



Kidney and Hypertension

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President Of Iraqi Society of Nephrology and
Renal Transplantation**

hdad 18th November 2022



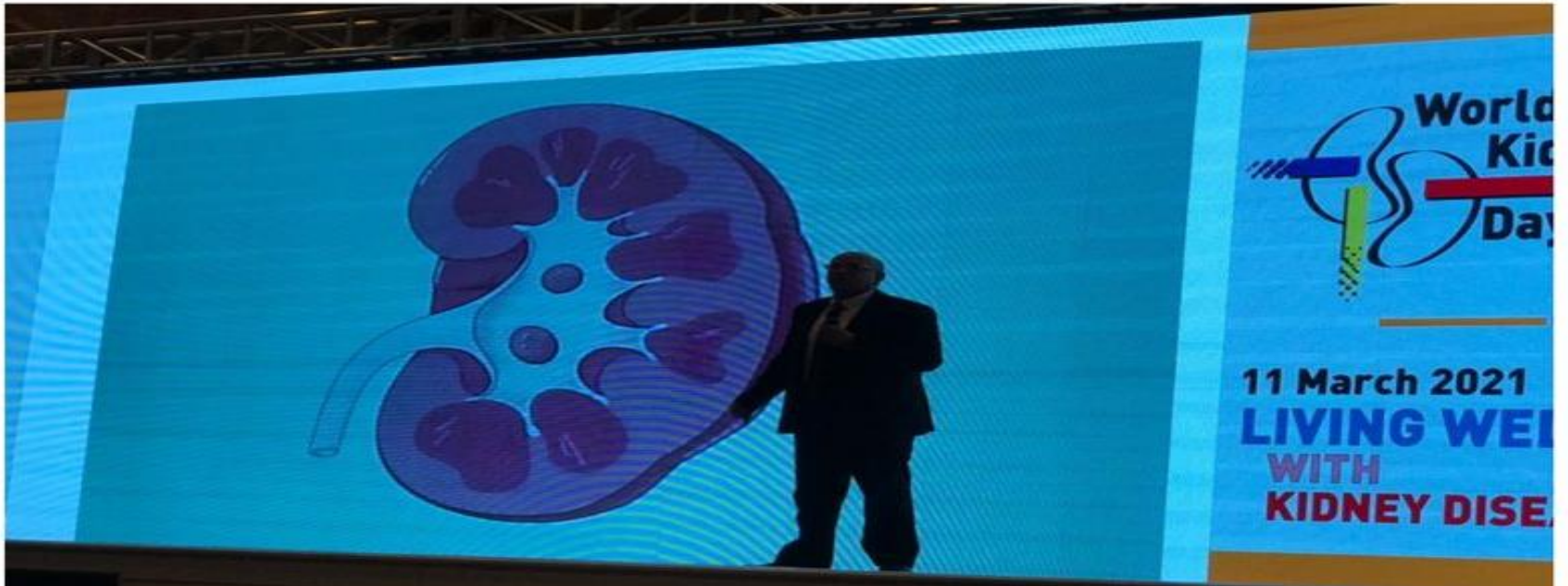
10 مارس 2022
صحة الكلى للجميع
#worldkidneyday #kidneyhealthforall
www.worldkidneyday.org

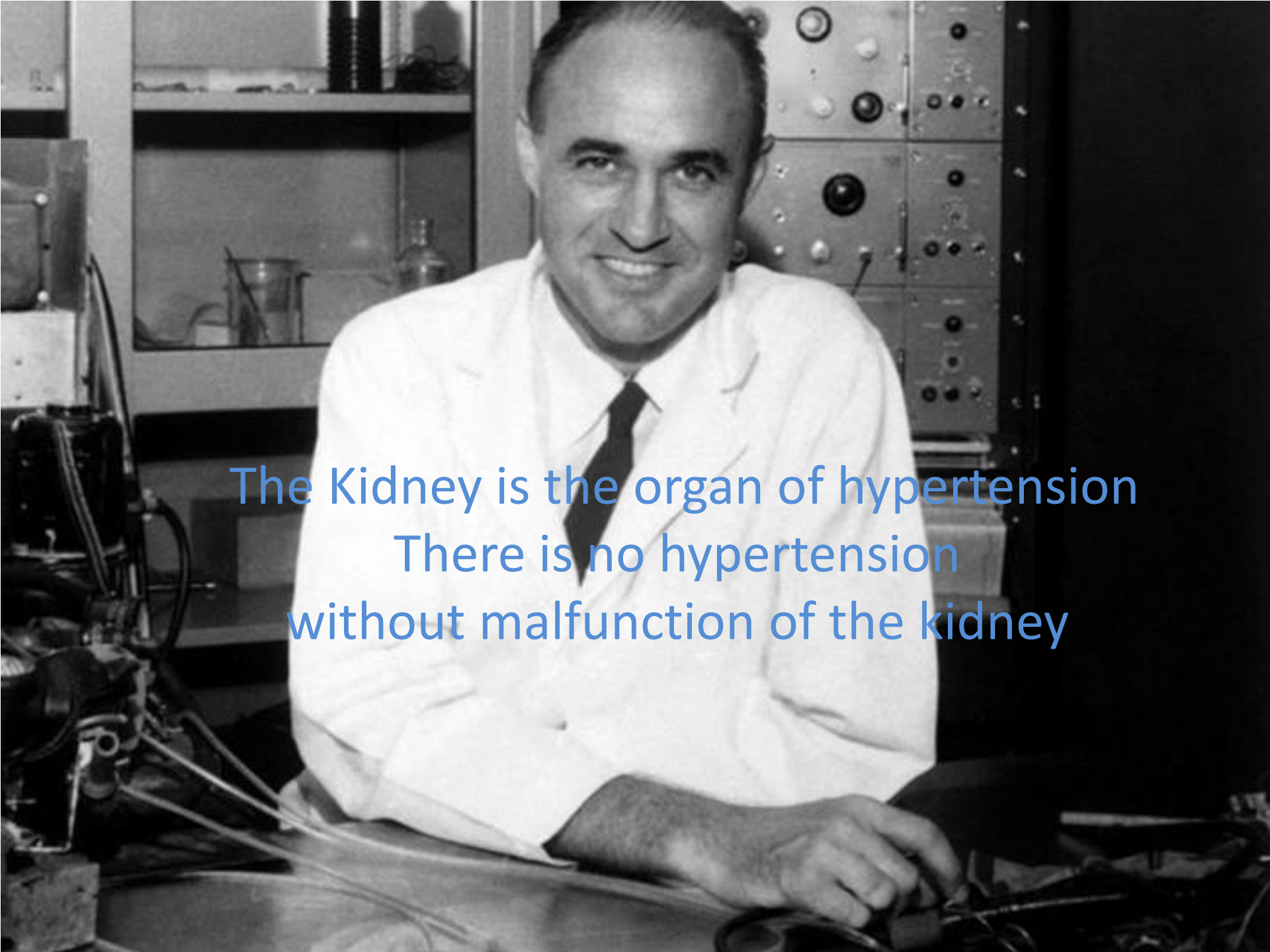
سد فجوة المعرفة
لتحسين رعاية
الكلى



World Kidney Day
is a joint initiative of  ISN  FKF-WKA

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The Kidney is the organ of hypertension
There is no hypertension
without malfunction of the kidney

A circular inset image showing a microscopic view of a renal corpuscle. The central feature is a glomerulus, a cluster of capillaries, surrounded by a network of capillaries. The colors are somewhat muted, with shades of brown, tan, and blue, suggesting a histological or electron micrograph. The text 'Renin' and 'Natriuresis' is overlaid in yellow on this image.

Renin
Natriuresis

GUYTON & HALL



Protect your Heart !
Save your Kidney !

Sub-Specialization in Nephrology

Current and Future Opportunities

ACKD
Advances in Chronic Kidney Disease

NATIONAL KIDNEY
FOUNDATION.



Onconephrology

Address kidney problems in cancer patients and provide a comprehensive care



Obstetrics nephrology

Expertise in various kidney disorders and transplant issues during pregnancy



Cardio-nephrology

Deals with cardiorenal syndromes and exposure with novel therapies



Uro-nephrology

Focuses on developing clinical acumen in urological diseases



Home-based dialysis

Learning of techniques in different modalities and complications management



Glomerular disorders

Primarily focused on treatment and evaluation of glomerular diseases

Conclusion: There is a need for training in nephrology subspecialties as areas of concentrations or extra years of fellowship training. Program specific mentors in each subspecialty should exist to foster curriculum development.

Reference:

Sachdeva M et al. Opportunities for Sub-Specializations in Nephrology. *Advances in Chronic Kidney Disease*. 2020.

Visual Abstract by Priti Meena, MD

@Priti899



Cardiology as a Potential Model for Sub-specialization in Nephrology

Cardiology	Nephrology
Cardiovascular Disease	General Nephrology, including: <ul style="list-style-type: none">• Cardiorenal disease• Hypertension• Diabetic kidney disease• Glomerular diseases, such as polycystic kidney disease
Clinical cardiac electrophysiology	Dialysis Care (including in-center and home modalities)
Interventional cardiology	Interventional Nephrology
Advanced heart failure and transplant cardiology	Transplant Nephrology
Adult congenital heart disease	Critical Care Nephrology and Acute Kidney Injury
	Onconephrology

We Must Take the Lead



**KIDNEY
WEEK** 2020
REIMAGINED

Healthy Kidneys Healthy Life

SAĞLIKLI
BÖBREK
SAĞLIKLI
HAYAT



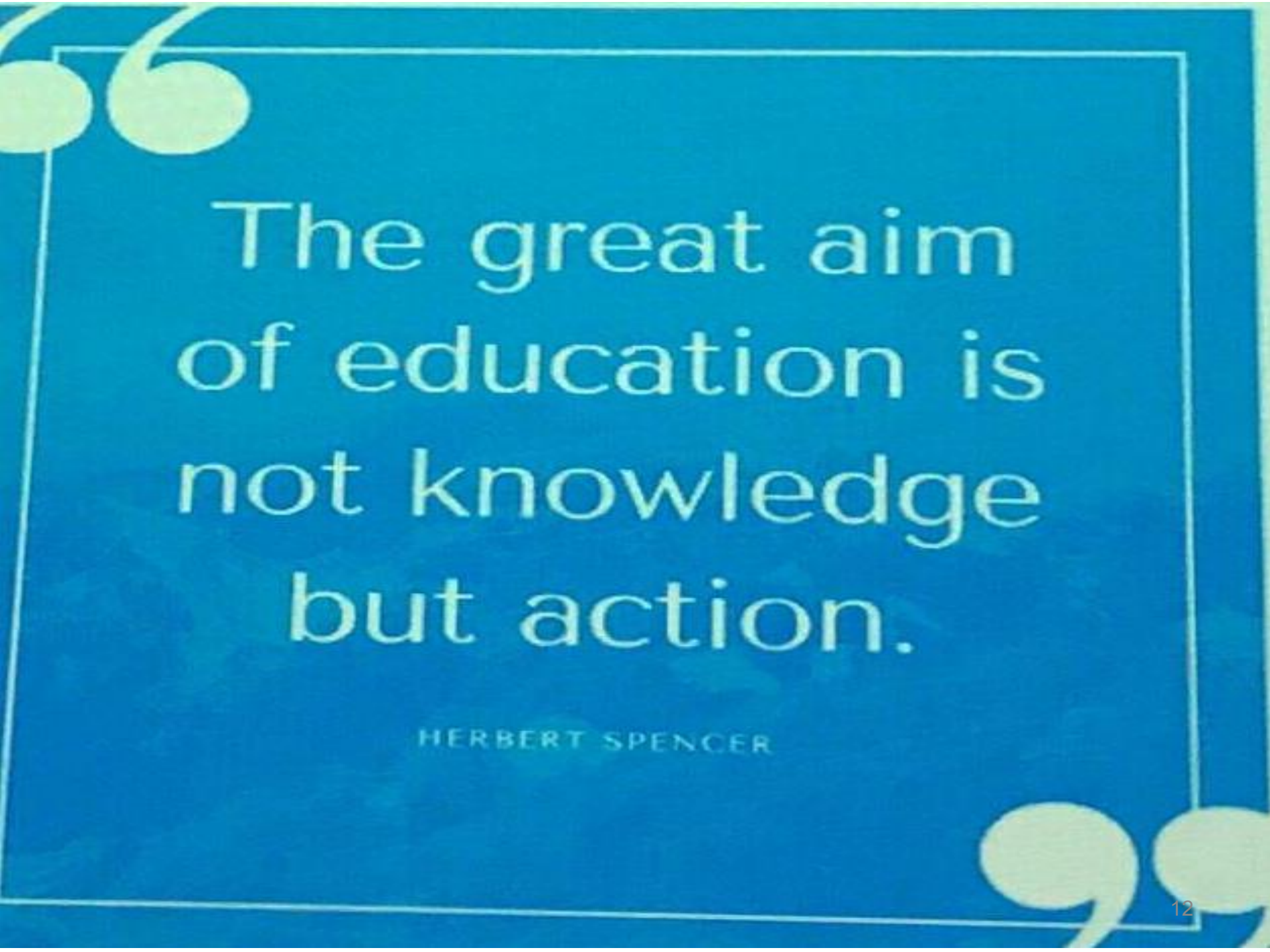


**A team is not a
group of people
who work together.**

**A team is a group
of people who
trust each other.**

• SIMON SINEK •



A blue background with a white border. In the top-left and bottom-right corners, there are large, stylized white quotation marks. The text is centered in white.

The great aim
of education is
not knowledge
but action.

HERBERT SPENCER



Diabetes



Heart Failure



Cardiovascular



Kidney Disease

C

CARDIO

K

KIDNEY

D

DIABETES

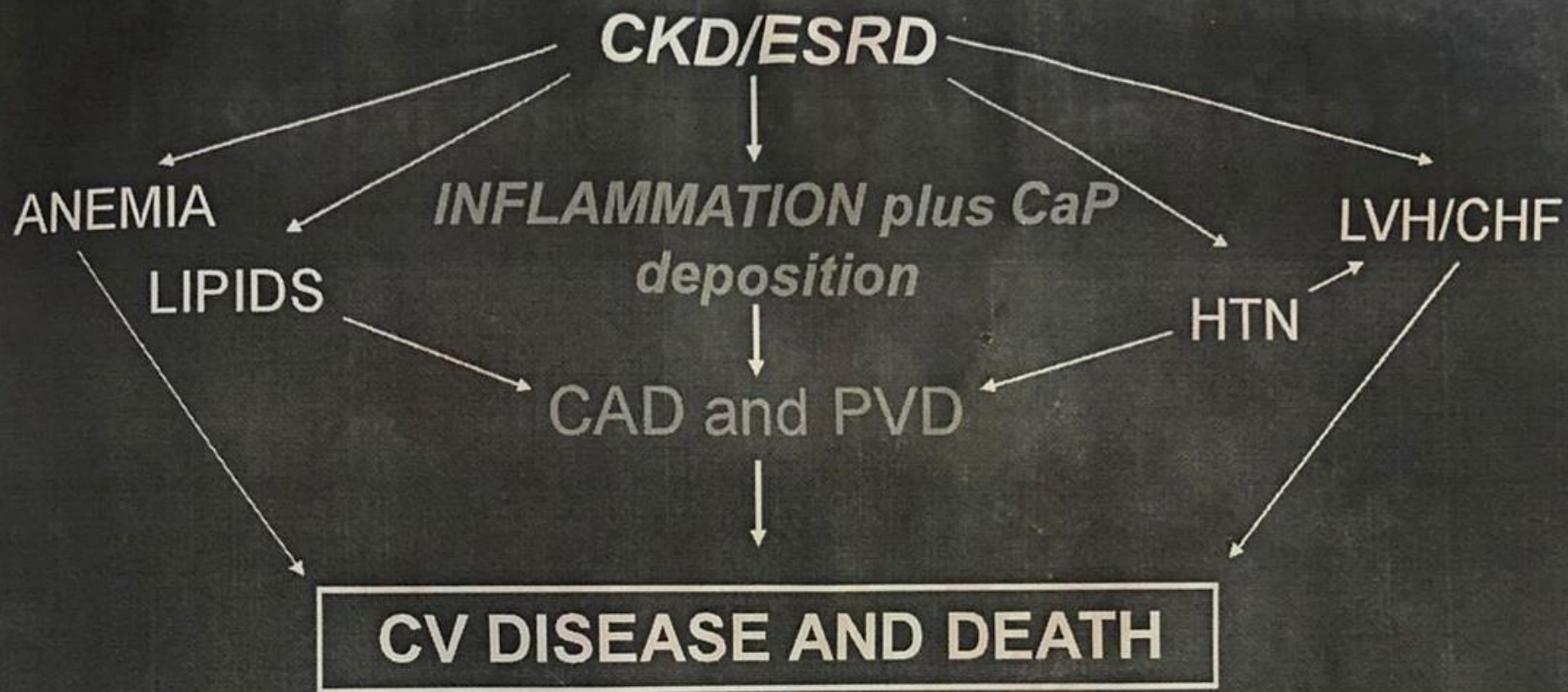
CKD is a **silent** disease...

“The heart beats, the lung breathes—the kidney does not make any noise, and often people end up presenting with end-stage kidney disease having never realised anything was wrong.”

ACT → → →



Why are CKD/ESRD Patients Predisposed to CV Disease?



**Vision: To protect the lives of 130 million people
Targeting 4 Disease Areas that are the leading causes of death worldwide**

Metabolism



425M

people living with
diabetes¹

Heart Failure



64M

people living with
heart failure²

Cardiovascular



17.9M

cardiovascular deaths
per year³

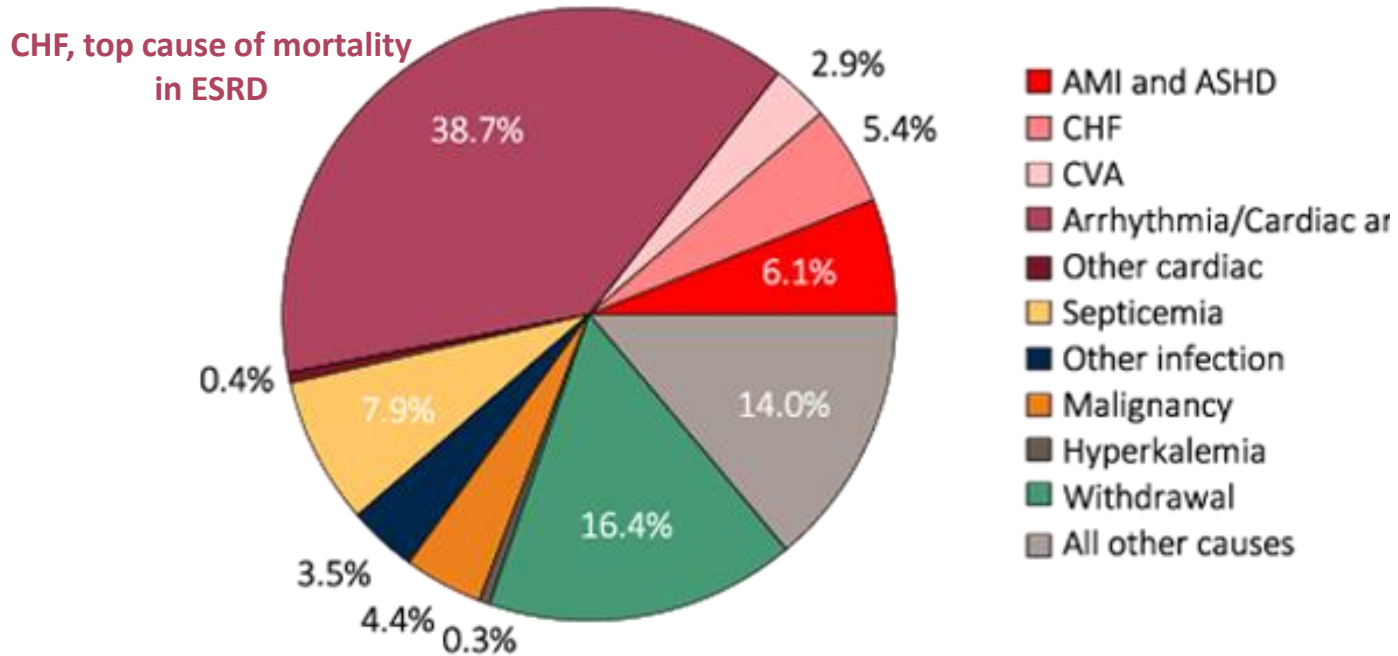
Renal



800M

people living with
chronic kidney disease⁴

Causes of death in ESRD patients, 2012-2014



Healthy Lifestyle for Healthy Kidneys

WORLD KIDNEY DAY

9 March



Obesity is dangerous.

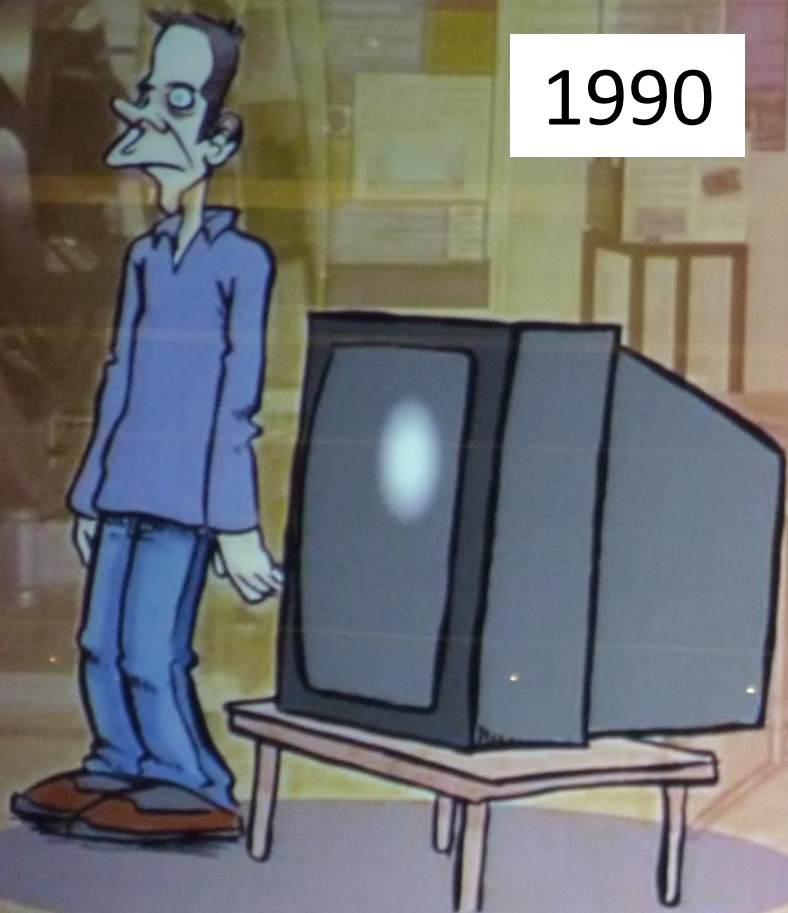


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caglecartoons.com



RACING TO AN EARLY FINISH..

1990



Life has changed!

2022



Flock-08

Hypertension

Lipids

**The
METABOLIC
SYNDROME**

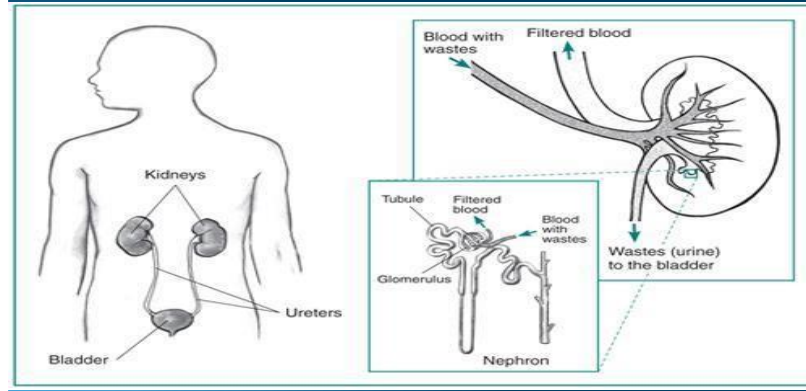
**Insulin resistance
hyperglycemia**

Weight

**Coagulation/
inflammation**



Kidney and blood pressure



Hypertensive Nephrosclerosis

The term hypertensive nephrosclerosis has traditionally been used to describe a clinical syndrome characterized by **long-term essential hypertension, hypertensive retinopathy, left ventricular hypertrophy, minimal proteinuria, and progressive renal insufficiency** with no evidence suggesting an alternative diagnosis

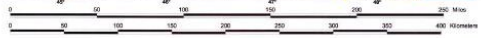


“Without data
you’re just
another person
with an opinion.”

- W. Edwards Deming,
Data Scientist



IRAQ
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 are not necessarily authoritative.
 Proper names on this product may not conform to standard USGS
 product name conventions of U.S. State or Department Name Conventions.
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MAP SCALE - 1:1,250,000
 PROJECTION: TRANSVERSE MERCATOR
 ELLIPSOID & DATUM: WGS 84



Population
41.350.462

M 50.5 % F 49.5 %

Below 5 years 15 %

5-14 Y 25 %

15-64 Y 57 %

Growth Rate 3 %



Skills vs Personality

Difference in guidelines



(optimal and essential standards)

No classes, No level of evidences

- **(1) to be used globally;**
- **(2) to be fit for application in low and high resource settings by advising on essential and optimal standards;**
- **(3) to be concise, simplified, and easy to use.**

History

- **The first population-based survey on HTN in Iraq was conducted in 1979 .**
- **Using the cut-off levels of 160/90**
- **A prevalence of about 12% was reported**



- **The World Health Organization (WHO) Eastern Mediterranean Region health statistics published in 2008 revealed that the prevalence of hypertension in Iraq for both sexes was 29.4% (20.4–38.9%)**

STEPS

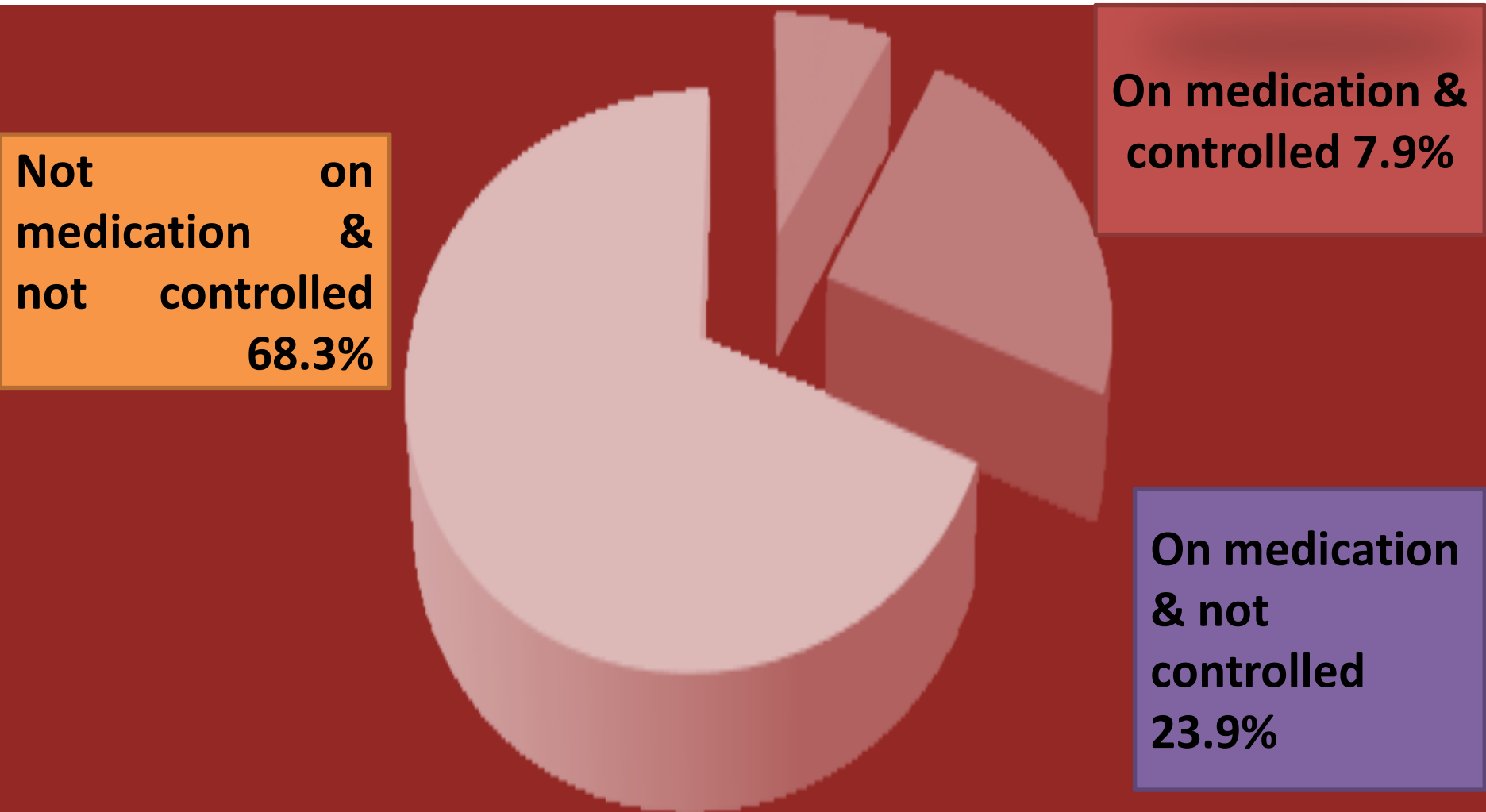


- **2015**
- **A Cross-sectional National household Survey**
- **Randomly selected (4120) person aged 18+ years from both gender,**
- **Carried on 15 governorates in Iraq, (*Nenawa, Salah addin and Al-Anbar*) were excluded .**

Outcome



- The prevalence of HTN in Iraq (35.6%),
- Higher among men as compared to women (36.5% vs. 34.5% respectively).
- The prevalence of HTN (SBP \geq 160 mmHg and/or DBP \geq 100 mmHg) was 18.7%.
- It was evidently higher among women as compared to men



Not on medication & not controlled 68.3%

On medication & controlled 7.9%

On medication & not controlled 23.9%



Survey of Hypertensive Patients Visiting Outpatient Clinics in Baghdad Associated Co Morbidities, Diseases and Risk Factors



- **The Journal of Research on the Lepidoptera**
Volume 51 (2): 589-595 The Lepidoptera Research Foundation. May 2020 ISSN 0022-4324 (print) ISSN 2156-5457 (online) GHAZI FARHAN HAJI¹, NAGHAM KAREEM MULLA², ZAINAB ABDULKHALEQ AL-RIKABI^{3*}, GHASSAN MOHAMMED MAHMOOD¹, ARSHAD FUAD RIDHA⁴, ABDULHAMEED ALQASEER⁵, MAHMOOD RIYADH ALHALEEM⁶, BASIM SAFI ALMKOUTAR⁷ AND TAGHREED KHAZAL
- **581-patients out of 1185 were included and classified into two groups, the already diagnosed group and the newly diagnosed group.**
- **hypertension prevalence among patients visiting cardiac outpatient clinics **was 49%.****
- **There is a clear shift in the incidence of hypertension towards younger age groups.**
- **Ischemic heart disease was the most common complication and diabetes mellitus was the most frequently encountered co-morbidity.**
- **Both, salt and fat restriction were higher in the already diagnosed group**
- **The already diagnosed group had higher compliance to treatment with fair commitment to regular visits.**

Prevalence of hypertension and associated risk factors in older adults in Kurdistan, Iraq



- Mariwan Saka,¹ Sherzad Shabu ² and Nazar Shabila ² **Eastern Mediterranean Health Journal 2020**
- The study involved 1480 adults selected
- Of the 1480 study participants, 809 (54.7%) had hypertension. Of these 809 hypertensive patients, 375 (46.4%) were known cases of hypertension and 434 (53.6%) were diagnosed during the survey.
- **Conclusion:** The prevalence of hypertension in Erbil City is high, with a high prevalence of undiagnosed hypertension. Treatment compliance was high but access to drugs was primarily from private pharmacies.

Prevalence and Control of Hypertension in Iraqi Diabetic Patients: A Prospective Cohort Study



- **Cardiovascular Medicine Journal 2012**
- Abbas Ali Mansour
- Abstract: Objectives: Diabetes and hypertension are major risk factors for cardiovascular disease, a leading cause of death in humans. The aim of our study was to determine the prevalence of hypertension, and hypertension control among adults with diabetes in **Basrah** (Southern Iraq). Methods: A prospective cohort study was conducted at Al-Faiha Diabetes and Endocrine Center in Basrah. It was started in August 2008 to April 2011. The total number of recruited patients with diabetes was **5578**. Results: Hypertensive diabetic patients constituted 89.6% of this study cohort, with 45.3% of them newly discovered in the center. From hypertensive patients, 48.2% achieved the target blood pressure of less than 130/80 mmHg. The results of the multivariate analyses showed that the factors independently associated with the hypertension were aged > 50 years (odds ratio, 0.4; 95% CI, 0.3 to 0.5; $p < 0.001$), body mass index equal or more than 25 (odds ratio, 0.5; 95% CI, 0.4 to 0.6; $p < 0.001$), insulin use (odds ratio, 0.6; 95% CI, 0.5 to 0.8; $p < 0.001$) and duration of diabetes > 5 years (odds ratio, 0.6; 95% CI, 0.5 to 0.7; $p < 0.001$).
- **Conclusion: This study confirmed that hypertension was seen in ~90% of diabetic patients in Iraq, and approximately half of them were achieving target blood pressure level**

Perception of Predictive Confounders for the Prevalence of Hypertension among Iraqi Population: A Pilot Study

- Authors: Zahraa Albasry, Hadeel D. Najim, Anmar **Al-Taie** 2019 **International Journal of Pharmacological and Pharmaceutical Sciences**
- Background: Hypertension is considered as one of the most important causes of cardiovascular complications and one of the leading causes of worldwide mortality. Identifying the potential risk factors associated with this medical health problem plays an important role in minimizing its incidence and related complications. The objective of this study is to explore the prevalence of receptor sensitivity regarding assess and understand the perception of specific predictive confounding factors on the prevalence of hypertension (HT) among a sample of Iraqi population in Baghdad, Iraq. Materials and Methods: A randomized cross sectional study was carried out on 100 adult subjects during their visit to the outpatient clinic at a certain sector of Baghdad Province, Iraq. Demographic, clinical and health records alongside specific screening and laboratory tests of the participants were collected and analyzed to detect the potential of confounding factors on the prevalence of HT. Results: 63% of the study participants suffered from HT, most of them were female patients ($P < 0.005$). Patients aged between 41-50 years old significantly suffered from HT than other age groups (63.5%, $P < 0.001$). 88.9% of the participants were obese ($P < 0.001$) and 47.6% had diabetes with HT. Positive family history and sedentary lifestyle were significantly higher among all hypertensive groups ($P < 0.05$). High salt and fatty food intake was significantly found among patients suffered from isolated systolic hypertension (ISHT) ($P < 0.05$). A significant positive correlation between packed cell volume (PCV) and systolic blood pressure (SBP) ($r = 0.353$, $P = 0.048$) found among normotensive participants. Among hypertensive patients, a positive significant correlation found between triglycerides (TG) and both SBP ($r = 0.484$, $P = 0.031$) and diastolic blood pressure (DBP) ($r = 0.463$, $P = 0.040$), while low density lipoprotein-cholesterol (LDL-c) showed a positive significant correlation with DBP ($r = 0.443$, $P = 0.021$).

Conclusion: The prevalence of HT among Iraqi populations is of major concern. Further consideration is required to detect the impact of potential risk factors and to minimize blood pressure (BP) elevation and reduce the risk of other cardiovascular complications later in life.

Comorbidity and Risk Factors for COVID-19



Confirmed Patients in Wasit Province, IRAQ

- 2020 Taqi M Taher, 2. Firas T Sarray 3. Saad A Farhan Al-Badri
- 4. Hasanain FI Ghazi
- Conclusion: Being a female, overweight or obese, and with blood group (O) are the major risk factors among patients. **Comorbidities can play an important role in the severity of disease especially hypertension, diabetes, coronary heart diseases, and chronic renal diseases.**

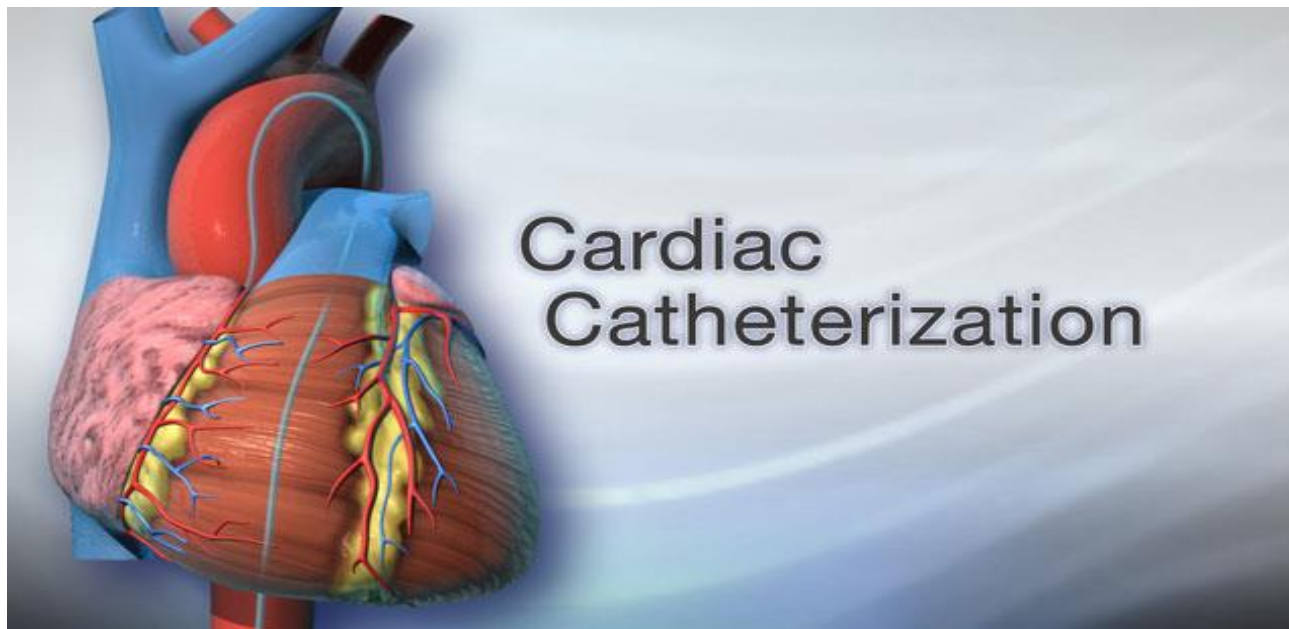
Knowledge, attitude and practice about HTN in hypertensive patients attending hospitals in Baghdad, Iraq 2017



Conclusion:

- HTN patients in our community have relatively good knowledge & attitude
- Poor practice & compliance to treatment







**THE KEY TO SUCCESS
IS TO FOCUS ON
GOALS, NOT OBSTACLES.**



“I have saved the lives of 150 people by heart transplants. If I had focused on preventive medicine earlier, I might have saved 150 million”

Christiaan Barnard
heart transplant surgeon



*An idea is like a virus,
resilient, highly
contagious and the
smallest seed of an idea
can grow.*

Inception (2010)



Who wants change?



Who wants *to* change?



Who wants *to lead the* change?



**Pills and
Surgery**

**Lifestyle
Change**





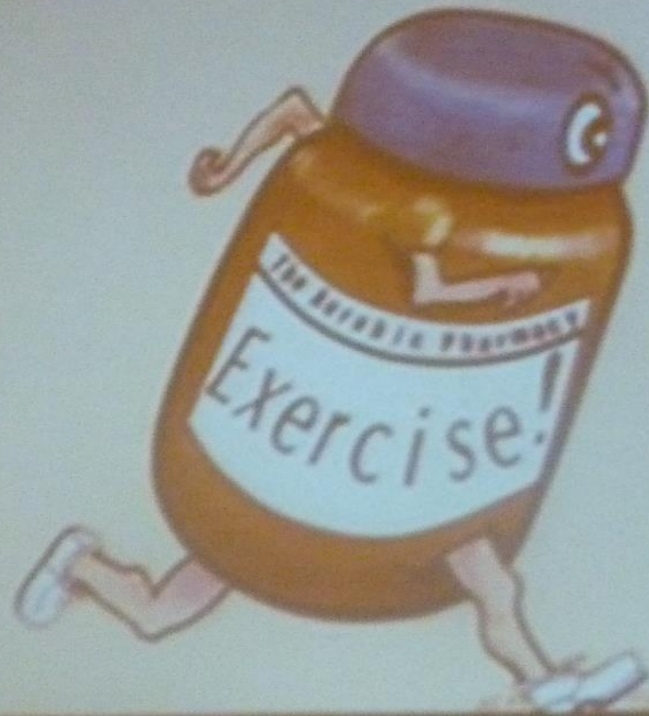
Open Letter to the Government

Obesity in childhood

Low cost

Low risk

Available



EXERCISE
AS
MEDICINE

An aerial photograph of a city skyline, likely New York City, featuring several prominent skyscrapers. The city is situated on a peninsula or near a large body of water, with a bright, hazy horizon line. The sky is a vibrant blue with scattered white clouds. A thin, bright line, possibly a satellite or a light trail, streaks across the upper left portion of the sky. The overall scene is bright and optimistic, serving as a background for the motivational text.

3D OF SUCCESS: DREAM, DECIDE, DO

- ALEX KHAN



**WRONG IS
WRONG**

even if everyone is doing it.

**RIGHT IS
RIGHT**

even if no one is doing it.

The world is not dangerous because of those
who do harm, but because of those who look at
it without doing anything

- Albert Einstein

