International Diabetes Federation

ISN INTERNATIONAL SOCIETY OF NEPHROLOGY

13 July

14:00-15:15 CEST

Renewing the Fight: A Call to Action for Diabetes and Chronic Kidney Disease

Renewing the Fight:
A Call for Action for Diabetes and Chronic Kidney Disease

Welcome from the Moderator

MS ANITA SABIDI

IDF Blue Circle Voices member

Indonesia

WELCOME FROM IDF AND ISN

- This webinar will be recorded.
- You can activate Zoom-generated subtitles for this webinar by clicking on the closed caption (cc) button at the bottom of your Zoom window. Please note these subtitles are not 100% accurate.
- The recording, slides and feedback questionnaire will be sent to all registrants in a few days.
- Participants who attend at least 80% of this event live will receive an attendance certificate only if they complete a feedback questionnaire. Please check your spam folders if you have not received them by August 4.
- **Please use the Q&A function to post your questions to speakers and panellists.**

Renewing the Fight:
A Call for Action for Diabetes and Chronic Kidney Disease

Welcome from the IDF President

PROF AKHTAR HUSSAIN

IDF President

Bangladesh/Norway

Renewing the Fight:
A Call for Action for Diabetes and Chronic Kidney Disease

Welcome from the ISN President

PROF MASAOMI NANGAKU

ISN President

Japan

International Diabetes Federation

ISN INTERNATIONAL SOCIETY OF NEPHROLOGY

Setting the Scene

Renewing the Fight:
A Call for Action for Diabetes and Chronic Kidney Disease

IDF-ISN Policy Brief: Main Highlights and Recommendations

DR ANTONIO CERIELLO

Head Research Dept.,
IRCCS MultiMedica

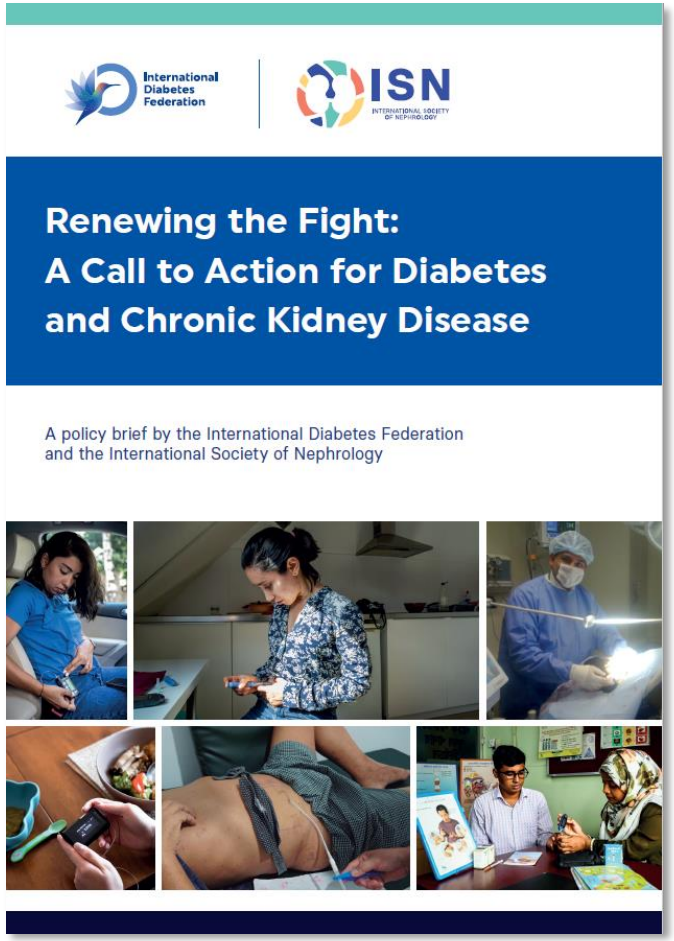
Italy

DR ROBERTO PECOITS-FILHO

Professor of Nephrology, School of Medicine, Ponticical Catholic University of Parana (Brazil) and Senior Research Scientic, Arbor Research Collaborative for Health (USA)

Brazil

RENEWING THE FIGHT: A CALL TO ACTION FOR DIABETES AND CHRONIC KIDNEY DISEASE



Editorial team

Anne Hradsky, Dr Antonio Ceriello, Beatriz Yáñez Jiménez, Federica de Giorgi, Dr Roberto Pecoits-Filho.

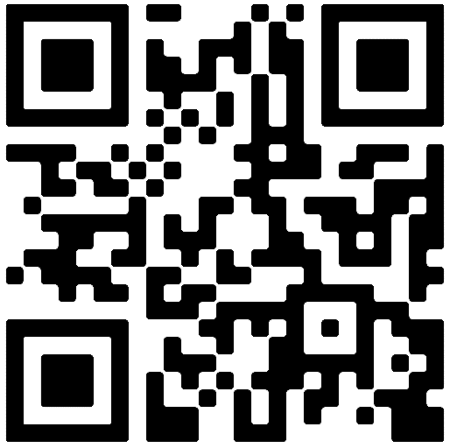
Contributors

Dr Adrien Liew, Dr Gloria Ashuntantang, Dr Laura Sola, Prof Roberto Pontremoli, Prof Salvatore De Cosmo, Prof Per-Henrik Groop.

ABOUT THE POLICY BRIEF

- Targets advocates, healthcare professionals and policymakers
- Highlights the links between diabetes and chronic kidney disease
- Emphasises the need for a multisectoral approach to prevent and treat both conditions
- Shares lived experiences of people living with diabetes and chronic kidney disease
- Provides recommendations on the actions required to improve prevention and care

Download the policy brief



KEY DIABETES STATISTICS (2021)

537 million
adults living with diabetes

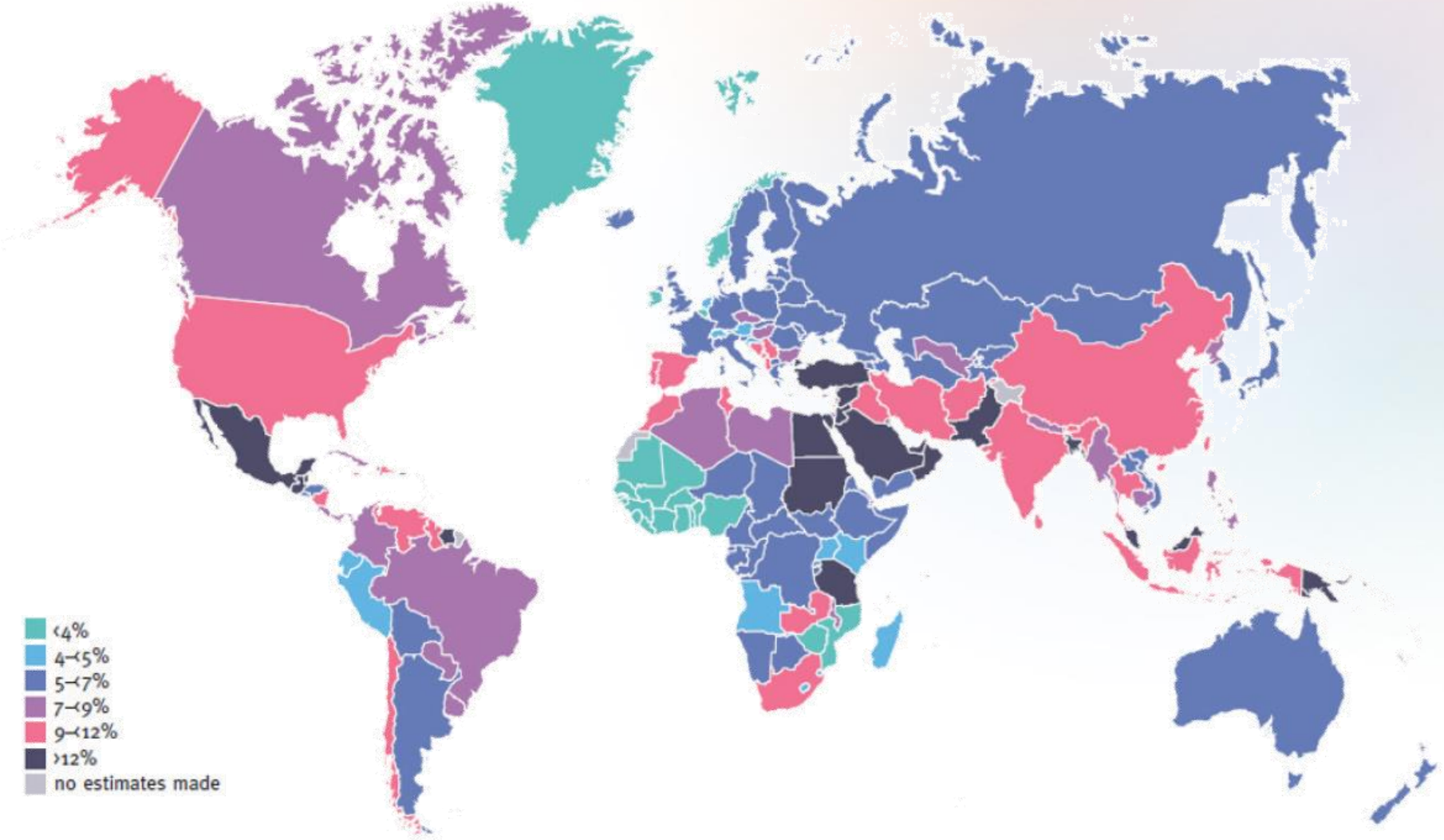
1 in 2
people are undiagnosed

3 in 4
people with diabetes live in LMICs

966 billion USD
spent on diabetes healthcare

6.7 million
deaths attributed to diabetes

DIABETES PREVALENCE IN ADULTS (20-79 YEARS) IN 2021



KEY CHRONIC KIDNEY DISEASE (CKD) STATISTICS

Epidemiology of chronic kidney disease: an update 2022

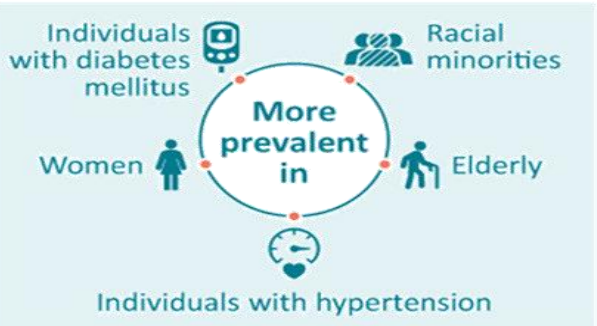
kidney INTERNATIONAL supplements

ISN INTERNATIONAL SOCIETY OF NEPHROLOGY

Extremely common

843,6 Million in 2017

Approximately **1 in 10**



Increasing death rate

+41.5% 1990 to 2017

Large burden in low- and middle-income countries

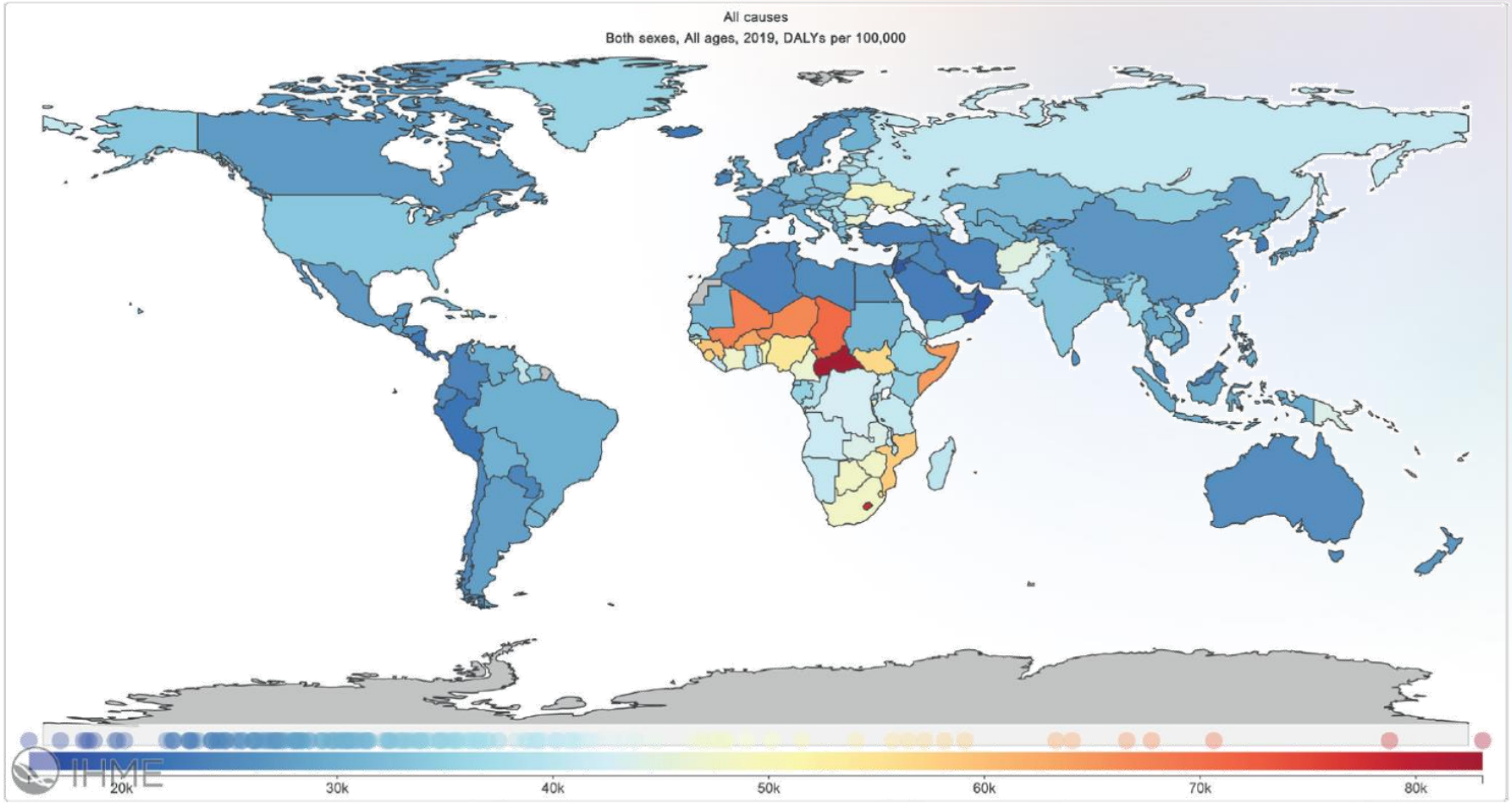
Among the **top 10 causes** of death in Singapore, Greece, and Israel

Kovesdy, 2022

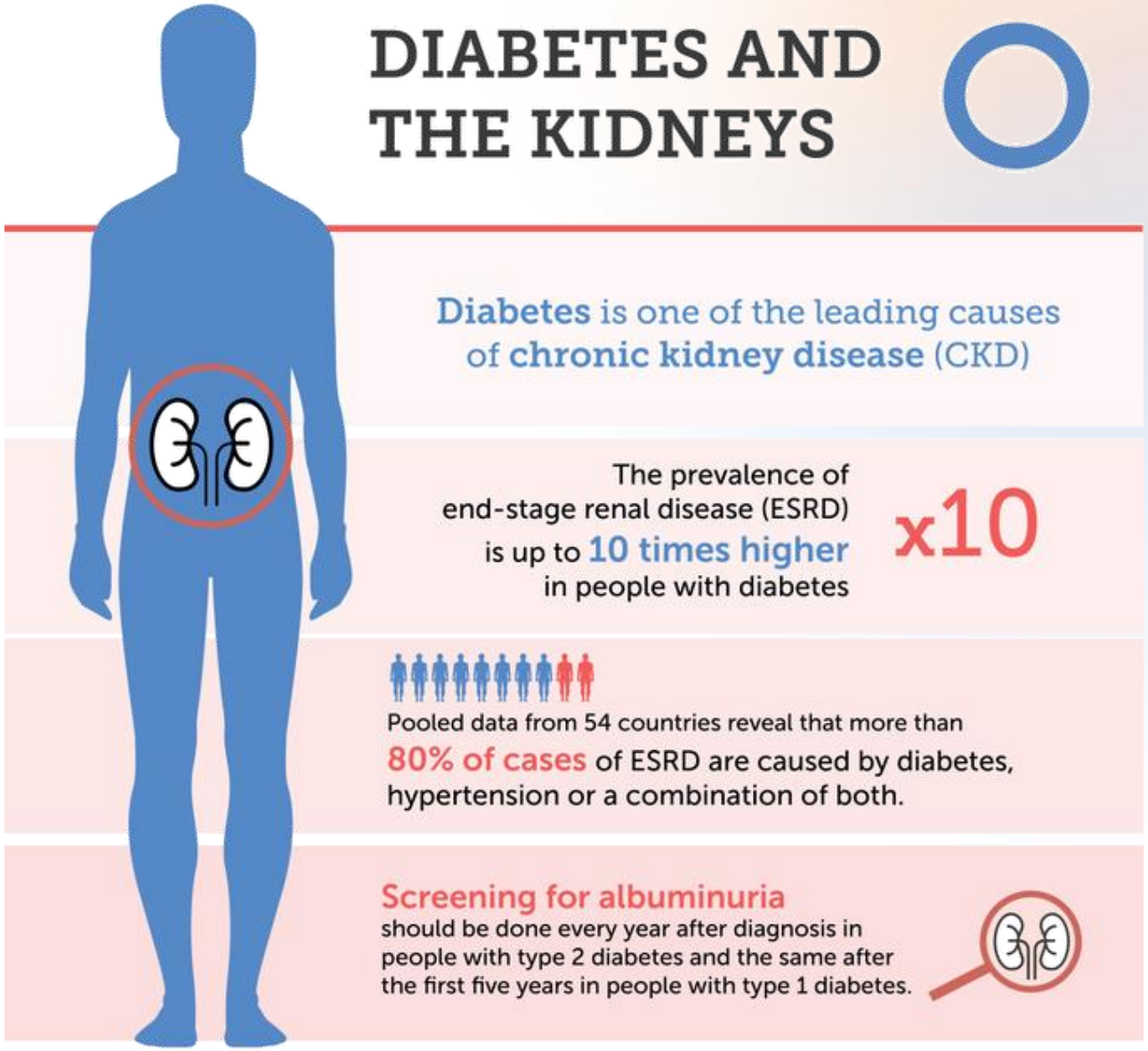
CONCLUSION

Chronic kidney disease (CKD) occurs frequently and has devastating consequences. This should prompt major efforts to develop preventative and therapeutic measures that are effective. The aim of these measures should be lowering the incidence of CKD and slowing its progression.

CKD IN PEOPLE LIVING WITH DIABETES INCREASES THE RISK OF DEATH



Map 3: Incidence of deaths due to diabetes and kidney disease [22]


DIABETES AND THE KIDNEYS
Diabetes is one of the leading causes of chronic kidney disease (CKD)
The prevalence of end-stage renal disease (ESRD) is up to 10 times higher in people with diabetes
x10
Pooled data from 54 countries reveal that more than 80% of cases of ESRD are caused by diabetes, hypertension or a combination of both.
Screening for albuminuria
should be done every year after diagnosis in people with type 2 diabetes and the same after the first five years in people with type 1 diabetes.

THE IMPACT OF CKD FOR PEOPLE LIVING WITH DIABETES AND HEALTHCARE BUDGETS

- Healthcare costs of people with diabetes and CKD: 50% higher than those of people with diabetes but no CKD.
- The costs for dialysis and kidney transplant create a significant economic burden to healthcare.
- The most effective strategies to reduce the economic impact of diabetes and its comorbidities are those focusing on prevention.

ADDRESING DIABETES AND CKD IN PEOPLE LIVING WITH DIABETES

The policy brief highlights different ways to address this problematic:

- Diabetes prevention
- Screening for CKD in people living with diabetes
- Addressing the different causes of kidney disease in people living with diabetes
- Therapeutic approach to CKD in people living with diabetes: lifestyle modification and treatment targets
- Disease modifying therapies

EARLY CKD SCREENING SHOULD TARGET HIGH RISK PATIENTS, INCLUDING ALL PEOPLE LIVING WITH DIABETES

CKD causes a global burden

CKD disproportionately affects socially disadvantaged populations

Determine At-Risk Individuals and Populations

Screen for CKD in individuals with hypertension, diabetes, and/or cardiovascular disease

Consider other factors including
Demographics, older age, race/ethnicity
Other systemic diseases that impact kidneys
Genetic risk factors
Environmental exposures

Screening and Diagnosis of CKD

Measure kidney function
Serum creatinine
Serum cystatin c if available for more accurate staging

Measure kidney injury
Urine albumin-to-creatinine ratio (UACR)
Urine dipstick if UACR not available

ASSESSING THE RISK OF KIDNEY DISEASE IN PEOPLE WITH DIABETES

Prognosis of CKD by GFR and albuminuria categories: KDIGO 2012

Guide to frequency of assessment for CKD progression and timely referral to nephrology service

GFR categories (ml/min per 1.73 m²) Description and range				Persistent albuminuria categories Description and range		
				A1	A2	A3
				Normal to mildly increased <30 mg/g <3 mg/mmol	Moderately increased 30-300 mg/g 3-30 mg/mmol	Severely increased >300 mg/g >30 mg/mmol
G1	Normal or high	≥90		(1 if CKD)	Monitor (1)	Refer* (2)
G2	Mildly decreased	60-89		(1 if CKD)	Monitor (1)	Refer* (2)
G3a	Mildly to moderately decreased	45-59		Monitor (1)	Monitor (2)	Refer (3)
G3b	Moderately to severely decreased	30-44		Monitor (2)	Monitor (3)	Refer (3)
G4	Severely decreased	15-29		Refer* (3)	Refer* (3)	Refer (4+)
G5	Kidney failure	<15		Refer (4+)	Refer (4+)	Refer (4+)

TREATMENT FOR PEOPLE LIVING WITH DIABETES TO PREVENT THE PROGRESSION OF CKD

Individualized Re-screening

Based on individualized risk of progression

Risk reduction for CKD & CVD progression and complications

- ✓ Lifestyle modification (e.g., physical activity; lower sodium intake)
- ✓ Smoking cessation
- ✓ Optimize blood pressure control
- ✓ Optimize glycemic control
- ✓ SGLT2 inhibitors in diabetic kidney disease
- ✓ RAAS inhibition
- ✓ Statins
- ✓ Treat metabolic acidosis
- ✓ Treat underlying cause of CKD
- ✓ Avoid nephrotoxins (e.g., NSAIDs)
- ✓ Adjust dosing of medications based on eGFR

RECOMMENDATIONS

1. Ensure **intersectoral and multisectoral collaboration** to develop policies and investments.

2. Collaborate with WHO to implement the **Global Diabetes Compact** at the national level.

3. Develop and implement **interventions to facilitate diabetes screening** across the entire population.

4. Provide **universal coverage** to glycaemia and glycated haemoglobin tests, glucose lowering drugs and antihypertensive treatment drugs.

5. Develop and implement programmes for **CKD screening, risk stratification and monitoring** in people with diabetes.

6. Provide **universal coverage for drugs that reduce CKD progression in people living with diabetes**: ACE inhibitors/ARB, SGLT2 inhibitors and MRA.

7. Provide **universal coverage for CKD care**, including dialysis and transplantation.

8. Include kidney disease specifically in **UN and WHO targets**, for example in the political declaration on the upcoming 2025 UN High Level meeting on NCDs.

9. Advocate for **people-centred care** and involve people with diabetes and CKD in the development of interventions and guidelines.

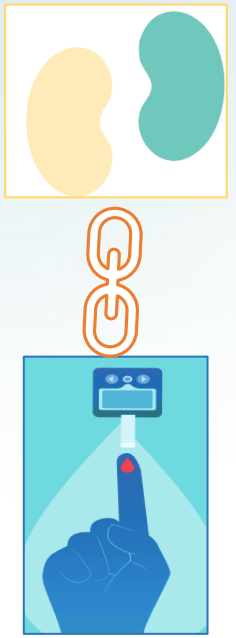
Renewing the Fight:
A Call for Action for Diabetes and Chronic Kidney Disease

Advocating for Better Care for Diabetes and Kidney Disease

DR SHAIFALI SANDAL, Hon B.Sc., MD, FRCPC

Associate Professor, McGill University Health Centre
ISN Advocacy Working Group and Emerging Leader Programme

Canada

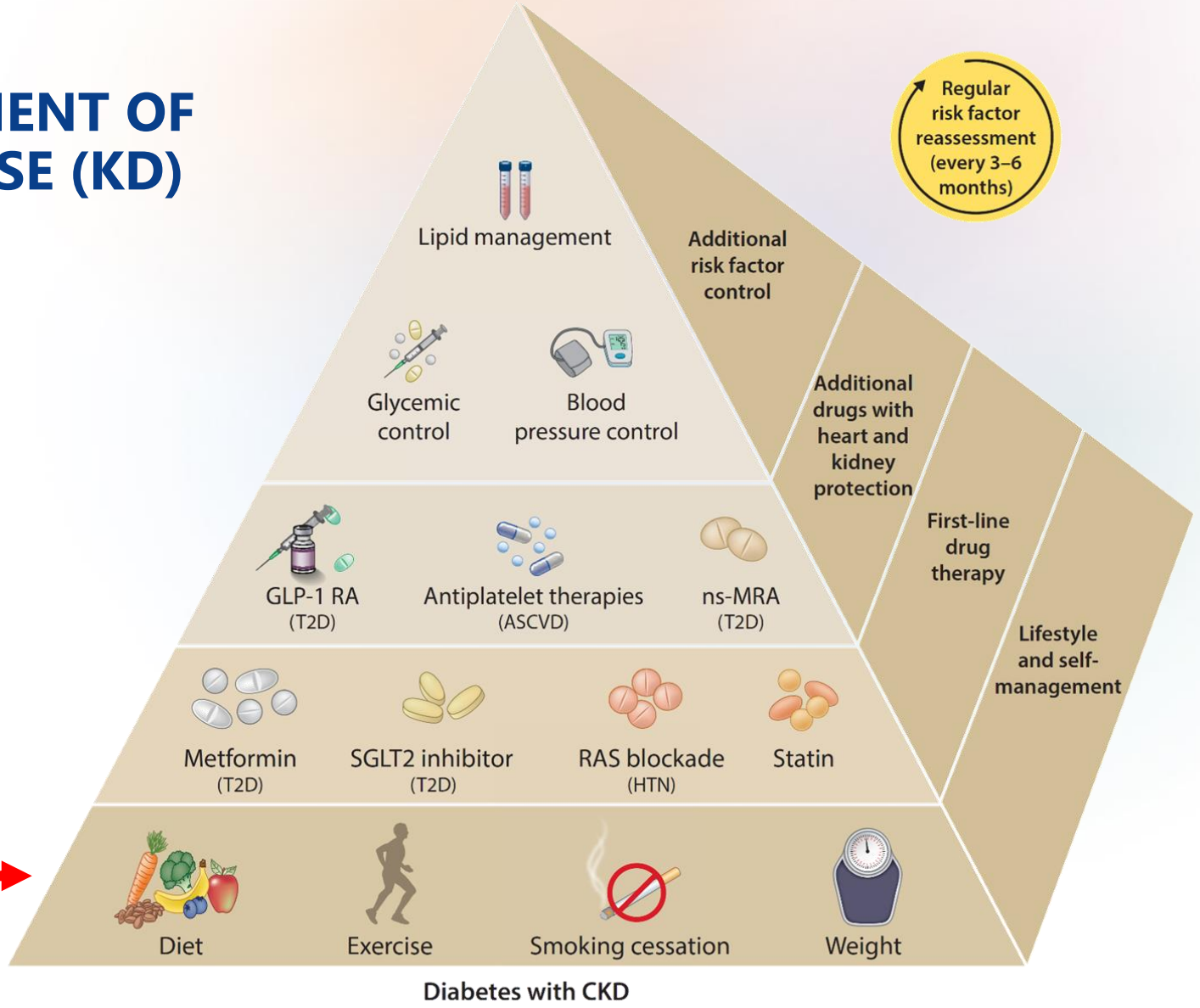


WHAT IS ADVOCACY

"A combination of individual and social actions designed to gain political commitment, policy support, social acceptance and systems support for a particular health goal or programme."

World Health Organization. Health Education Service. (1992). Advocacy strategies for health and development: development communication in action.

PREVENTION AND MANAGEMENT OF DIABETES AND KIDNEY DISEASE (KD)



Kidney International (2022) 102, 990–999

HEALTHIER DIETS

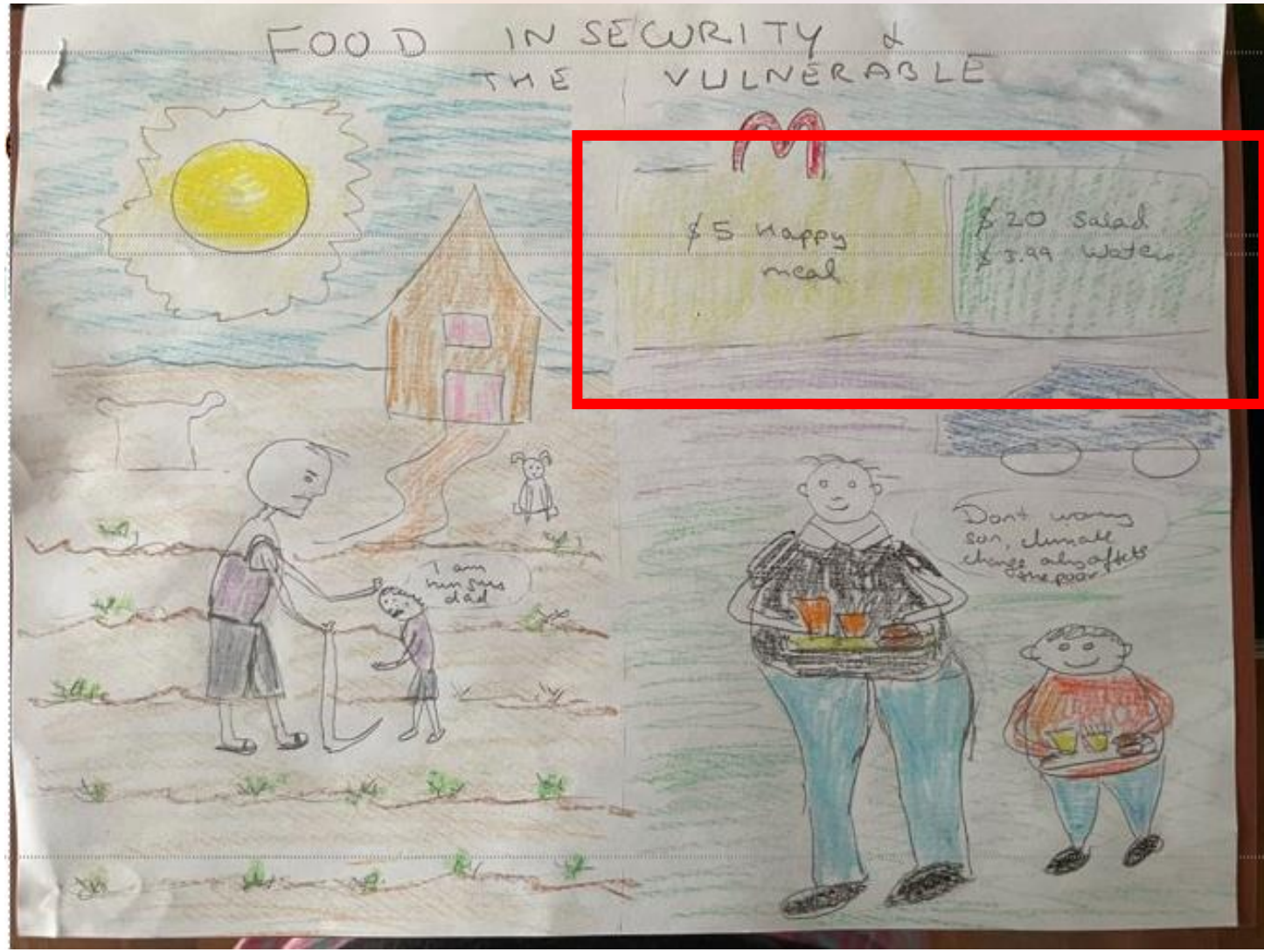
ROI for Specific Intervention Areas

HEALTHY DIETS

US$ 1

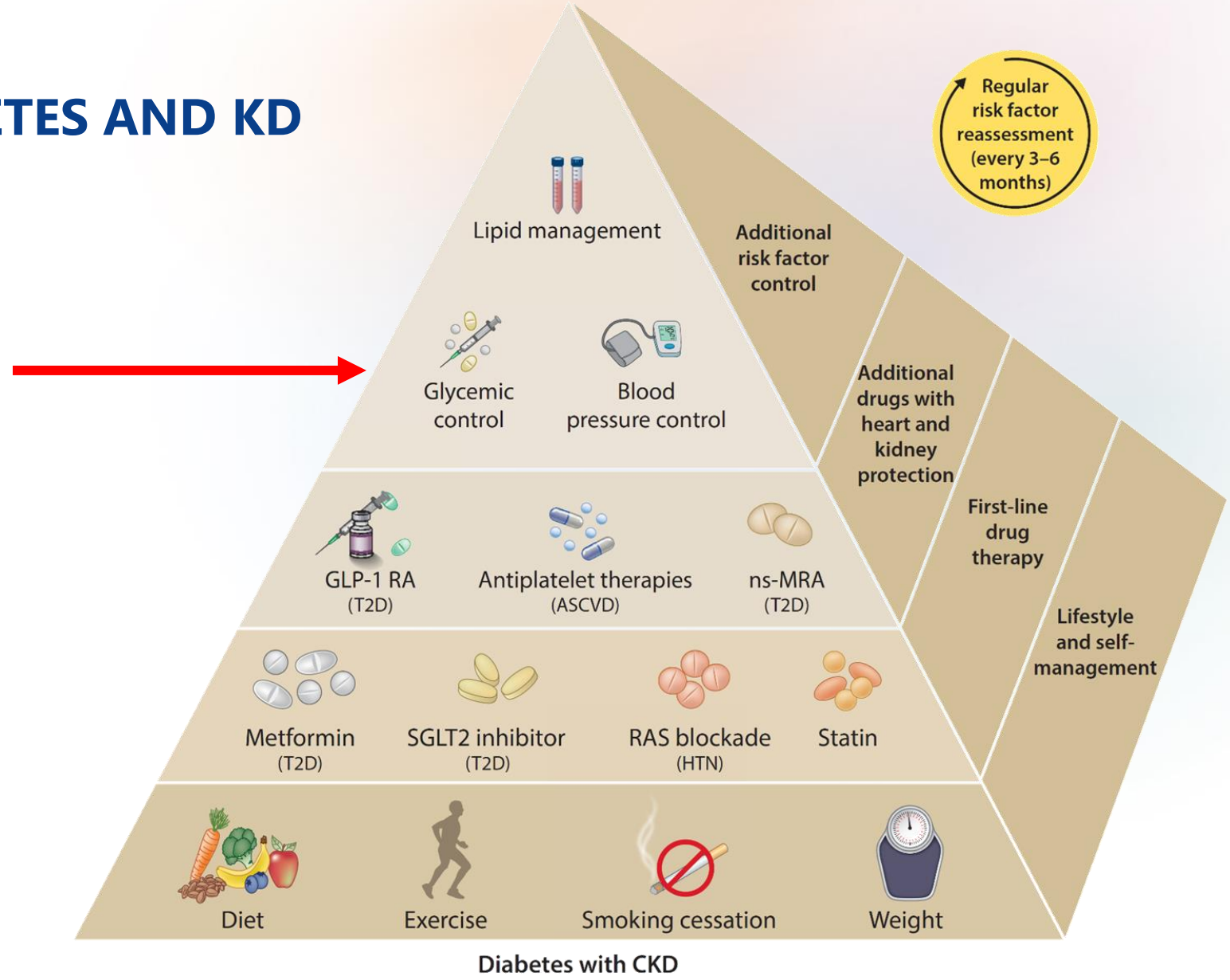
Return on Investment (ROI) per dollar invested

US$ 11.93



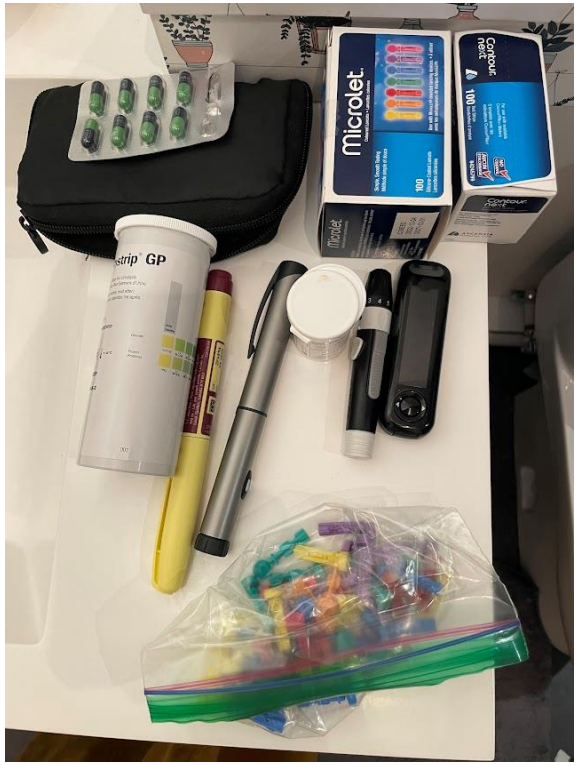
WHO Saving lives, spending less: the case for investing in noncommunicable diseases. https://www.who.int/publications/i/item/9789240041059

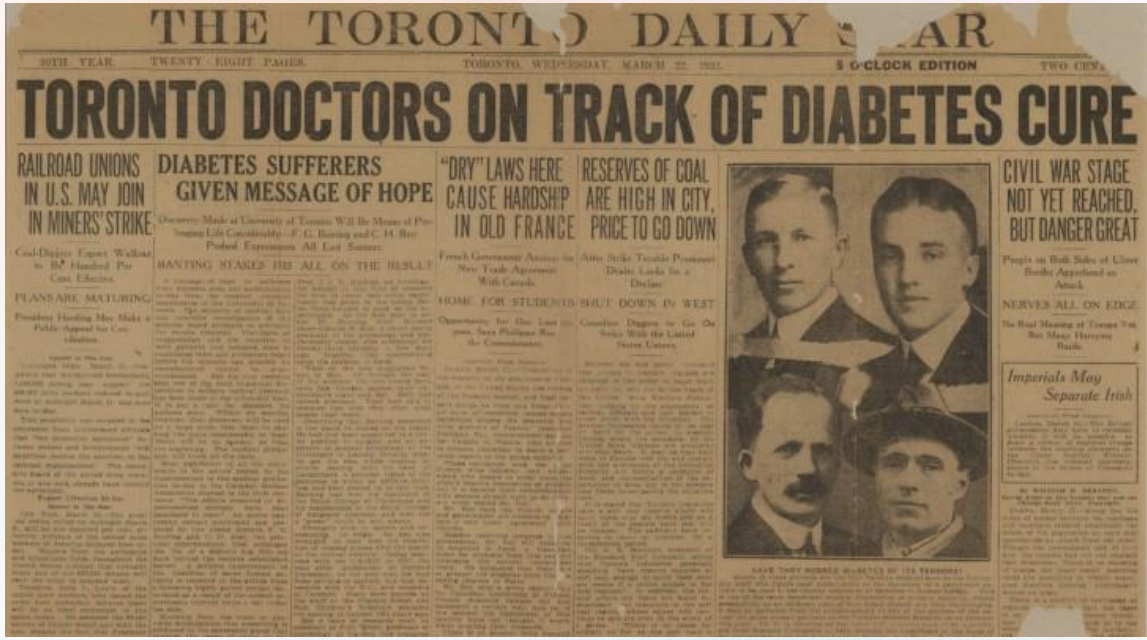
MANAGEMENT OF DIABETES AND KD



Kidney International (2022) 102, 990–999

AFFORDABLE MEDICATIONS TO TREAT DIABETES AND KD




THE TORONTO DAILY STAR

TORONTO DOCTORS ON TRACK OF DIABETES CURE

RAILROAD UNIONS IN U.S. MAY JOIN IN MINERS' STRIKE

DIABETES SUFFERERS GIVEN MESSAGE OF HOPE

"DRY" LAWS HERE CAUSE HARDSHIP IN OLD FRANCE

RESERVES OF COAL ARE HIGH IN CITY, PRICE TO GO DOWN

CIVIL WAR STAGE NOT YET REACHED, BUT DANGER GREAT

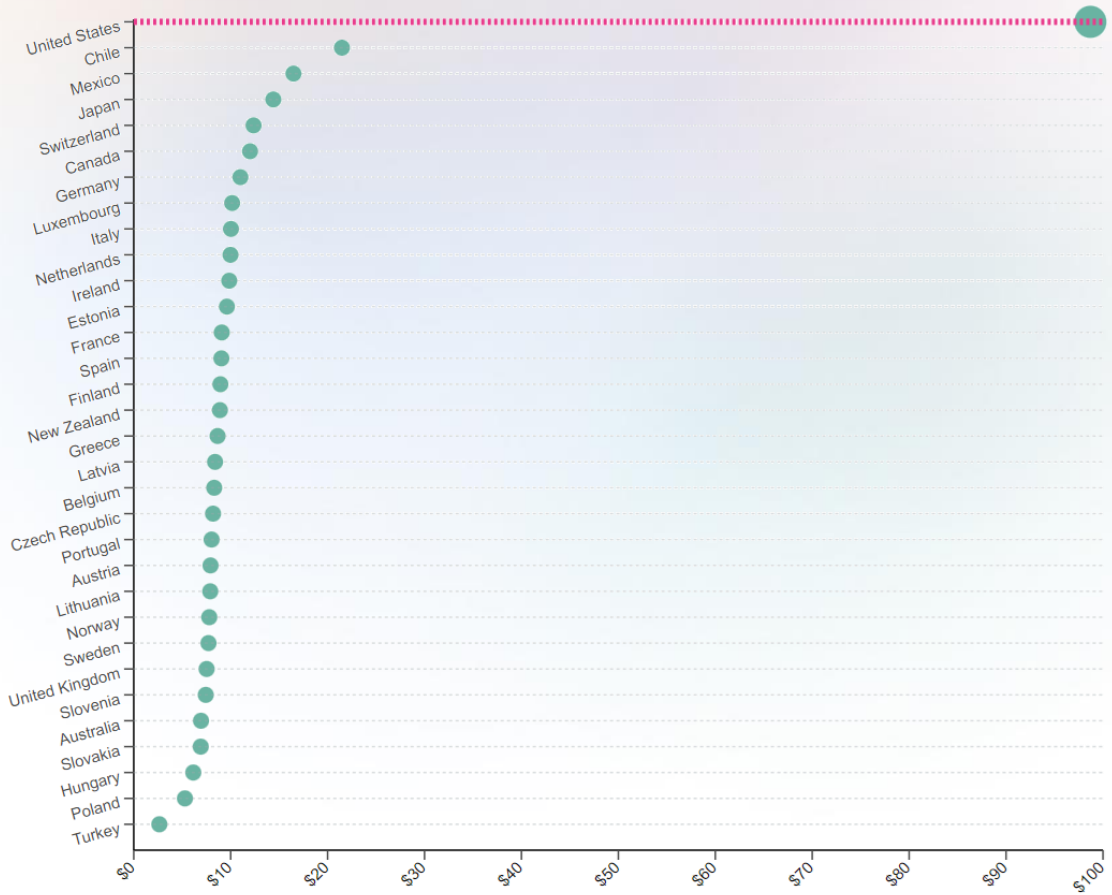
23 January 1923:
"insulin belongs to the world"

Patent sold for $1 US

https://www.umassmed.edu/dcoe/diabetes-education/patient-resources/banting-and-best-discover-insulin/
https://worldpopulationreview.com/country-rankings/cost-of-insulin-by-country

ADDRESS INEQUITIES IN TREATING DIABETES AND KD

- A low-income person had to work 4 and 7 days to buy 10mL human and analogue insulin, respectively.



Research

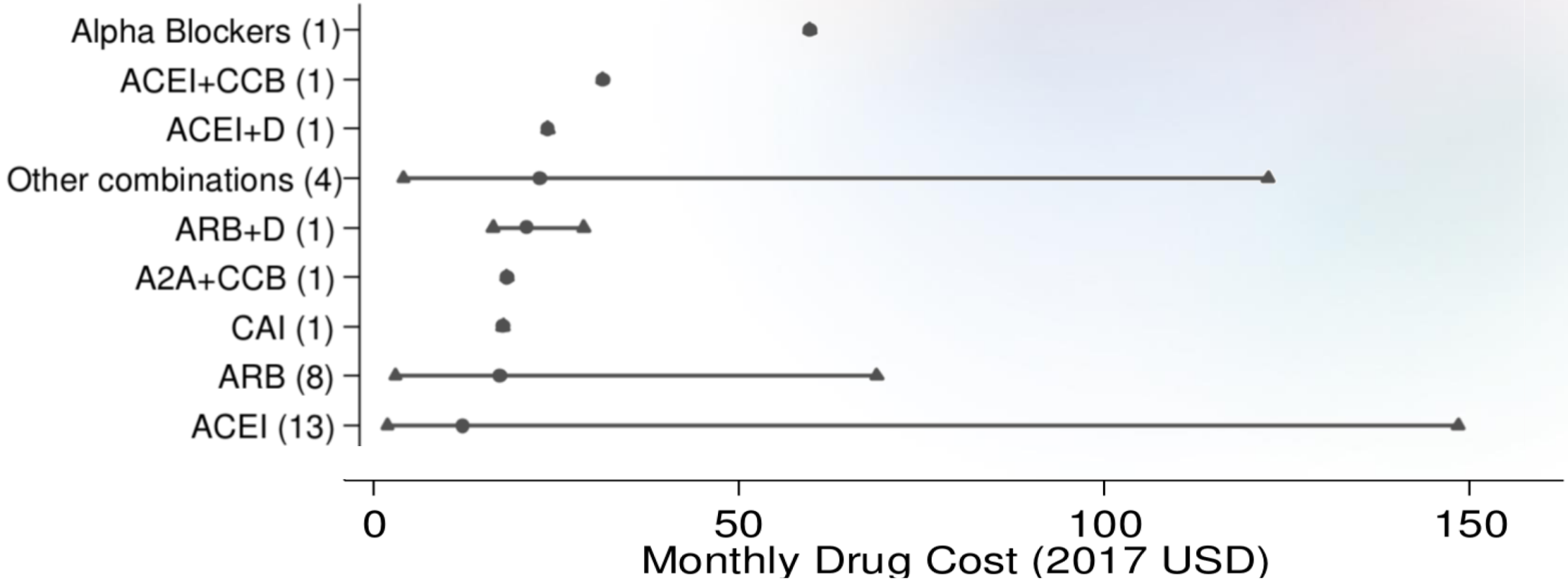
BMJ Global Health

Insulin prices, availability and affordability in 13 low-income and middle-income countries

Margaret Ewen,[1] Huibert-Jan Joosse,[2] David Beran,[3] Richard Laing[4]

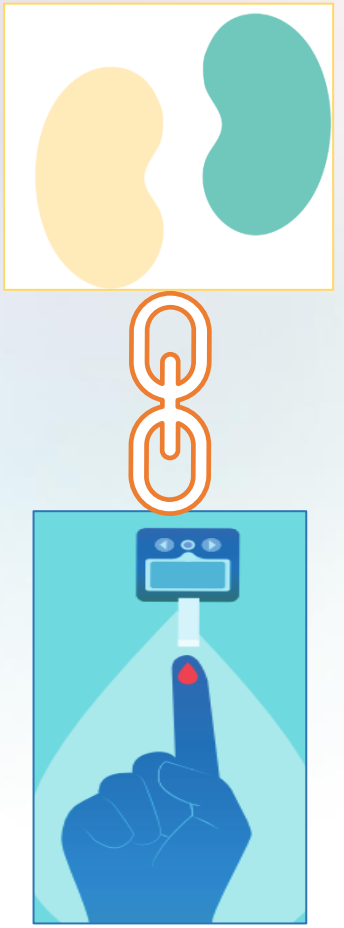
BMJ Glob Health. 2019; 4(3): e001410
https://worldpopulationreview.com/country-rankings/cost-of-insulin-by-country

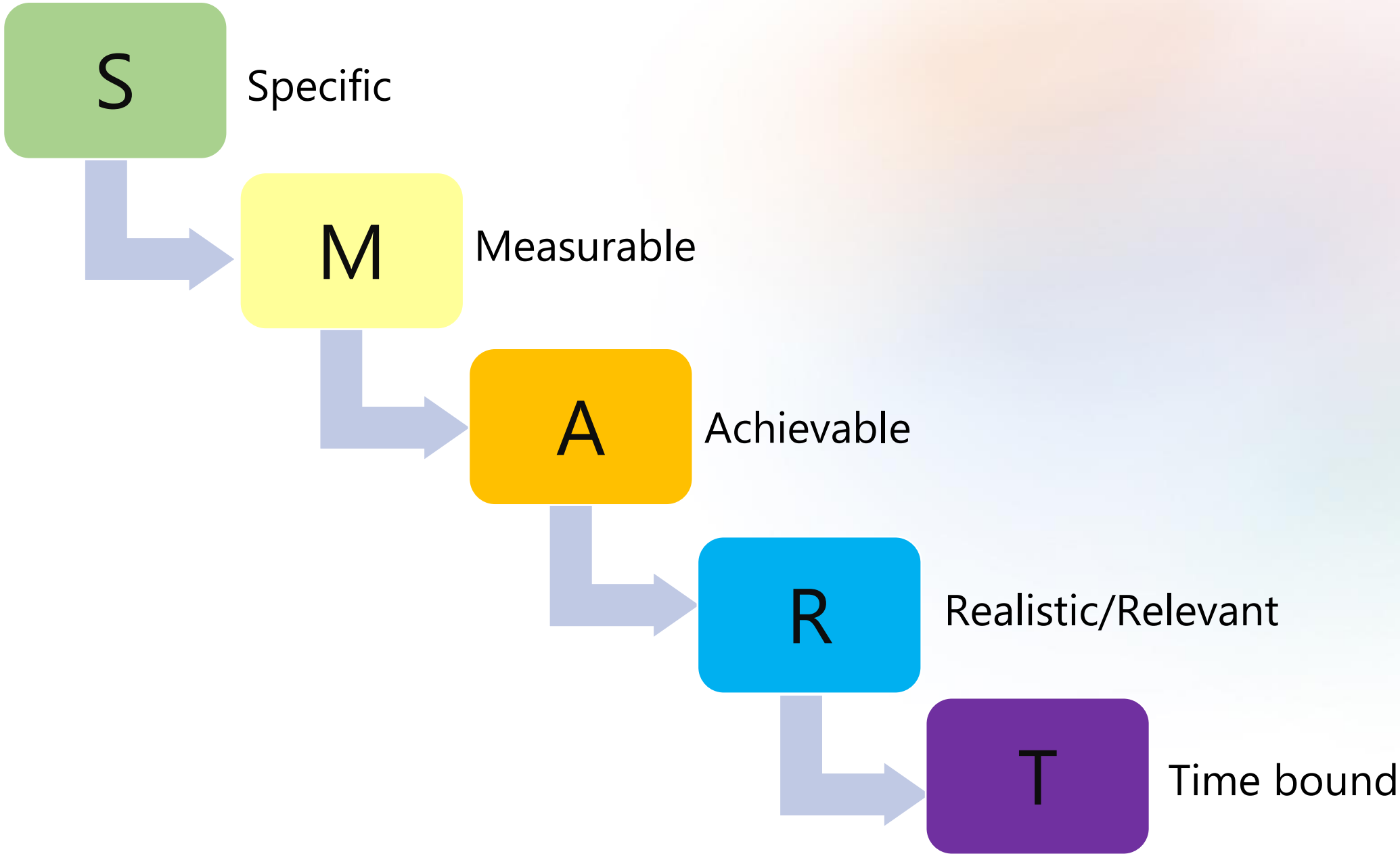
ADDRESSING INEQUITIES IN TREATING DIABETES AND KD



BMJ Global Health 2020;5:e002213./

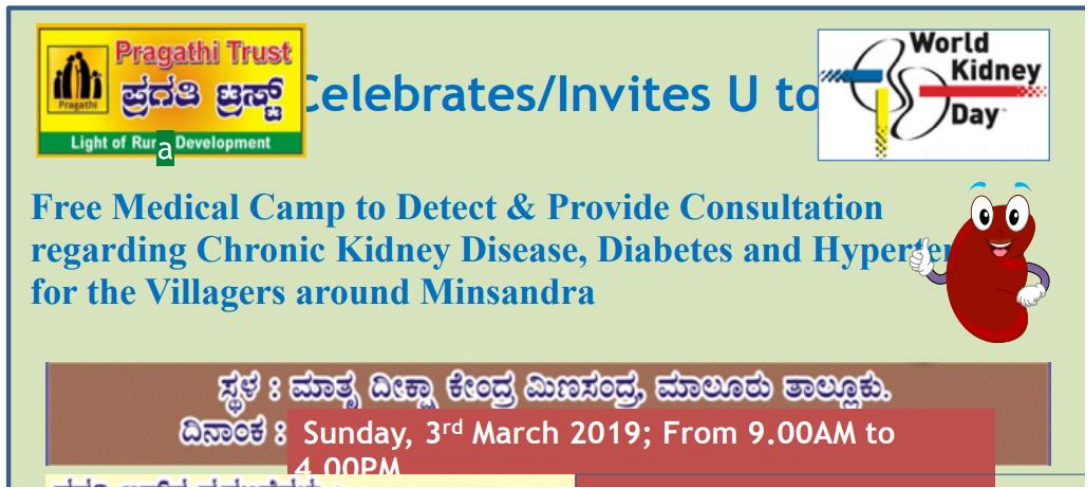
How to build advocacy campaigns for better diabetes and kidney disease care

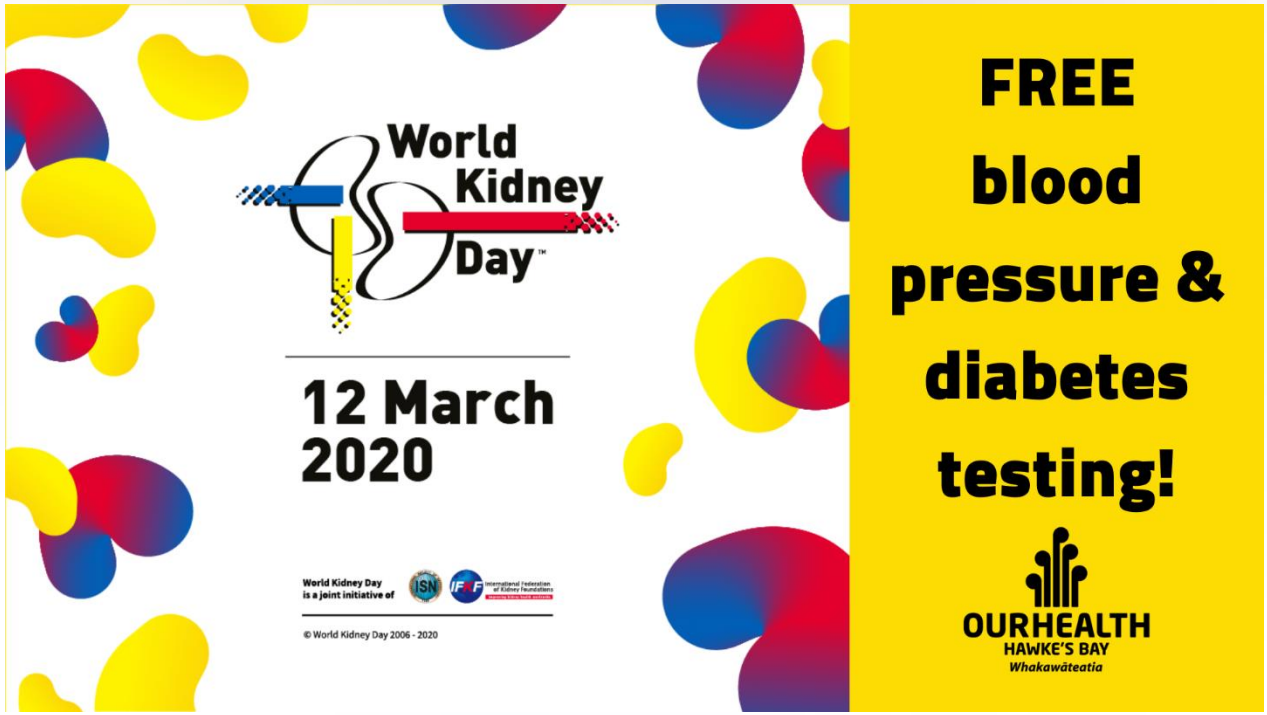




Cancer Control: Knowledge into Action: WHO Guide for Effective Programmes: Module 6: Policy and Advocacy.

S SPECIFIC





https://www.worldkidneyday.org/event/world-kidney-day-free-blood-pressure-and-diabetes-testing/
https://www.worldkidneyday.org/wp-content/uploads/events/34724/Pragathi-flier.pdf

M

T

MEASURABLE AND TIME-BOUND

75th World Health Assembly five new targets by 2030:

- 80% of people living with diabetes are diagnosed
- 80% have good control of glycaemia
- 80% of people with diagnosed diabetes have good control of blood pressure
- 60% of people with diabetes of 40 years or older receive statins
- 100% of people with type 1 diabetes have access to affordable insulin and blood glucose self-monitoring

M MEASURABLE

Diabetes around the world in 2021

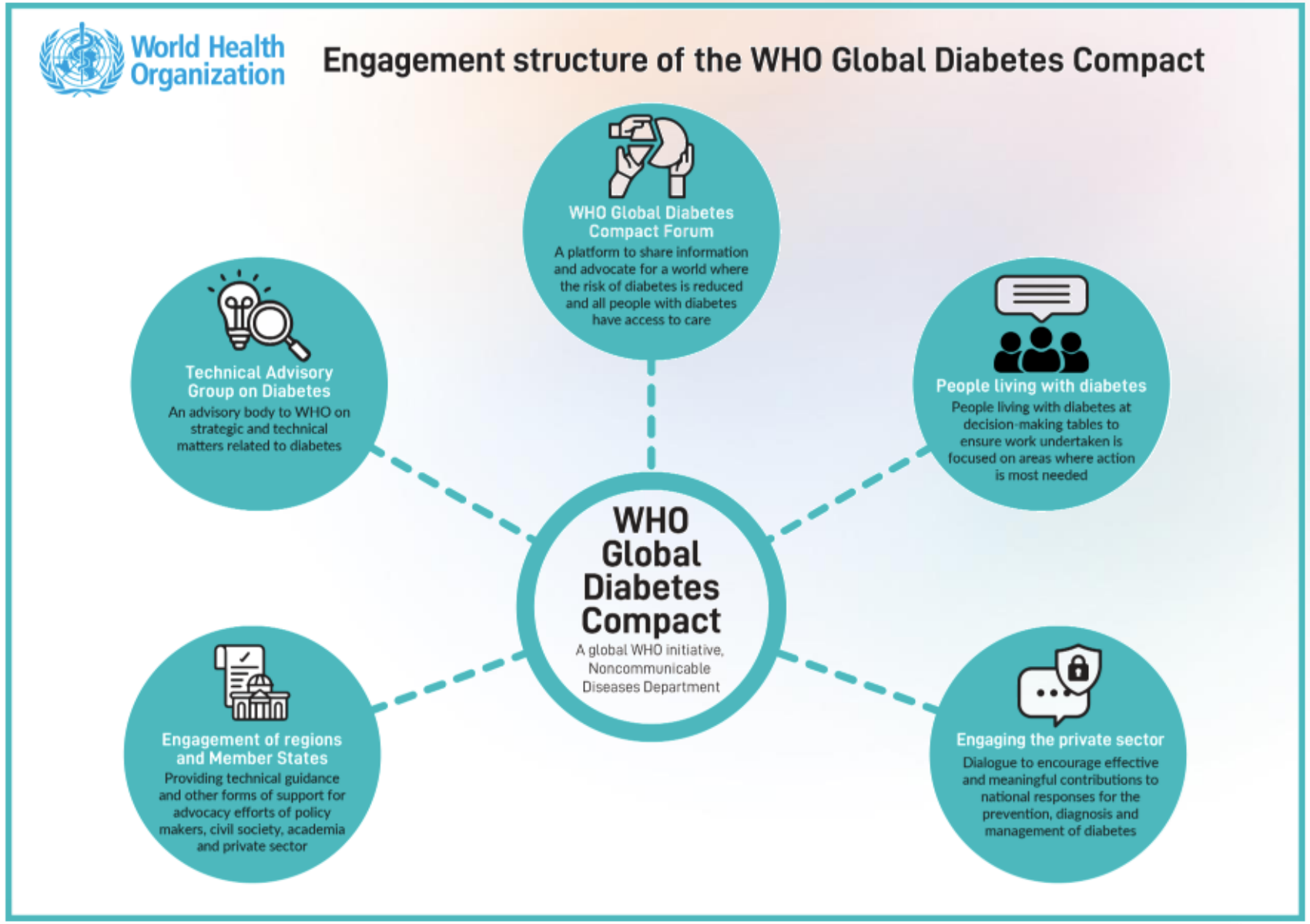
537 million

Approximately **537 million adults** (20-79 years) are living with diabetes.

Unawareness of CKD among people with diabetes: -> 30-70%

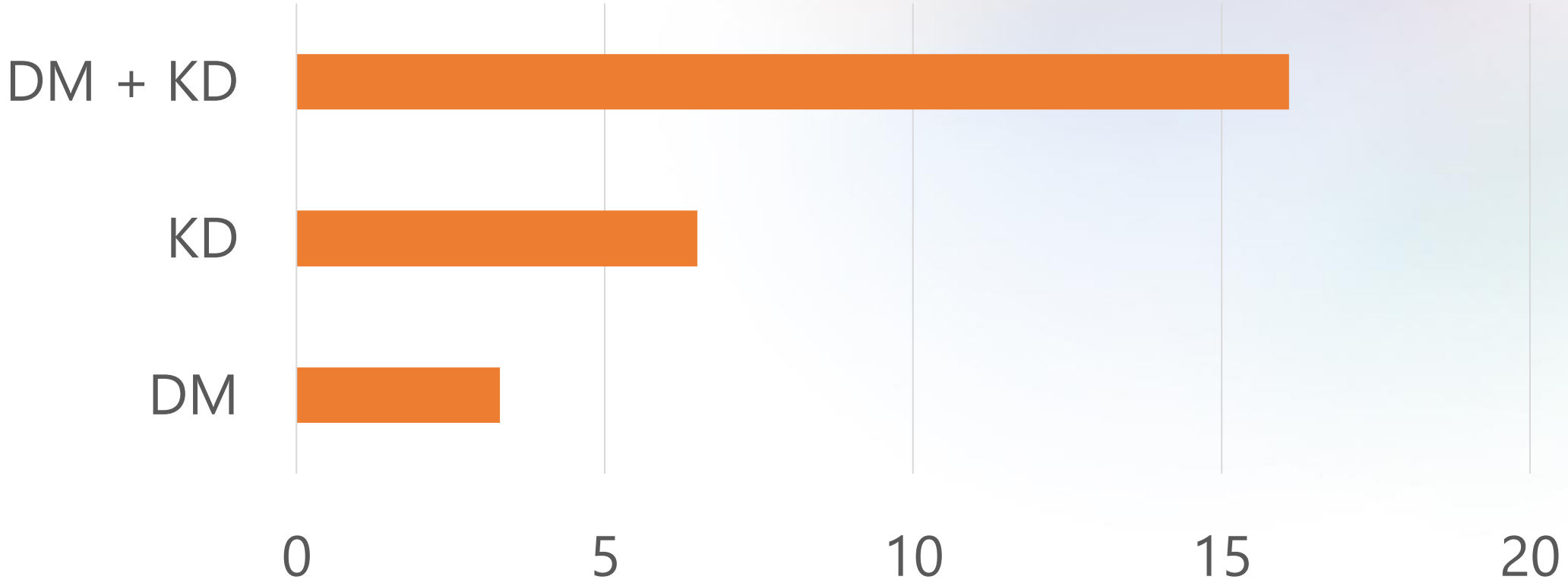
https://idf.org/about-diabetes/facts-figures/
Dtsch Med Wochenschr. 2022 Sep;147(17):e70-e81
Canadian Journal of Diabetes Volume 46, Issue 5, July 2022, Pages 464-472

A ACHIEVABLE



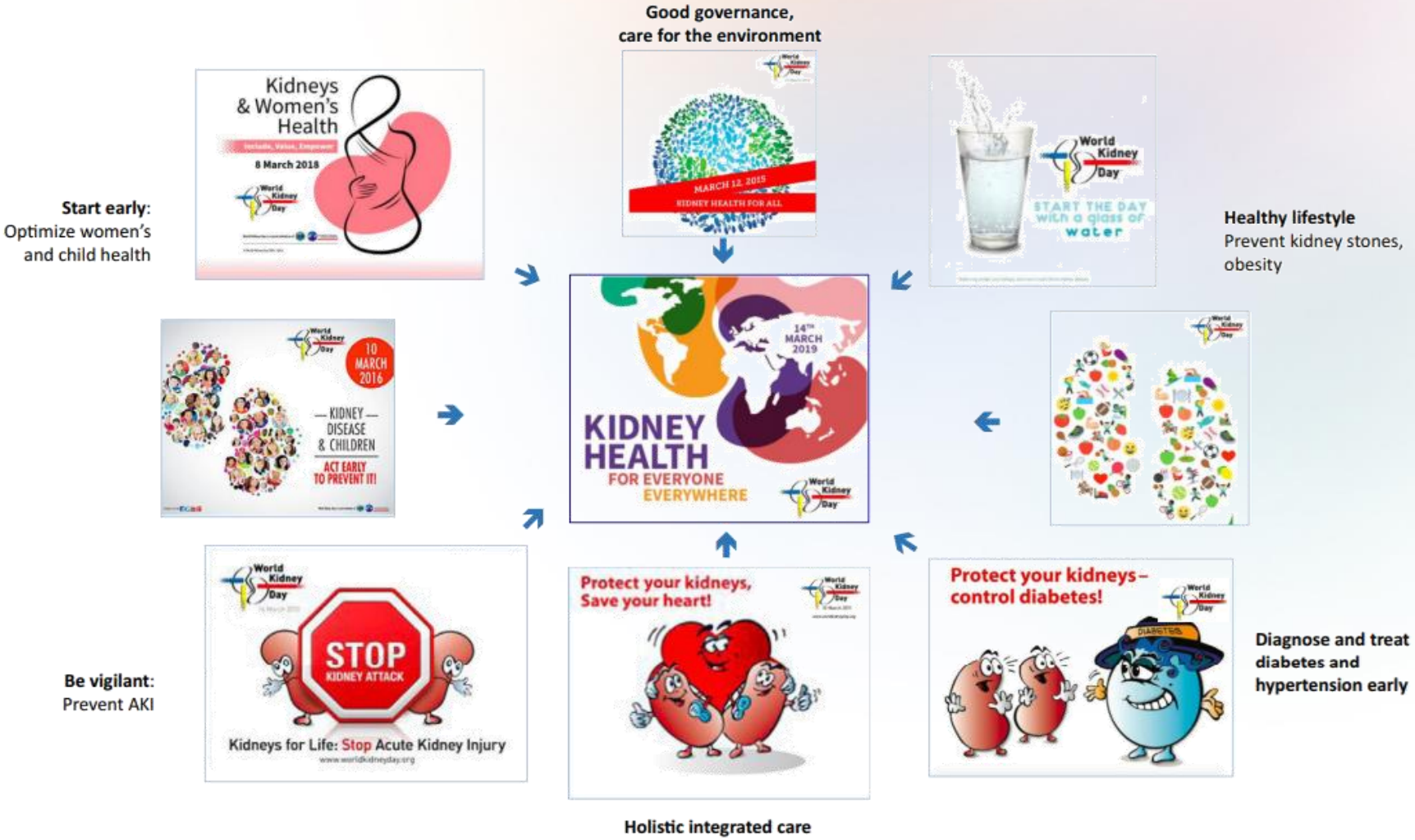
https://www.who.int/initiatives/the-who-global-diabetes-compact

R RELEVANT (CARDIOVASCULAR MORTALITY)



Journal of the American Society of Nephrology 24(2):p 302-308, February 2013

R REALISTIC



Kidney Int Rep (2020) 5, 263–277

Renewing the Fight:
A Call for Action for Diabetes and Chronic Kidney Disease

Life goes on after diabetes and CKD diagnosis

MS ANITA SABIDI

IDF Blue Circle Voices member

Indonesia

ABOUT ME

- From Jakarta - Indonesia.
- Type 1 diabetes since 1997, diagnosed at 13 years old.
- Artist, illustrator and designer.
- Mother of 2 boys.
- Developed chronic kidney disease in 2015 due to pregnancy complications.

CKD DIAGNOSIS

- Pregnant with baby #2
- Early contractions at 27 weeks of pregnancy
- Hypertension, led to pre-eclampsia
- Hospitalised for 5 weeks to extend pregnancy, ICCU for 3 weeks after birth
- Diagnosed with stage 2 chronic kidney disease, eFGR 65% and macro albuminuria 6,000

TRANSITION TO LIFE WITH CKD

- Protein limitation
- Nutrient awareness
- Managing diabetes and hypertension
- Current progress : eFGR 83% and macro albuminuria 500

RECOMMENDATIONS FOR OTHER PEOPLE WITH DIABETES AND CKD

- Look for information from reliable sources
- Reach out to communities
- Consistency

Life goes on after chronic kidney disease diagnosis, keep going

Discussion Panel and Q&A

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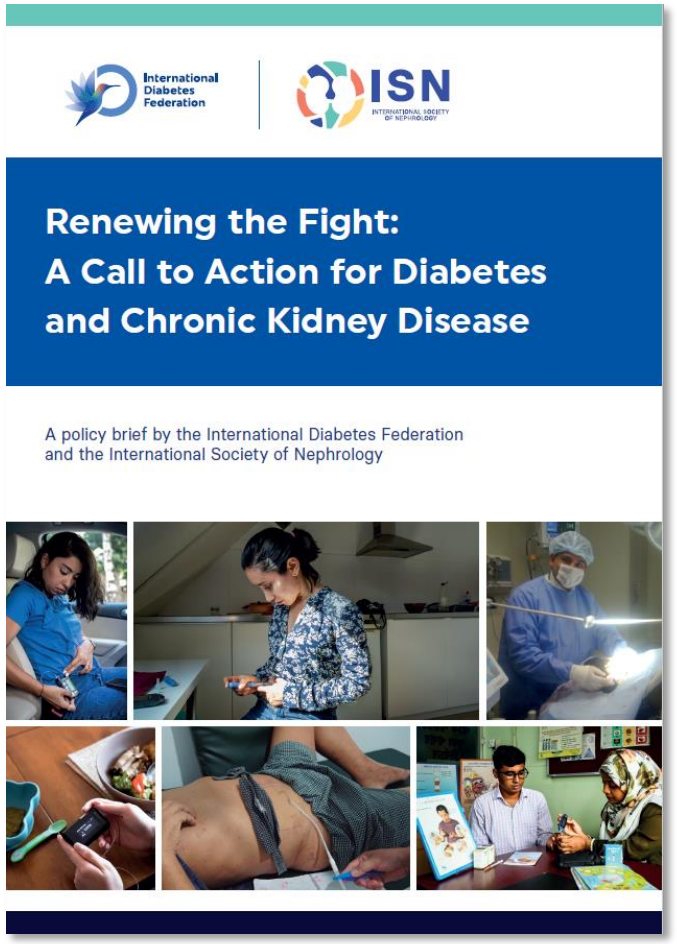
Closing Remarks

DOWNLOAD THE POLICY BRIEF



The download link will be circulated via email, together with the webinar recording

CLOSING REMARKS AND THANKS

- The recording, slides and feedback questionnaire will be sent to all registrants in a few days
- Please respond to the feedback questionnaire to help us improve future IDF online events
- Send any questions you may have to advocacy@idf.org

International Diabetes Federation

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Thank you!