

Harvard College

KIDNEY DISEASE SCREENING AND AWARENESS PROGRAM (KDSAP)

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The Challenges of CKD

1. Rising prevalence of disease
2. Low patient awareness
3. Underserved minority groups
4. Shortage of nephrologists

Our Response: KDSAP

- Student-run organization at Harvard College, founded by undergraduate students in 2008 with the support of Dr. Li-Li Hsiao
- In collaboration with nephrologists at the Brigham and Women's Hospital Asian Renal Clinic
- Has 4 chapters: University of Medicine and Dentistry of New Jersey, University of Toronto, North Quincy High School, Brookline High School
- In process of expanding nationwide to three new pilot sites through Kidney MAPS program in conjunction with the American Society of Nephrology (ASN)

KDSAP Objectives

Community Outreach

- Health Screenings
- Health Education

Student Career Development

- Health Career Development
- Leadership
- Mentorship (hierarchical)

Free Community Kidney Health Screening



1. Registration



2. Questionnaire



3. Health Education



5. Blood Pressure



4. BMI + Waist Circ.



6. Urinalysis



7. Blood Glucose



8. Consultation

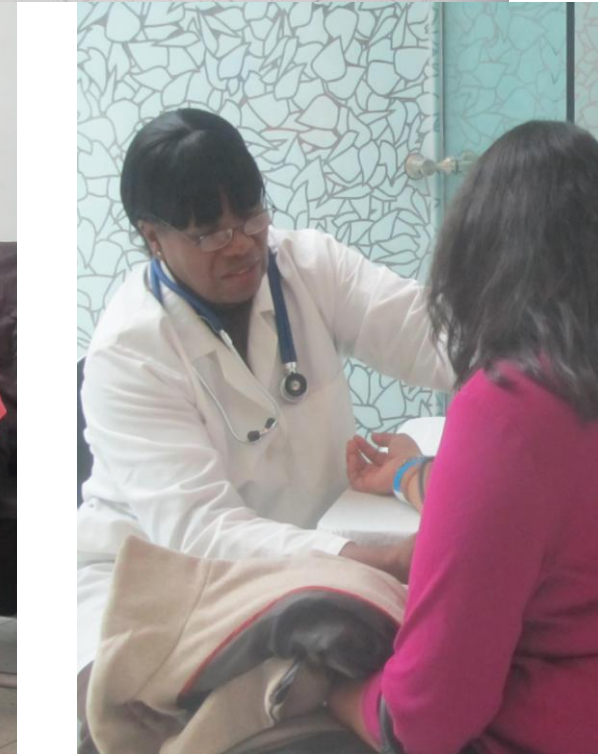
Registration



BMI



Blood Pressure



Blood Glucose



Urinalysis



MD Consultation



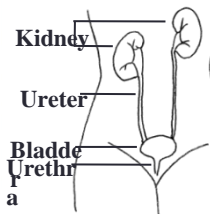
Debriefing with Our Nephrologist Mentor: Dr. Li-Li Hsiao



Community Outreach: Health Education

Sample powerpoint presentation slides

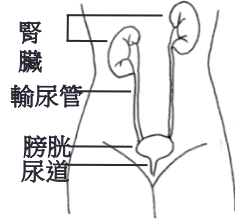
Functions of the kidney



- Filter body waste
- Secrete water
- Maintain balance of electrolytes, salts and acids
- Produce hormones that control blood pressure, red blood cell production, Vitamin D, and Calcium balance

English

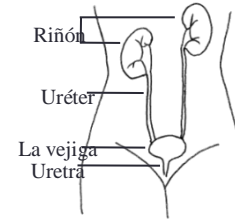
腎臟的功能



- 過濾體內廢物
- 把多餘的水份排出
- 保持電解質、鹽份及酸鹼平衡
- 製造荷爾蒙 (腎素調節血壓、製造紅血球生成素、活性維生素D, 調節鈣與磷代謝)

Chinese

Las Funciones del Riñón



- Filtrar el desecho de cuerpo
- Secretar la agua
- Mantener el equilibrio de los electrolitos, las sales y los ácidos
- Producir hormonas que controlan tensión, la producción de glóbulo rojo, la Vitamina D, y el equilibrio de Calcio

Spanish

Educational brochure

WHERE ARE MY KIDNEYS?

• Your kidneys are found near your back, below the ribcage.

WHAT DO MY KIDNEYS DO?

- Make urine to remove excess water, wastes, and toxins from your blood.
- Maintain your body's balance of salts and acids.
- If kidney function fails, your body is damaged by the toxic waste that aggregates in your blood.
- Produce hormones that control blood pressure, red blood cell numbers, and vitamin D and calcium levels.

WHAT IS KIDNEY DISEASE?

There are two types of kidney disease:

- 1. Acute Kidney Disease:** your kidneys stop working over days or weeks. Problems with kidney blood supply, activity, or urine flow can cause this. If diagnosed and treated in time, you can recover completely.
- 2. Chronic Kidney Disease (CKD):** the gradual, irreversible damage to the kidneys over several months or years. Initial symptoms do not appear until its later stages, making CKD a silent killer.

WHAT CAUSES CKD?

- **Diabetes:** prevents glucose breakdown, damaging the kidneys. The kidneys may stop working well 15-20 years after onset of diabetes.
- **High blood pressure:** damages kidney blood vessels, preventing waste removal.
- **Kidney Infection**
- **Genetics:** having family members with diabetes, hypertension, kidney disease, like polycystic kidney disease
- **Inflammation** due to problems with immune system
- **Obstructions preventing proper urine flow:** kidney stones, enlarged prostate, abnormal urological system
- **Medications:** Motrin, Ibuprofen, Advil, certain herbs, contrast injections

WHAT ARE THE SYMPTOMS OF CKD?

• There are **often no symptoms** until permanent damage has happened to your kidneys.

• When symptoms do occur, they include:

- Fatigue and weakness
- Swelling of the legs
- Itching
- Headaches
- Nausea and vomiting
- Frequent urination
- Painful or difficult urination
- Bloody urine
- Chest pains
- Decreased sexual interest
- Bone pain and fractures

HOW IS CKD DIAGNOSED?

There are two types of lab tests:

- **Blood test:** These measure blood creatinine and urea, waste products from the breakdown of muscle and protein. High levels of these substances can be found in serious kidney disease.
- **Urine test:** Looks for blood or protein in urine, which only appear with kidney disease.

HOW DO I PREVENT CKD?

- 1. Seeing your doctor on a regular basis is crucial to preventing CKD. Your doctor can help you to:**
 - Control high blood pressure and diabetes
 - Avoid medicines that hurt your kidneys
 - Pain killers, like Motrin, Ibuprofen, and Advil, and some herbal medicines can damage the kidneys.
 - Avoid too much protein and sodium in your diet
 - People who consume too much protein are more likely to develop kidney disease. Too much salt can also damage your kidneys.
- 2. Drink enough fluid:** 2 liters/day can help prevent kidney stones
- 3. Exercise often:** 5 times a week, 30-60 minutes
- 4. Eat healthy:** Avoid food that is high in fats, salts, and sugar

Talking to your doctor about all of these issues can help you to avoid chronic kidney disease.

Brought to you by
COMMUNITY KIDNEY DISEASE DETECTION

Sponsored by
Asian Remed Clinic, Brigham and Women's Hospital, NIDDK Global Foundation, and Genzyme Corporation Educational Grant

COMMUNITY KIDNEY DISEASE DETECTION

What you should know about

Chronic Kidney Disease

Important facts and how to protect yourself

CHRONIC KIDNEY DISEASE AT A GLANCE

About 67,000 people die each year due to renal failure, the 9th leading cause of death in America.

About 1 in 6 individuals have kidney disease, and over 400,000 patients are on dialysis or have received kidney transplants.

Kidney disease is more common in Asian-Americans, African-Americans, and Hispanics.

CKD can be a silent disease; you may not know you have it until irreversible damage has occurred.

Student Development: Mentorship and Career Exposure

- “Meet the Doctors” colloquium
- “Meet the Patients” colloquium
- Universal Precaution and Professionalism (UPP) Training
- Blood Pressure Training Workshops
- Hierarchical Mentoring (physician to undergraduate student to high school student)
- Shadowing Program

Results

- Screened and educated over 4000 community members in 21 different communities across Massachusetts
- Subscribed membership of more than 300 undergraduates since 2008
- Broad representation of student volunteers, ranging from high school to graduate/medical students.

Upcoming Screenings

- Saturday, Dec 7, 2013

Central Square, Flu Shots Provided!

World Kidney Day Screening at Brigham & Women's Hospital 3/14/13



Reminder

- Please help us improve BKHS by taking our short exit survey before you leave!

Thank You!