The Demise of Mr. Homo sapiens

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Life Expectancy

National Center for Health Statistics, 2011
Number of Men per 100 Women

U.S. Census Bureau, 2010

Comparison of Death Rates from Major Disease Groups

National Center for Health Statistics, 2011
Comparison of Death Rates from Major Disease Groups

- Cerebrovasc. ds
- Diabetes
- Influenza / pneum.
- Suicide
- Liver ds / cirrhosis
- HIV

Deaths per 100,000

National Center for Health Statistics, 2011

Death rates for Heart Disease

- 35-44
- 45-54
- 55-64
- 65-74
- 75-84

Deaths per 100,000

National Center for Health Statistics, 2011
What percentage of the men who die suddenly of CAD have no prior symptoms?

A) 10%
B) 20%
C) 30%
D) 40%
E) 50%

ED is a strong predictor of cardiovascular disease

ED associated with a 50 fold increase in the 10 year incidence of a cardiac event in men age ≤ 49*

* Inman B. Mayo Clinic Proceedings, 2008
Princeton III Consensus Recommendations for the Management of ED and CVD

- **ED is a marker** (independent of FRS) **of significantly increased risk** of CVD, CAD, stroke, and all-cause mortality.

- **ED provides an opportunity** for CVD risk reduction.

- **All men with ED** (esp. age 30-60) **should have their cardiovascular risk assessed.** (WC, BP, FBS, lipids, EST, CACS, etc)

- **In all patients,** lifestyle changes are likely to reduce cardiovascular risk and improve ED.

AAA Screening

- 3rd leading cause of sudden death in men > 60

- One-time ultrasound screening for AAA is recommended for all men ≥ 65 years.*
  (USPSTF: 65-75 smoker)

- Screening men as early as 55 years is appropriate for those with FH of AAA*

*Society of Vascular Surgery Position Statement on Vascular Screening 2011

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Death rates for Malignant Neoplasms

<table>
<thead>
<tr>
<th>Age</th>
<th>Deaths per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>35-44</td>
<td></td>
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<td>75-84</td>
<td></td>
</tr>
</tbody>
</table>

National Center for Health Statistics, 2011
Comparison of Incidence Rates for Major Malignancies

![Bar chart showing comparison of incidence rates for major malignancies between men and women.](chart)

Lifetime Probability of Developing an Invasive Cancer

<table>
<thead>
<tr>
<th>Gender</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>1 in 2</td>
</tr>
<tr>
<td>Women</td>
<td>1 in 3</td>
</tr>
</tbody>
</table>

Cancer Statistics, 2013 American Cancer Society
2013 Estimated US Cancer Deaths

The Need for Lung Cancer Screening

- Total # lung CA deaths > prostate + colorectal + pancreas
  (> breast + colorectal in women)

- Patients typically present with advanced disease
  – Only 15% of lung cancers are diagnosed at a localized stage

- 5-year survival rate is only 16%

- 90% of lung CA deaths among men due to smoking
National Lung Screening Trial (NLST)

• Screened *high risk* individuals with LDCT or CXR
  
  *(55-74 with ≥30 pack year; former smokers quit <15 yrs)*

• 20% ↓ in lung CA mortality in LDCT vs CXR

• NNS to prevent 1 death = 320

• But… weigh against false +, procedures for benign disease, XRT exposure, $, etc.


LDCT Lung CA Screening 6/12/13

• National Comprehensive Cancer Network: recommend for
  
  1) 55-74 with ≥30 pack year; former smokers quit <15 yrs (NLST)
     (Category 1 recommendation)

  2) ≥ 50 with ≥20 pack year + 1 risk factor (Prior CA, +FH, COPD, radon exposure, occupational exposure) (Category 2B recommendation)

• American Lung Association: recommend for NLST

• American College of Chest Physicians

• American Society of Clinical Oncology

• American Thoracic Society

• American Cancer Society: consider screening for NSLT

• American Association for Thoracic Surgery: recommend for NLST+

• USPSTF: insufficient evidence to recommend for or against screening (2004)
The PSA Controversy: stay tuned.....

Peter Tiffany, MD
Alan Edelstein, MD
Adam Feldman, MD

Colon Cancer Screening
Get Scoped!
Melanoma Screening

Asymmetry  Border irregularity  Color  Diameter:
¼ inch or 6mm

1 in 35 !!

Cancer Statistics, 2013 American Cancer Society
Comparison of Male & Female Suicide Rates

Deaths per 100,000

0 10 20 30 40

Age

20-24 25-34 35-44 45-54 55-64 65-74 75-84 85+

men
women

National Center for Health Statistics, 2011

Screen for Depression in CAD

• Depression 3x more common after an acute MI

• 15-20% of hospitalized MI patients meet criteria for major depression

• Similar prevalence for bypass surgery, valve surgery, USA, angioplasty, & CHF

• Depression associated with a worse prognosis in patients with CHD (doubles risk of CV event 1-2 yrs after MI!)

Circulation. 2008;118:1768-1775
The Demise of Mr. Homo sapiens

Why?

• Unhealthy Behavior

Alcohol Misuse

• Men more likely to develop alcohol dependence than women

• Men have more alcohol related problems than women

• Men have more aggressive behavior associated with excessive drinking than women

Clin Psychol Rev. Dec 2004
Risk Drinking

- > 14 drinks per week or > 4 drinks on any day, or > 7 drinks per week or > 3 drinks on any day over 65

- 23% of U.S. adults report risk drinking!

- ↑ risk of oropharyngeal & esophageal CA, HTN, CVD, stroke, liver disease, sleep disorders, depression, accidents, social problems, and alcohol dependence & abuse

- USPSTF now recommends screening ≥ 18 for EtOH misuse and providing brief behavioral counseling to reduce risky drinking

National Institute on Alcohol Abuse and Alcoholism
Friedman, NEJM, 2013
USPSTF 5/13

Continuum of Risk Associated with Alcohol Use and Possible Clinical Responses

Screening Tests for *Alcohol Misuse*

1) Single question

*How many times in the past year have you had 5 (4 in women and ≥ 65) or more drinks in a day?*  
≥1 time is positive test

2) AUDIT-C (3 questions; 1-2 minutes to complete)

3) AUDIT (10 questions; 2-5 minutes to complete)

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### Audit-C Alcohol Screening

1. **How often do you have a drink containing alcohol?**
   - Never (0 points)
   - Monthly or less (1 point)
   - 2-4 times a month (2 points)
   - 2-3 times a week (3 points)
   - 4 or more times a week (4 points)

2. **How many drinks do you have on a typical day?**
   - 1 or 2 (0 points)
   - 3 or 4 (1 point)
   - 5 or 6 (2 points)
   - 7 to 9 (3 points)
   - 10 or more (4 points)

   **Positive result**
   - Men ≥ 4 points
   - Women ≥ 3 points

   7 -10 suggests alcohol dependence

3. **How often do you have 6 or more drinks on one occasion?**
   - Never (0 points)
   - Less than monthly (1 point)
   - Monthly (2 points)
   - Weekly (3 points)
   - Daily or almost daily (4 points)

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Adapted from Friedmann, NEJM, 2013
“A couple drinks per day”
(1 drink = ½ oz. of ethyl alcohol)

Behavioral Counseling Interventions for *Risky* Drinkers

- Brief multicontact (each session 6-15 minutes) most effective
- Results in: ↓ weekly consumption & binge drinking (BAC ≥ 0.08%)
  ↑ long-term adherence to recommended drinking limits
  ↓ alcohol-related accidents
- Strategies: drinking diaries, stress management, avoid triggers, measure servings (wine), alternate with non alcoholic beverages, reinforce positive health outcomes

Friedmann, NEJM, 2013
Cigarette Smoking by Gender

Helping Patients Who Drink Too Much

A CLINICIAN’S GUIDE
Updated 2005 Edition

National Center for Health Statistics, 2011

Cigarette Smoking by Gender

% of persons

male
female

Age

0 10 20 30

18-24 25-34 35-44 45-64 >65
## 2013 Estimated US Cancer Deaths

<table>
<thead>
<tr>
<th>Estimated Deaths</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung &amp; bronchus</td>
<td>87,260</td>
</tr>
<tr>
<td>Prostate</td>
<td>29,720</td>
</tr>
<tr>
<td>Colorectum</td>
<td>26,300</td>
</tr>
<tr>
<td>Pancreas</td>
<td>19,480</td>
</tr>
<tr>
<td>Liver &amp; intrahepatic bile duct</td>
<td>14,890</td>
</tr>
<tr>
<td>Leukemia</td>
<td>13,660</td>
</tr>
<tr>
<td>Esophagus</td>
<td>12,220</td>
</tr>
<tr>
<td>Urinary bladder</td>
<td>10,820</td>
</tr>
<tr>
<td>Non-Hodgkin lymphoma</td>
<td>10,590</td>
</tr>
<tr>
<td>Kidney &amp; renal pelvis</td>
<td>8,780</td>
</tr>
<tr>
<td>All Sites</td>
<td>306,920</td>
</tr>
</tbody>
</table>

Cancer Statistics, 2013 American Cancer Society

## 10 Leading Causes of Death for a Male All Ages, U.S.

1) Heart disease
2) Malignancy
3) Accidents (MVA #1)
4) Chronic lower respiratory diseases
5) Cerebrovascular disease
6) Diabetes
7) Suicide
8) Influenza & pneumonia
9) Alzheimer’s disease
10) Nephritis, nephrotic syndrome & nephrosis

National Center for Health Statistics, 2011
Motor Vehicle-Related Death Rates

Deaths per 100,000

Age

25-34 35-44 45-54 55-64 65+

men
women

National Center for Health Statistics, 2011

“But I use a hands-free device”
Homer Simpson Syndrome

Any 3 of the following 5
1) Elevated waist circumference
   M \geq 37 \text{ inches} \\
   F \geq 31.5 \text{ inches} \\
2) Elevated sugar (FBS \geq 100) \\
3) Elevated triglycerides ( \geq 150) \\
4) Low HDL (<40M, <50F) \\
5) Elevated BP ( \geq 130/85) or on BP med

Belly Fat Secretes Bad Stuff

- inflammatory cytokines
- angiotensinogen
- cortisol
- free fatty acids


Metabolic Syndrome

- Diabetes
- Coronary Artery Disease
- Stroke
Metabolic Syndrome

Over 50 million Americans!

American Heart Association

WHY?
The secret behind obesity: Portion Distortion

20 Years Ago
500 calories
1 cup spaghetti with sauce &
3 small meatballs

Today
1,025 calories
2 cups of pasta with sauce &
3 large meatballs

Calorie Difference: 525 Calories!!

“The Perfect Plate”
Percent of Obesity (BMI ≥ 30) in U.S. Adults
1989

Percent of Obesity (BMI ≥ 30) in U.S. Adults
1991
Percent of Obesity (BMI ≥ 30) in U.S. Adults

1995

1997
WASHINGTON - Approximately 40% of the U.S. population could have some form of cardiovascular disease by the year 2030, based on data from a prediction model created by the American Heart Association.
Total Direct Costs of CVD

2010: $273 Billion
2030: $818 Billion!!

Heidenreich et al, Circulation; 2011

The Demise of Mr. Homo sapiens

Why?

• Unhealthy Behavior
• Avoidance of Healthcare
“Going to the doctor is for sissies!”

I’m Fine!

Visits to Physicians Offices

Number of Visits per 100 Persons

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-44</td>
<td>200</td>
</tr>
<tr>
<td>45-54</td>
<td>400</td>
</tr>
<tr>
<td>55-64</td>
<td>600</td>
</tr>
<tr>
<td>65-74</td>
<td>800</td>
</tr>
<tr>
<td>75+</td>
<td>1000</td>
</tr>
</tbody>
</table>

National Center for Health Statistics, 2011
Unhealthy Behavior + Avoidance of Healthcare

Premature Death & Disability

10 Survival Tips for Mr. Homo sapiens

1) Exercise for at least 30 minutes only on the days you eat
2) Eat right and avoid portion distortion—the lean man wins
3) On the road, off the phone
4) If you drink, set a limit of 1-2 “real” servings/day
5) Avoid tobacco like the plague—it causes ED!
6) Get out of your cave and build friendships
7) Get 7-8 hours of sleep per night—real men sleep!
8) Get scoped, and go to the doc regularly for a check up
9) Avoid motorcycles and risk taking behavior
10) Take at least 15 minutes a day to enjoy your life!
A Woman’s Touch

"Marriage, at least for males, has a huge benefit on health, and that being married is associated with men being more health proactive and practicing good health habits, such as seeing the doctor regularly for check-ups."

Markey, New Jersey Family Health Survey, 2005