



La malattia renale cronica: una epidemia misconosciuta e un'emergenza di salute pubblica

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Nephrology is a new discipline...in the seventies was built up on the quest of better treating renal disease and preventing dialysis...

Chronic Kidney Disease (CKD) is a new concept, a functional / organ damage based classification of renal diseases independently of diagnostic categories.



Renal dysfunction

GFR



Renal damage

**Albuminuria / Proteinuria
Urine sediment and Imaging**



World population in 2017 7.6 billion



World ~10 %



USA ~18%
Italy ~6%

On a world scale 850 million of people have CKD, 85% of whom are in low-middle-income countries

ERA-EDTA, ASN, ISN estimate 2019

editorial www.kidney-international.org

A single number for advocacy and communication—worldwide more than 850 million individuals have kidney diseases

Kidney International (2019) **96**, 1048–1050; <https://doi.org/10.1016/j.kint.2019.07.012>

KEYWORDS: chronic kidney disease; kidney development

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Aging



Diabetes, Obesity



hypertension



↑ LDL &
↓ HDL Cholesterol
↑ Triglycerides
Hyperglycemia

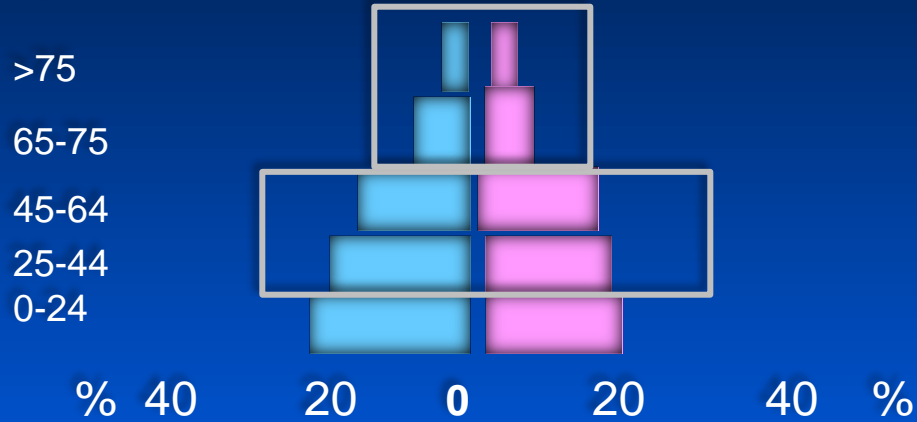


- smoking
- salt
- alcohol,
- Lack of physical exercise
- environmental problems

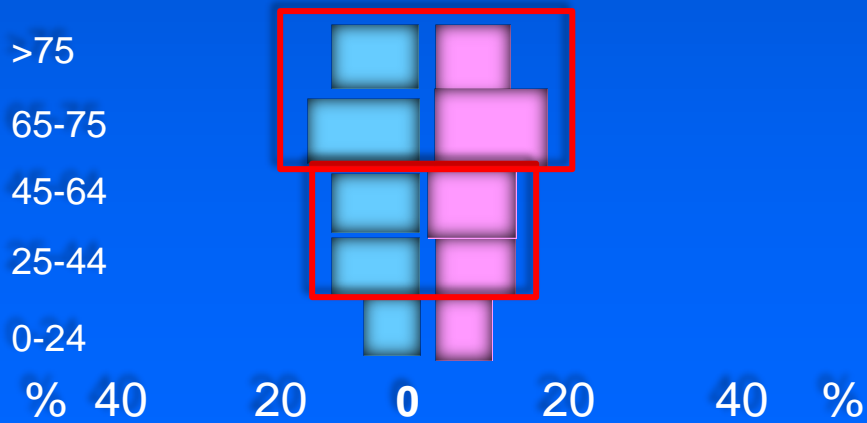


Population structure till the XXth century

Age (years)



Age (years)



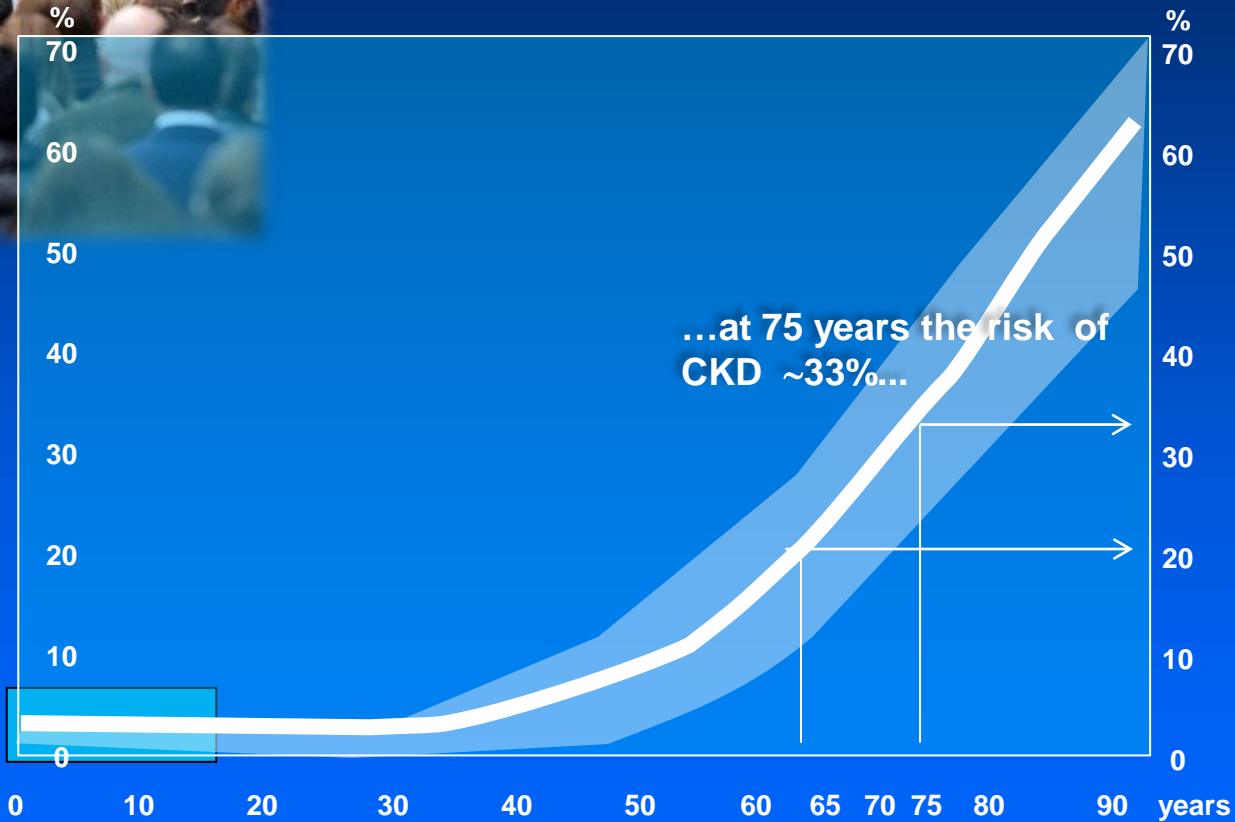
Lifetime Incidence of CKD Stages 3-5 in the United States

Morgan E. Grams, MD, MHS,^{1,2} Eric K.H. Chow, MS,³ Dorry L. Segev, MD, PhD,^{2,3} and

AJKD 2013; 62: 245-252 Josef Coresh, MD, PhD^{1,2,4}



Life-time risk for stage G3-5 CKD



Immunologic diseases



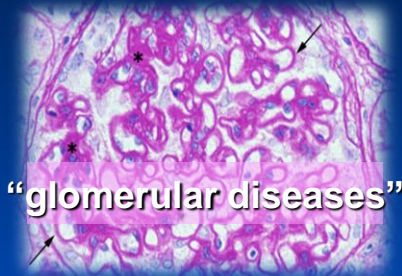
6-8:1000

(non-conservative estimate)

World population

7.6 billion

~**50 million** with immunologic diseases, primary and secondary GN and hereditary diseases or are in Regular Dialysis

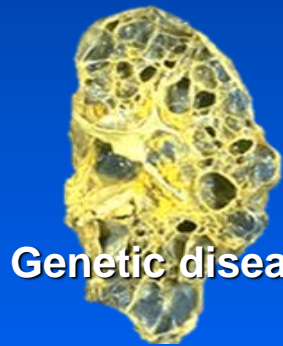


“glomerular diseases”

Nephrology as Niche specialty...

With today's 850 million people with kidney diseases...

Can we still speak of a “niche specialty”?



Genetic diseases

Definitely NO!



dialysis



Knowledge

«powerful» speciality

Technical abilities and duties

Cardiology workforce in western Europe ~50 pmp

Western Europe Nephrology workforce ~21 pmp

Total >850 million

Global, regional, and national age–sex specific all-cause and cause-specific mortality for 240 causes of death, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013

GBD 2013 Mortality and Causes of Death Collaborators*



Forecasting life expectancy, years of life lost, and all-cause and cause-specific mortality for 250 causes of death: reference and alternative scenarios for 2016–40 for 195 countries and territories

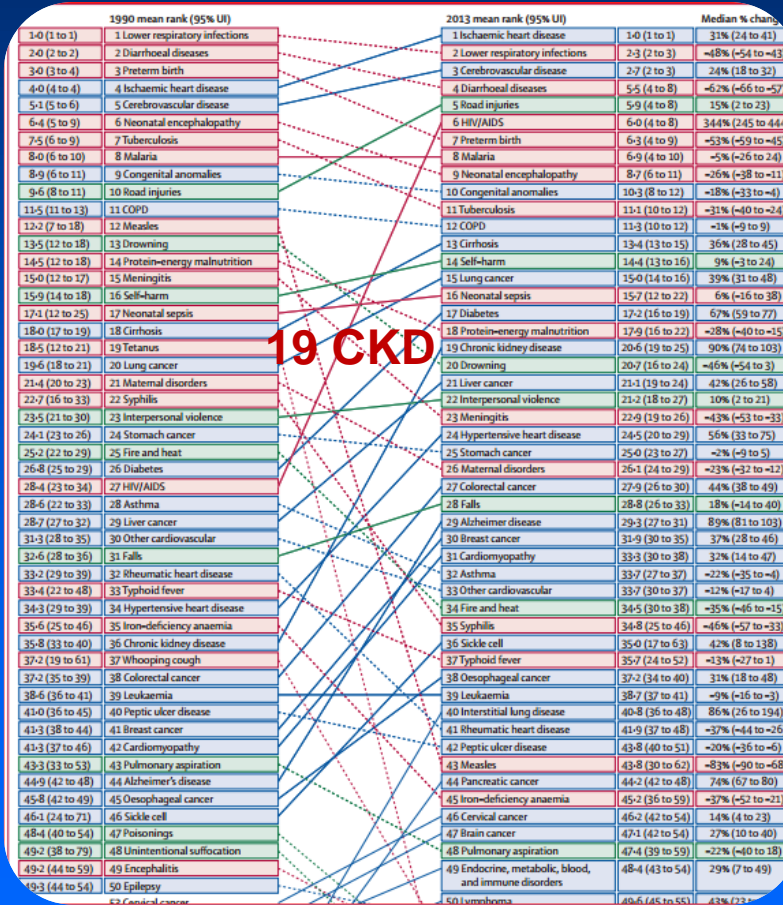


Kyle J Foreman, Neal Marquez, Andrew Dolgert, Kai Fukutaki, Nancy Fullman, Madeline McGaughey, Martin A Pletcher, Amanda E Smith, Kendrick Tang, Chun-Wei Yuan, Jonathan C Brown, Joseph Friedman, Jiawei He, Kyle R Heuton, Mollie Holmberg, Disha J Patel, Patrick Reidy, Austin Carter, Kelly Cecy, Abigail Chapin, Dirk Douwes-Schultz, Tahvi Frank, Fallo Goettsch, Patrick Y Liu, Vishnu Nandakumar, Marissa B Reitsma, Vince Reuter, Nafsa Sadat, Reed J D Sorensen, Vinay Srivastava, Rachel L Updike, Hunter York, Alan D Lopez, Refajal Lozano, Stephen S Lim, Ali H Mokdad, Stein Emil Vollset, Christopher J L Murray

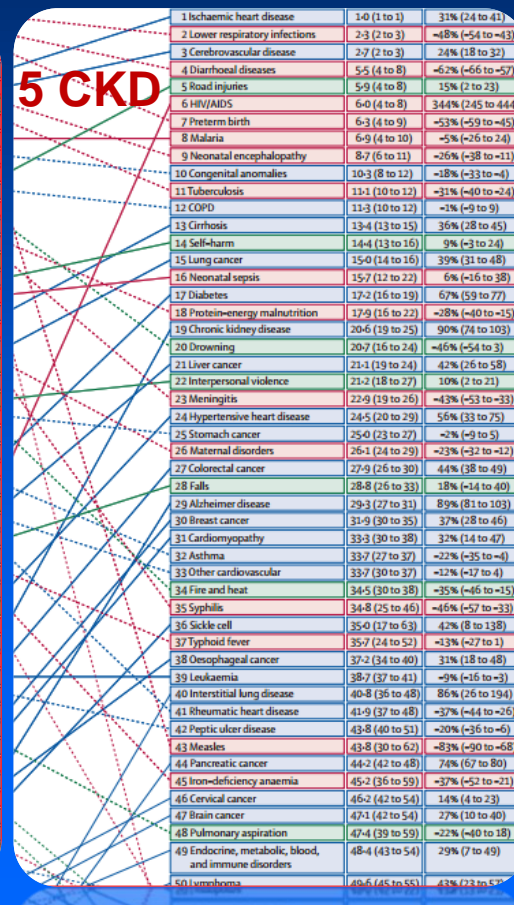
1990

2013

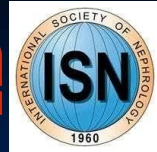
2040



5 CKD



36 CKD



The global dimension of kidney diseases in 2017

world population in 2017 7.6 billion

Stage 1-5 CKD pts	843,6 million
AKI pts	13,3 million
Pts on Renal Replacement therapy	3,9 million
Total	860,8 million

Conservative figure : **850 million**

x 2 the estimated global number of diabetics (422 million in 2014)



850 million is the WOW! number of kidney diseases on a world scale

use this number for communication with the public and health authorities and for advocacy!



THE HIDDEN EPIDEMIC: WORLDWIDE, OVER 850 MILLION PEOPLE SUFFER FROM KIDNEY DISEASES

June 27, 2018 — The global burden of kidney diseases has so far been underestimated; most people are not aware of their impaired kidney function. In general, kidney diseases are “silent diseases”, most often there are no apparent early symptoms. Many patients with kidney diseases are not aware that they have been living with high risks not only of kidney failure which may require dialysis or transplantation but also cardiovascular diseases, infections, and hospitalizations.

Social media

Sommario e conclusioni

L'insufficienza renale è un problema di dimensioni epidemiche.

Le implicazioni del fenomeno vanno ben al di là delle malattie renali in quanto la malattia renale aumenta il rischio Cardiovascolare (Infarto, Stroke ...)

E' urgente varare un piano di informazione sul fenomeno che è ancora misconosciuto dai medici e ignoto al pubblico.

Il problema ha costi sociali altissimi e deve essere affrontato in fase di prevenzione per ottenere risultati significativi.