenge for governments, particularly in low and middle income countries<sup>1</sup>. Kidney disease is a cause and a consequence of other major NCDs, including heart disease and diabetes, and yet it has been neglected in global NCD discussions to date.

Kidney disease is a high priority NCD which now requires urgent consideration by political leaders. As the Sustainable Development Goals (SDG) agenda progresses and provides a platform for raising awareness of NCD health care and monitoring needs<sup>2</sup>, targeted action on kidney disease should become integral to the global policy response.

This document aims to inform contributors to the UN HLM process and outcome document of the importance of kidney disease and to highlight best practice policy solutions.

# Kidney disease

## The case for action



**850 MILLION**

PEOPLE  
WORLDWIDE

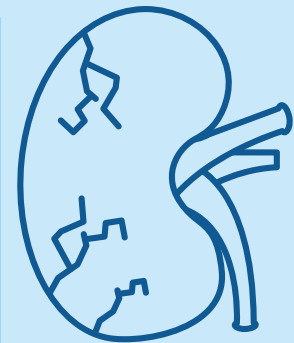
are now estimated to have some form of kidney disease<sup>3</sup>.



**11<sup>TH</sup>**

LEADING CAUSE OF  
GLOBAL MORTALITY

Chronic kidney disease (CKD) causes an estimated 1.2 million deaths per year and is now the 6<sup>th</sup> fastest growing cause of death. An additional 1.2 million deaths are attributable to reduced kidney function (measured by the glomerular filtration rate (eGFR))<sup>4</sup>.



**13 MILLION**

PEOPLE  
AFFECTED WORLDWIDE

Acute kidney injury (AKI), an important driver of CKD, affects over 13 million people worldwide and 85% of these cases are found in low and middle-income countries (LMICs)<sup>5</sup>.



**2.6 MILLION**

RECEIVED DIALYSIS OR  
TRANSPLANTATION  
WORLDWIDE

In 2010, 2.6 million people with end-stage kidney disease (ESKD) or “kidney failure” received dialysis or transplantation worldwide<sup>6</sup>, a number projected to increase to 5.4 million by 2030<sup>7</sup>.



**\$35,000 -  
\$100,000**

DIALYSIS AND KIDNEY  
TRANSPLANTATION  
ANNUAL COSTS

The cost of treating CKD and its complications is unaffordable for governments and individuals in many parts of the world. Annual costs of dialysis and kidney transplantation alone range between US \$35,000 and US \$100,000 per patient<sup>8</sup>.



BETWEEN  
**2.3 - 7.1  
MILLION**

PREMATURE DEATHS FOR  
LACK OF ACCESS TO DIALYSIS  
AND TRANSPLANTATION

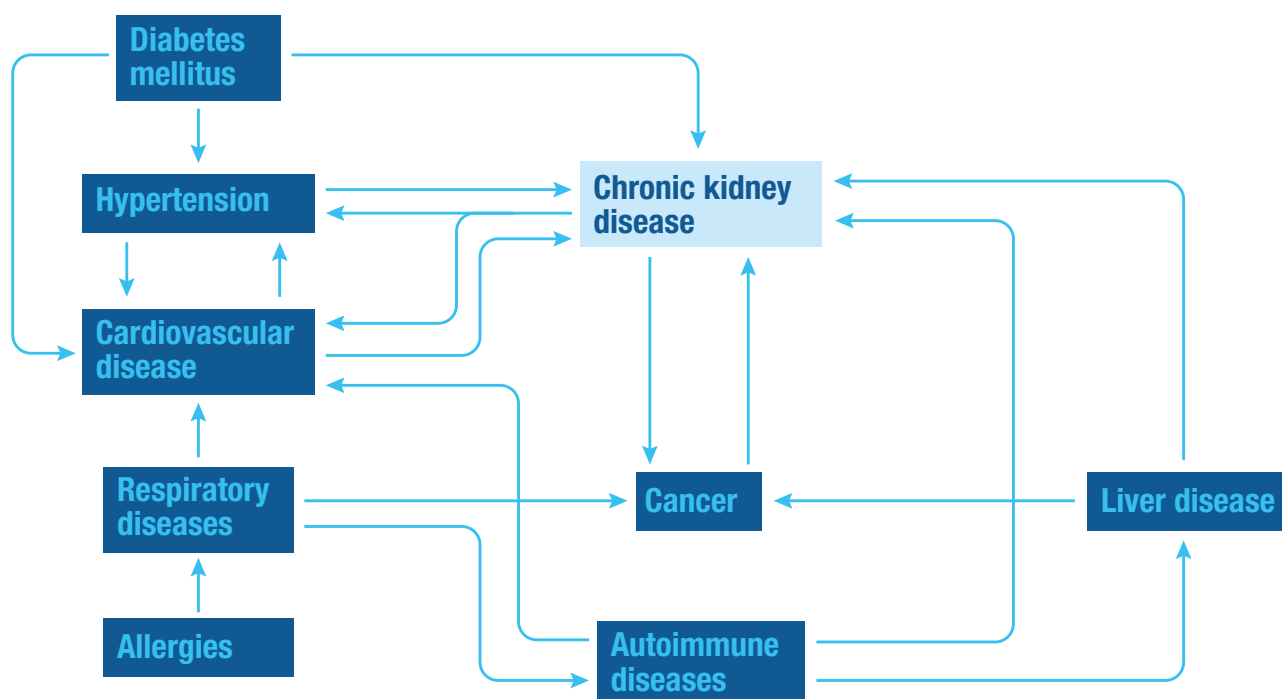
The majority of those deaths occur in countries where resources are insufficient and out of pocket costs are too high<sup>9</sup>.

# Risk factors and co-morbidities

• CKD and AKI are intricately linked to increased morbidity from other diseases including cardiovascular disease, diabetes, hypertension, obesity, as well as infections such as HIV, malaria, tuberculosis and hepatitis.

• CKD and AKI share common risk factors including poverty, lack of education, malnutrition, poor sanitation, working conditions, environmental exposures, infectious diseases, and natural disasters as well as poor access to maternal and child health, public health interventions, and universal health coverage.

• The causes of kidney disease remain uncertain in a large proportion of affected individuals, often hindering specific therapeutic approaches.



**THE NETWORK OF CHRONIC DISEASES AND THEIR MUTUAL INFLUENCES** | Almost all chronic disorders impact each other in various ways. Chronic kidney disease is often one of the end points in this cascade, but can also cause several chronic conditions, leading to a vicious cycle. *Source: Vanholder, R., et al. (2017)<sup>10</sup>*

# Kidney disease management

• While national policies and strategies for NCDs in general are common in many countries, specific policies directed toward kidney disease are often lacking<sup>11</sup>.

• Screening of at-risk individuals is not covered in 52% of countries, and coverage for early and general management to reduce the risk of CKD progression and management of CKD complications is absent in 42% and 40% of countries respectively<sup>12</sup>.

• Poor management of kidney disease is compounded by delayed referrals, fragmented care, poor follow-up referral pathways, and inadequate focus on patient engagement and education<sup>13</sup>. These challenges are magnified considerably in LMICs<sup>14</sup>.

# 1

LEAVE NO DISEASE BEHIND:  
**AN INTEGRATED APPROACH  
TO NCD PREVENTION AND  
MANAGEMENT, INCLUDING  
KIDNEY DISEASE.**

## PRIORITIES FOR ACTION

### | Background

- Current global political commitments on NCDs (UN Sustainable Development Goals, WHO Global Action Plan for NCDs, WHO Best Buys and others) focus predominantly on four main diseases - cardiovascular disease (CVD), cancer, diabetes and chronic respiratory disease. Yet, it is estimated that 55% of the global NCD burden is attributed to diseases outside of this group<sup>15</sup>. Furthermore, the burden of these four diseases is amplified in the presence of kidney disease, and they frequently also co-exist including with kidney disease.
- This narrow focus on a limited number of NCDs leads to shortcomings at the national level where policies to address kidney disease are widely lacking. According to the Global Kidney Health Atlas, only 44% of countries are reported to have national strategies for kidney care (non-dialysis), 55% for chronic dialysis and 47% for kidney transplantation.
- Given the mutual influences and evident synergies between kidney disease and CVD, hypertension and diabetes, integrated prevention and disease management programs are essential to improving the early detection, treatment and tracking of NCDs at country level.
- The integration of CKD screening and management strategies into national NCD programs has been shown to reduce the burden and cost of CKD care, especially in developing countries<sup>16</sup>. For example, screening for CKD in people with diabetes has shown reduced costs, reduced cumulative incidence of end-stage kidney disease, and improved overall life expectancy<sup>17</sup>. Furthermore, integrated prevention strategies such as blood pressure and glycemic control in high-risk patients can slow progression of CKD and reduce the risk of cardiovascular mortality<sup>18</sup>.

### | Policy Asks

ISN calls on global political leaders to:

Recognize kidney disease as a key contributor to the global NCD burden - as both a cause and a consequence of other major NCDs.

Ensure that policies implementing the SDG agenda address kidney disease in order to appropriately tackle its significant contribution to premature mortality from NCDs.

Deliver integrated health strategies that prioritize prevention, early detection and management of NCDs, including kidney disease.



# 2

## COVER ALL BASES: A COMPREHENSIVE APPROACH TO KIDNEY DISEASE PREVENTION AND MANAGEMENT.

### Background

- In the context of universal health coverage, diseases can only be tackled effectively in a comprehensive and synergistic manner.
- Governments are now being guided in prioritizing healthcare interventions and identifying “best buys” for reducing their NCD burden, with a strong focus on prevention and detection. While supportive of this approach, in order to make a meaningful impact on kidney health, efforts should also be targeted across the healthcare continuum according to member states’ specific needs and available resources.
- In Taiwan, Uruguay, Chile and Cuba, national kidney care programs have been successfully implemented resulting in measurable improvements in outcomes and sustainable cost reductions for the healthcare system<sup>19</sup>.
- For example, according to official reports, the annual incidence of end-stage kidney disease in Taiwan declined from a peak of 432 per million of the population in 2005, to 361 per million of the population in 2010. The program has resulted in savings of US \$36 million per year, owing to reduced dialysis costs and improved quality of life<sup>20</sup>.
- In Mexico, the Ministry of Health has set up a network of health services against chronic kidney disease with the goal of reducing the number of patients with end-stage kidney disease by 50% by 2025. Total investment in this network is estimated to be US \$50 million<sup>21</sup>.
- In 2017, the ISN Global Kidney Policy Forum produced a 12-point set of measurable actions to curb the burden of kidney disease worldwide. Endorsed by government representatives, policy makers, nephrologists, researchers, patients and other key stakeholders, the Mexico Conclusions (see box on next page) provide a strong basis for the development of comprehensive national kidney care strategies.

### Policy Asks

ISN calls on global political leaders to:

Implement comprehensive national kidney health strategies that include prevention, detection and management of early stage disease, through to end-of-life support for those with advanced disease.

Implement surveillance mechanisms to better understand and quantitate the burdens of acute and chronic kidney disease, specifically by developing robust national and regional registries for AKI, CKD and ESKD.

Work towards universal health coverage to permit sustainable access to effective and affordable medication to treat risk factors for kidney disease and delay kidney disease progression. Member states need to ensure availability of the affordable basic technologies and essential medicines required to treat NCDs in line with Target 9 of the WHO Global Action Plan 2013-2020.



# 3

INCREASE AVAILABLE RESOURCES:  
**INCREASED INVESTMENT  
IN NCDs, INCLUDING  
KIDNEY DISEASE.**

## PRIORITIES FOR ACTION

### Background

- Scaling up investment for NCDs, including kidney disease, is a critical priority to achieve the 2025 NCD targets and the Sustainable Development Goals.
- Sustainable and adequate resources for NCDs are severely lacking and remain a bottleneck in the global response. NCDs receive just 1.3% of development assistance for health, making NCDs the only major global health priority without international financing<sup>22</sup>.
- If efforts are not increased, NCDs and mental health conditions could cost the world an estimated US \$47 trillion in lost economic output by 2030. In turn, primary prevention of NCDs promises favorable returns on investment (ROI). A study focusing on India projected a 15% ROI from programs such as prevention of onset kidney failure via early screening and control of blood pressure and diabetes<sup>23</sup>.

### Policy Asks

ISN calls on global political leaders to:

Increase and meet the financing needs of the global NCD response from all sources, including domestic, bilateral, multilateral and innovative financing by 2025<sup>24</sup>.

Increase national health budgetary allocations for NCDs as well as support to local, regional and transnational research on NCDs including kidney disease to further the understanding of prevention and treatment strategies.

### 12 STEPS TO COMPREHENSIVE KIDNEY DISEASE MANAGEMENT:

- Implement and support ongoing surveillance mechanisms to better understand and quantitate the burdens of acute and chronic kidney disease within and outside the context of non-communicable diseases, specifically by developing robust national and regional registries for AKI, CKD and ESKD.
- Support local, regional and transnational research on kidney disease to further understanding of prevention and treatment strategies.
- Develop and implement public health policies to prevent or reduce risk factors for chronic kidney disease in adults and children, including strategies to promote maternal and child health and nutrition, to reduce the burdens of diabetes, hypertension, obesity and tobacco consumption, to promote safe work environments and prevent infectious diseases.
- Implement early detection, preventive and treatment strategies for AKI.
- Improve awareness of kidney disease among health care workers at all levels and ensure appropriate access to essential tools and medications required for diagnosis and treatment.
- Support education for a skilled nephrology workforce to implement prevention and treatment of kidney disease at all stages.
- Educate the public and people at risk about kidney disease within non-communicable disease education campaigns.
- Work towards universal health coverage to permit sustainable access to effective and affordable medication (e.g. for hypertension, diabetes, cardiovascular disease) to treat risk factors for kidney disease and delay kidney disease progression.
- Integrate early evidence-based treatment for CKD acknowledging the important synergies with diabetes, hypertension and cardiovascular disease.
- Develop and implement transparent policies governing just and equitable access to kidney disease care including dialysis and transplantation, according to international standards, and to support, safe, ethical, affordable and sustainable programs.
- Promote and expand kidney transplantation programs within countries and across the regions.
- Work within current frameworks promoted by the World Health Organization and the United Nations such the Sustainable Development Goals of Agenda 2030 for Sustainable Development, Universal Health Coverage, and Life Course approach in the context of Health 2020 to develop and implement policies to ensure integration and synergies for kidney disease prevention and treatment within existing initiatives.

## WHO ARE WE?

The International Society of Nephrology (ISN) is a philanthropic organization dedicated to advancing worldwide kidney health. We bridge the gaps of available care through advocacy and collaborations with our global partners. We build capacity with healthcare professionals via granting programs, education and research. By connecting communities, we develop a stronger understanding of how to manage kidney diseases and engage in a collaborative effort to improve prevention, diagnosis and treatment.

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