Preventive Medicine

Individual preventive strategies and clinical preventive services

Li, Jiang

INDIVIDUAL PREVENTIVE STRATEGIES

Definition of Health

- A State of complete physical, mental, and social well-being, and not merely the absence of disease and infirmity.

WHO 1948

Criticism on the definition

1. It is totally unrealistic and idealistic (how often is anyone truly feel in a state of ‘complete…well-being’?)
2. It implies a static position, whereas life and living are anything but static.
3. It appears to assume that someone, somewhere, has the ability and right to define a state of health, whereas we have seen that people define health in many ways.

Six dimensions of Health/Wellness

- The Six Dimensions of wellness include physical, emotional, spiritual, environmental, mental, and social wellness.

- Physical Health
  - Mechanical functioning of the body
- Mental Health
  - The ability to think clearly and coherently
- Emotional Health
  - The ability to recognize emotions such as fear, joy, grief and anger and to express such emotions appropriately, to cope with stress, tension, depression and anxiety.

- Social Health
  - The ability to make and maintain relationships with other people.

- Spiritual Health
  - Religious beliefs or personal creeds, principles of behavior and ways of achieving peace of mind and being at peace with oneself

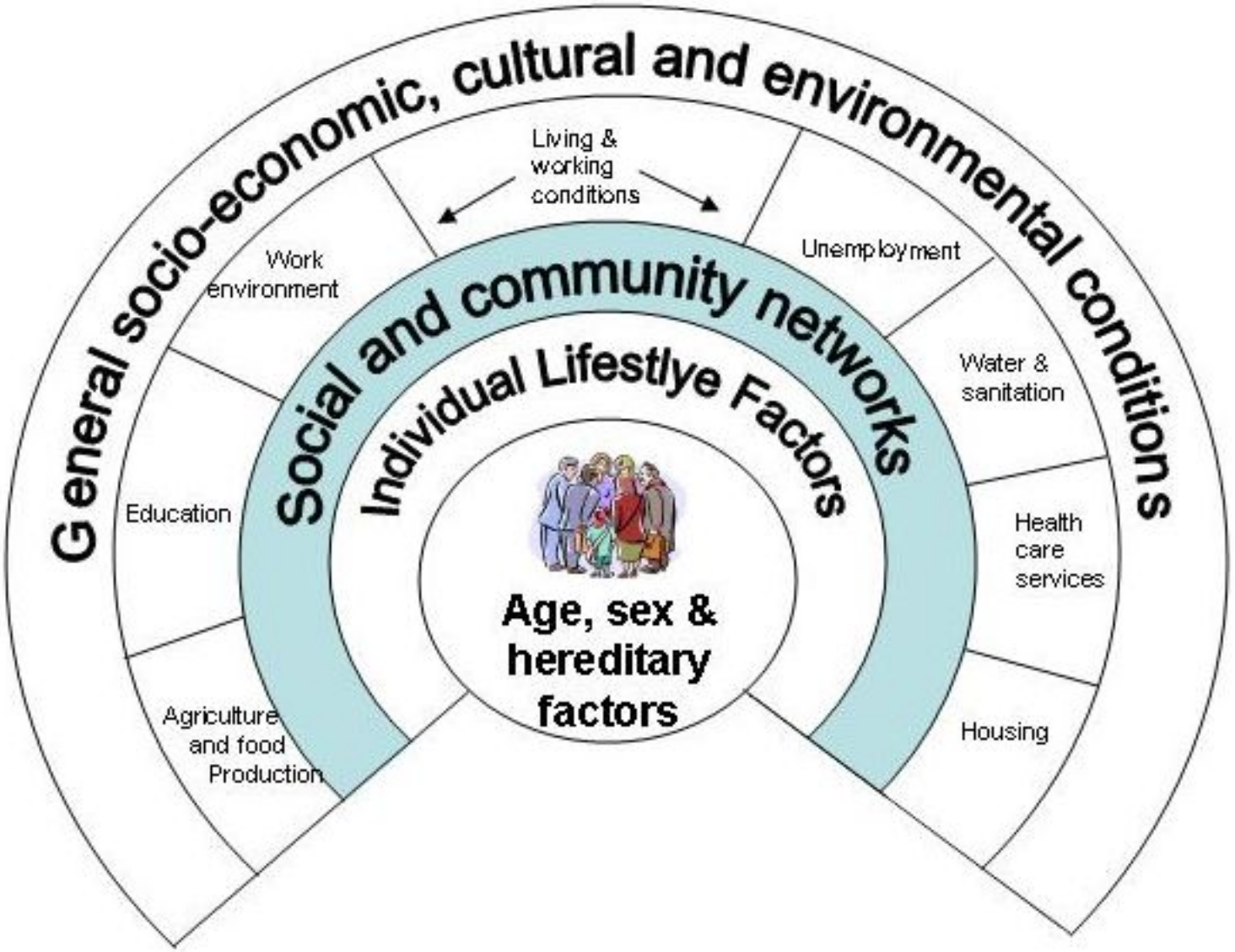
- Environment Health
  - A person's health is related to everything surrounding that person. It is impossible to be healthy in a 'sick' environment that does not provide the resources for basic physical and emotional needs.

Holistic view of Health

- Health is, therefore, seen as a resource for everyday life, but not the objective of living; it is a positive concept emphasizing social and personal resources, as well as physical capacities.

Determinants of Health

- Luck (incl. genetic inheritance)
- Choices (personal behavior)
- Health care
- Physical environment
- Social determinants



A Social Model of Health (Dahlgren & Whitehead, 1991)

Case Study 1:

The experience of Eastern Europe

- Countries such as Poland, Hungary, Bulgaria, and Russia experienced steady improvements in life expectancy after World War II.
- These increases ceased and life expectancies began to decline as the economies of these countries have faltered.
- In Russia life expectancy has fallen from 65 years in 1987 to 59 years in 1993.

Case Study 2：

Economic growth and prosperity

- Japan best illustrates the relationship between narrow income spreads and improved overall health status. Between 1965 and 1990 it leaped ahead of all other industrialized countries despite increased dietary fat and increased smoking rates.
- Life expectancy was 63.6 years for males and 67.8 years for females in 1955.
- By 1991 it had increased to 76.1 for males and 82.1 years for females.

What is ‘Social Determinant of Health’?

Example:

The gender difference in Insomnia

Four“Lenses”of Analysis

1. Biomedical Lens-
   - Physiological differences between man and women. E.g. hot flashes in premenopausal women; influenced of female sex hormones on GABAergic neurons

1. Biomedical Lens-
2. Psychological Lens-
   - Psychological differences between man and women in reporting symptoms.

1. Biomedical Lens-
2. Psychological Lens-
3. Epidemiological Lens-
   - Gender differences in the distribution of “risk factors”, e.g. depression, exercise, tea/ alcohol intake.

1. Biomedical Lens-
2. Psychological Lens-
3. Epidemiological Lens-
4. Society and Health Lens-
   - Gender differences in the division of work, e.g. time use differences based on ‘double shift’ among women.

What Explains Social-economic Inequalities in Health?

Personal Responsibility

Structural Constraints

Examples of explanation emphasizing personal responsibility- The standard economic model of smoking

"Fully informed, forward-looking, rational consumers make the decision to smoke after weighing the benefits of smoking(enjoyment) against the costs."

Targets of Intervention

Personal responsibility	Structural constraints
•Increase intrinsic motivation to quit •Build self-efficacy •Modifying beliefs about benefits and costs of behavior. •Enhance skills needed to quit	

The Social Context of smoking among Low Income populations

Characteristics of Social Environment	The smoking response
•High stress •Few economic resources •Social norms support smoking •Causes illness/death in short term	Relieve stress Inexpensive Provides social connection Causes death in long run

Social Inequalities in Smoking-policy Response

Causes of smoking in Low-income Groups	The smoking response
•Inexpensive	•Make nicotine replacement therapy more affordable
•Social norms support smoking	•De-normalize smoking-e.g. indoor smoking restrictions
•Environment causes illness/death in short run	•Improve expectations of long-term health

Traditional Ten Tips For Better Health

1. Don't smoke. If you can, stop. If you can't, cut down.
2. Follow a balanced diet with plenty of fruit and vegetables.
3. Keep physically active.
4. Manage stress by, for example, talking things through and making time to relax.
5. If you drink alcohol, do so in moderation.
6. Cover up in the sun, and protect children from sunburn.
7. Practise safer sex.
8. Take up cancer screening opportunities.
9. Be safe on the roads: follow the Highway Code.
10. Learn the First Aid ABC : airways, breathing, circulation.

Source: Donaldson, 1999

An Alternative Ten Tips for Better Health

1. Don't be poor. If you can, stop. If you can't, try not to be poor for long.
2. Don't have poor parents.
3. Own a car.
4. Don't work in a stressful, low paid manual job.
5. Don't live in damp, low quality housing.
6. Be able to afford to go on a foreign holiday and sunbathe.
7. Practice not losing your job and don't become unemployed.
8. Take up all benefits you are entitled to, if you are unemployed, retired or sick or disabled.
9. Don't live next to a busy major road or near a polluting factory.
10. Learn how to fill in the complex housing benefit/ asylum application forms before you become homeless and destitute.

Source: Gordon, 1998

Different Questions

Traditional Epidemiology	Social Epidemiology
•Why did this individual get sick? •What can I do to avoid disease?	•Why is this population healthy? •What can society do to improve health?

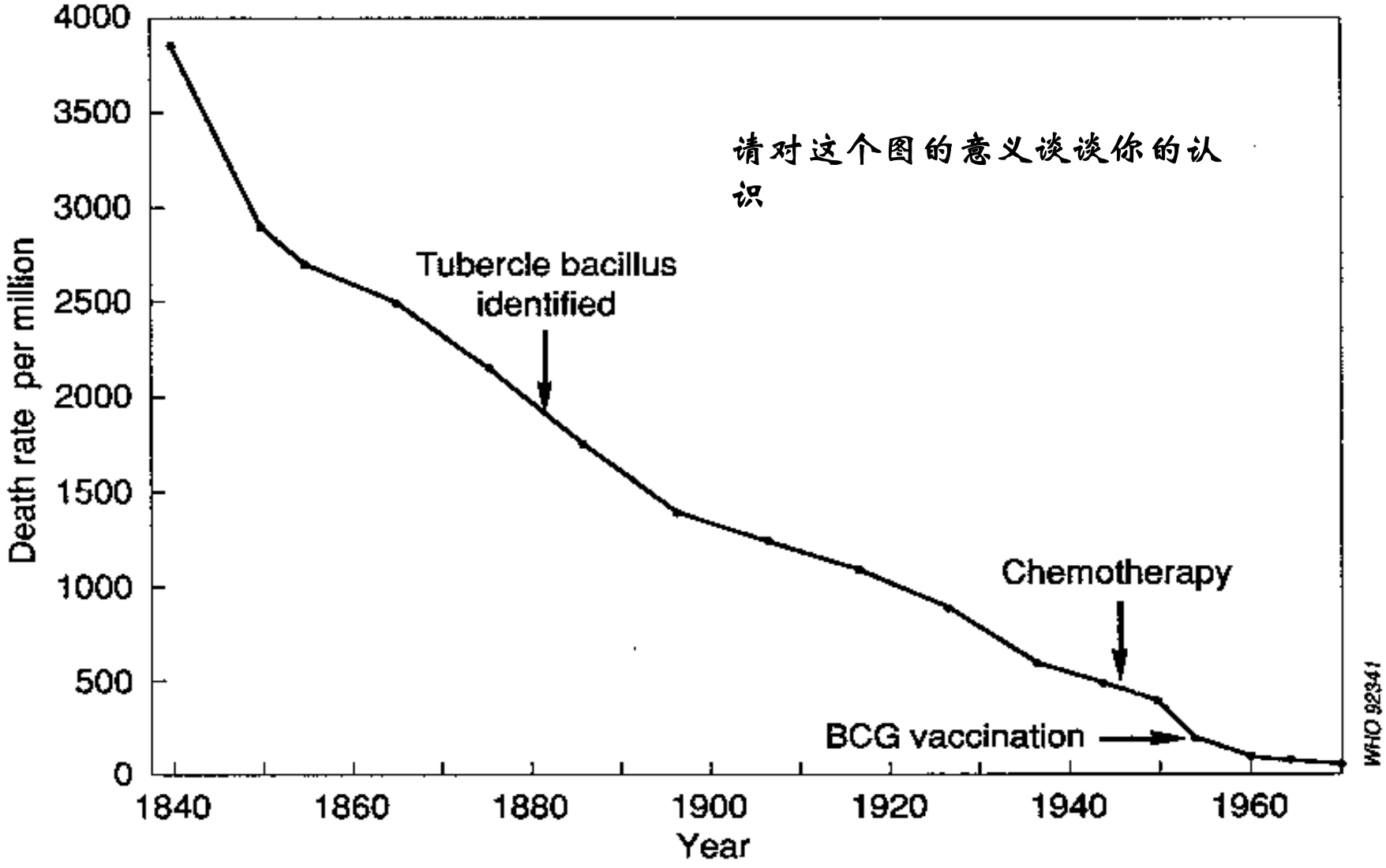
The contribution of medicine to population health, and the strategies of prevention

Determinants of Health

- Luck (incl. genetic inheritance)
- Choices
- **Health care**
- Physical environment
- Social determinants

What is the contribution of health care to population health,
and to health inequalities?

Fig. 6.1. Age-standardized death rates from tuberculosis in England and Wales, 1840–1968



请对这个图的意义谈谈你的认识

Source: McKeown, 1976. Reproduced by kind permission of the publisher.

Measles: death rate of children under 15: England and Wales

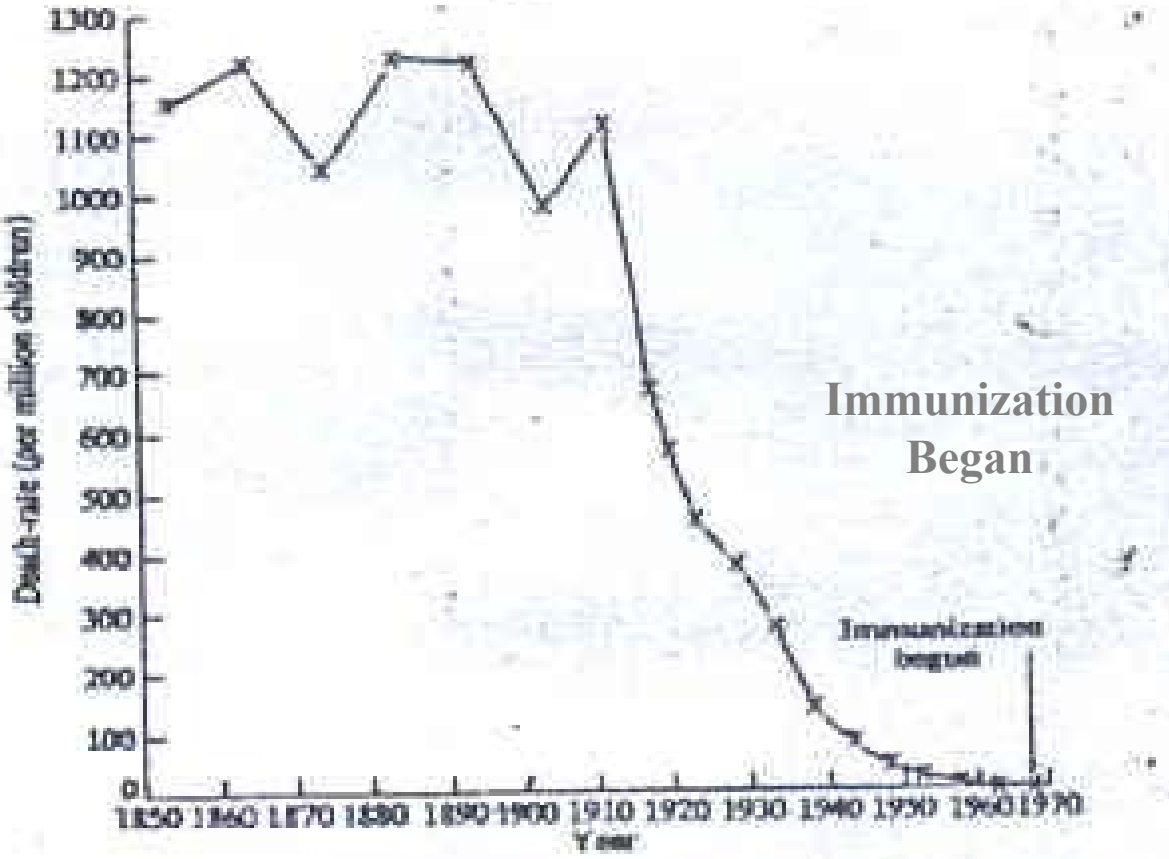
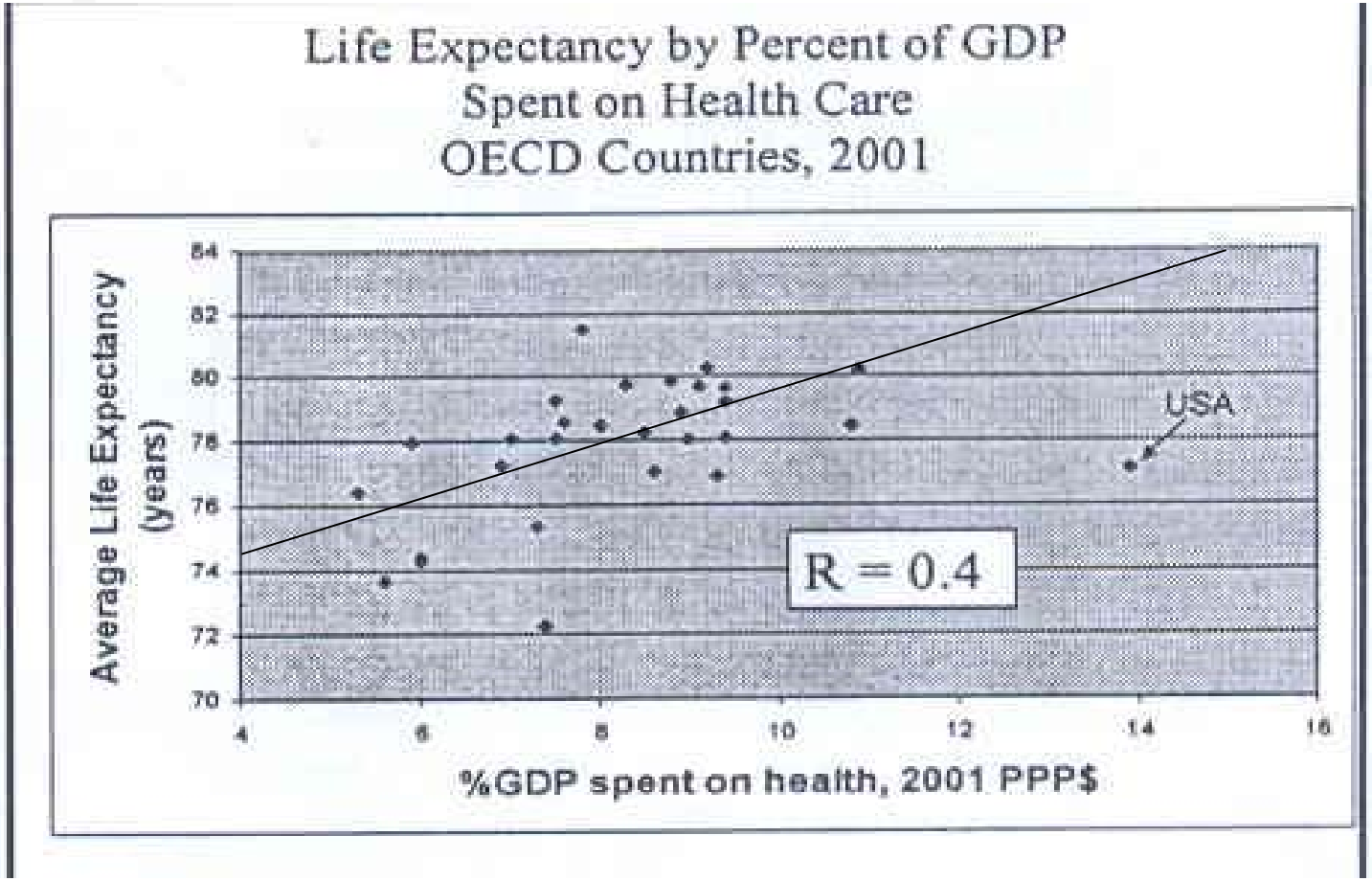


FIGURE 8.14. Measles: death rates of children under 15: England and Wales.

1. Haldane, J. B. S., *Science and Life* (London: Pemberton, 1968), p. 63.


Life Expectancy by Percent of GDP
Spent on Health Care
OECD Countries, 2001
Average Life Expectancy (years)
84
82
80
78
76
74
72
70
4
6
8
10
12
14
16
USA
R = 0.4
%GDP spent on health, 2001 PPP$

The Contribution of Primary Care Systems to Health Outcomes within OECD countries, 1970-1998

- Strength of a country's health care system was inversely associated with

- (a) all-cause mortality,

- (b) morality from asthma, pneumonia, cardiovascular disease($p < 0.05$), even after control for per capita GDP, total physicians per capita, percent elderly.

The Prevention Paradox and the strategies of Prevention

Relationship between DBP and Stroke

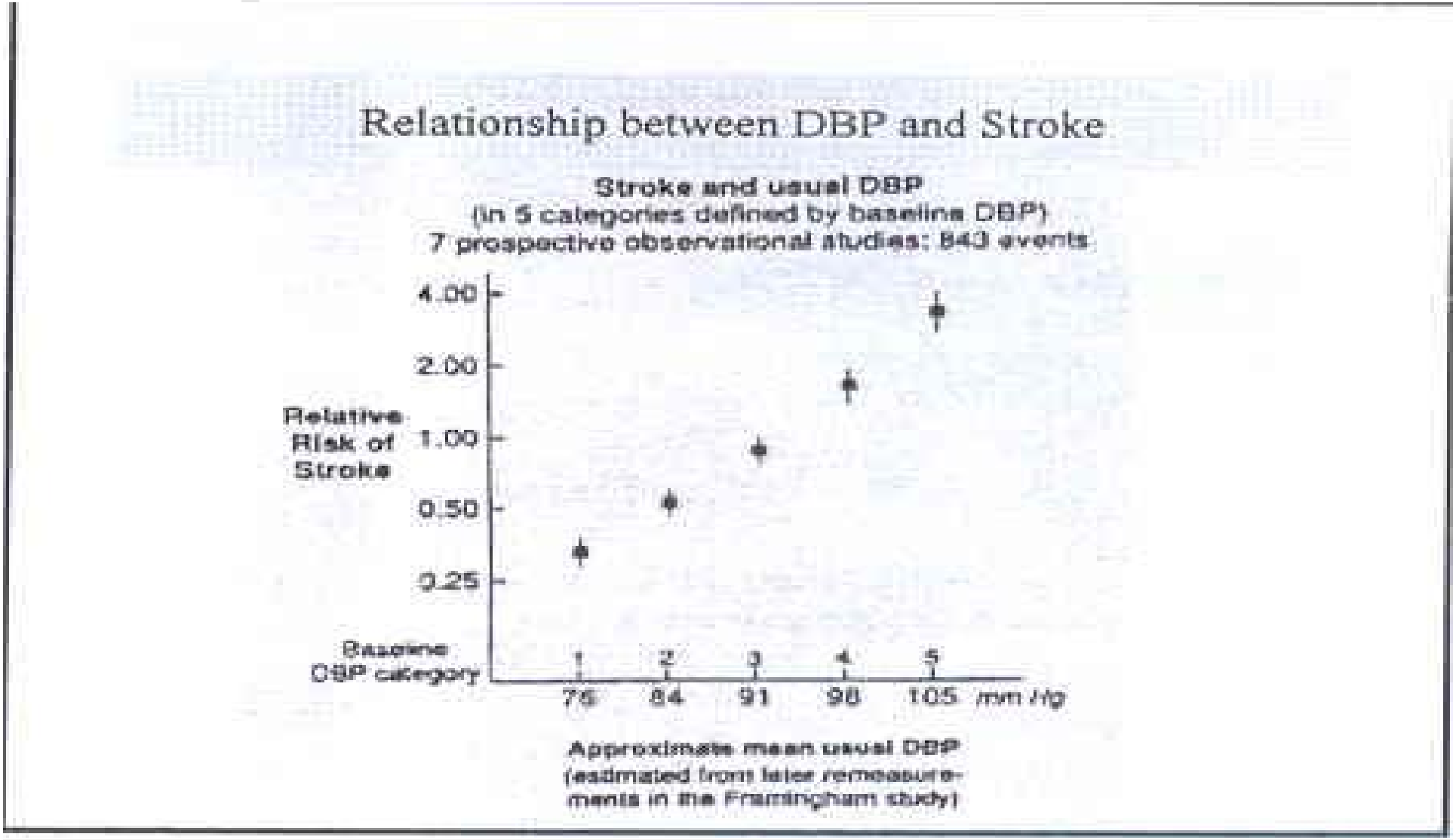
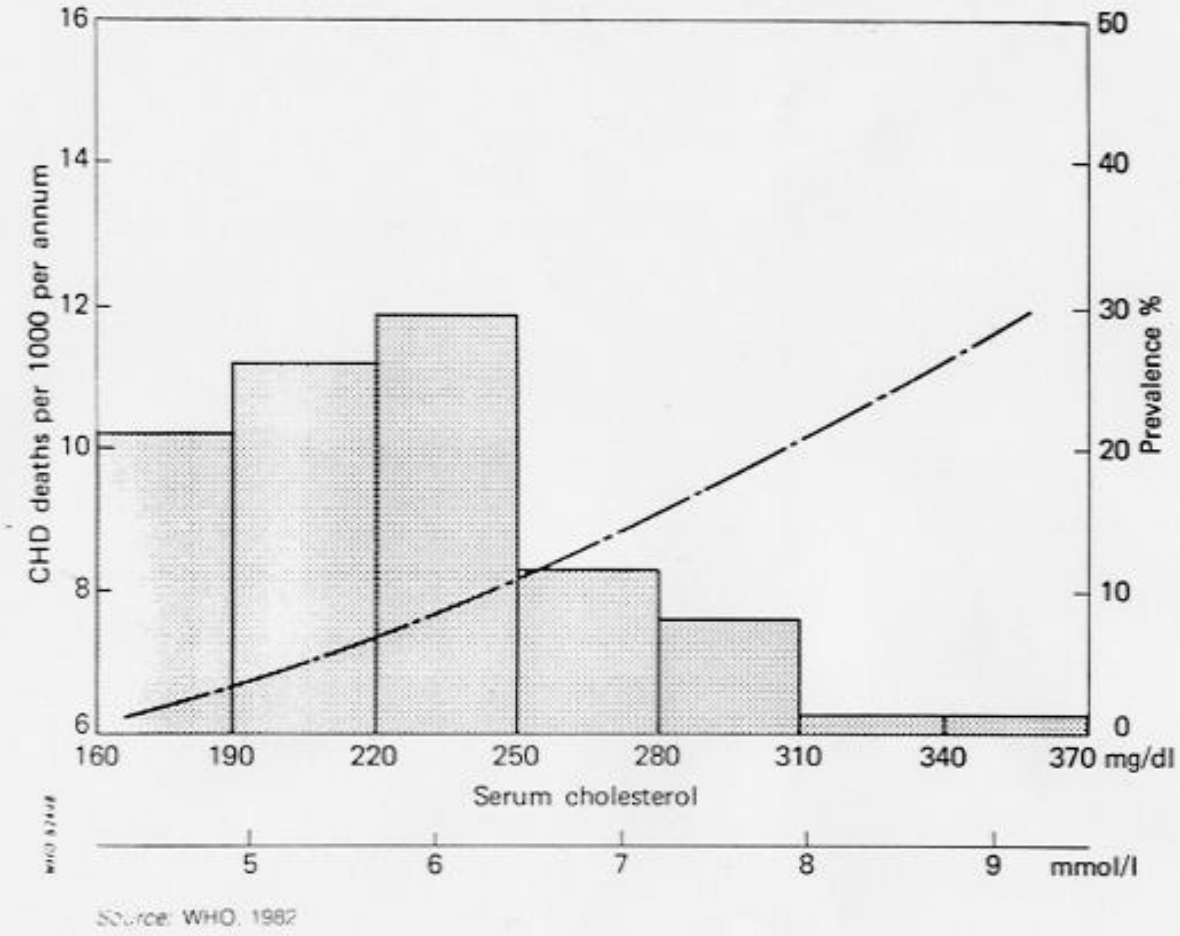
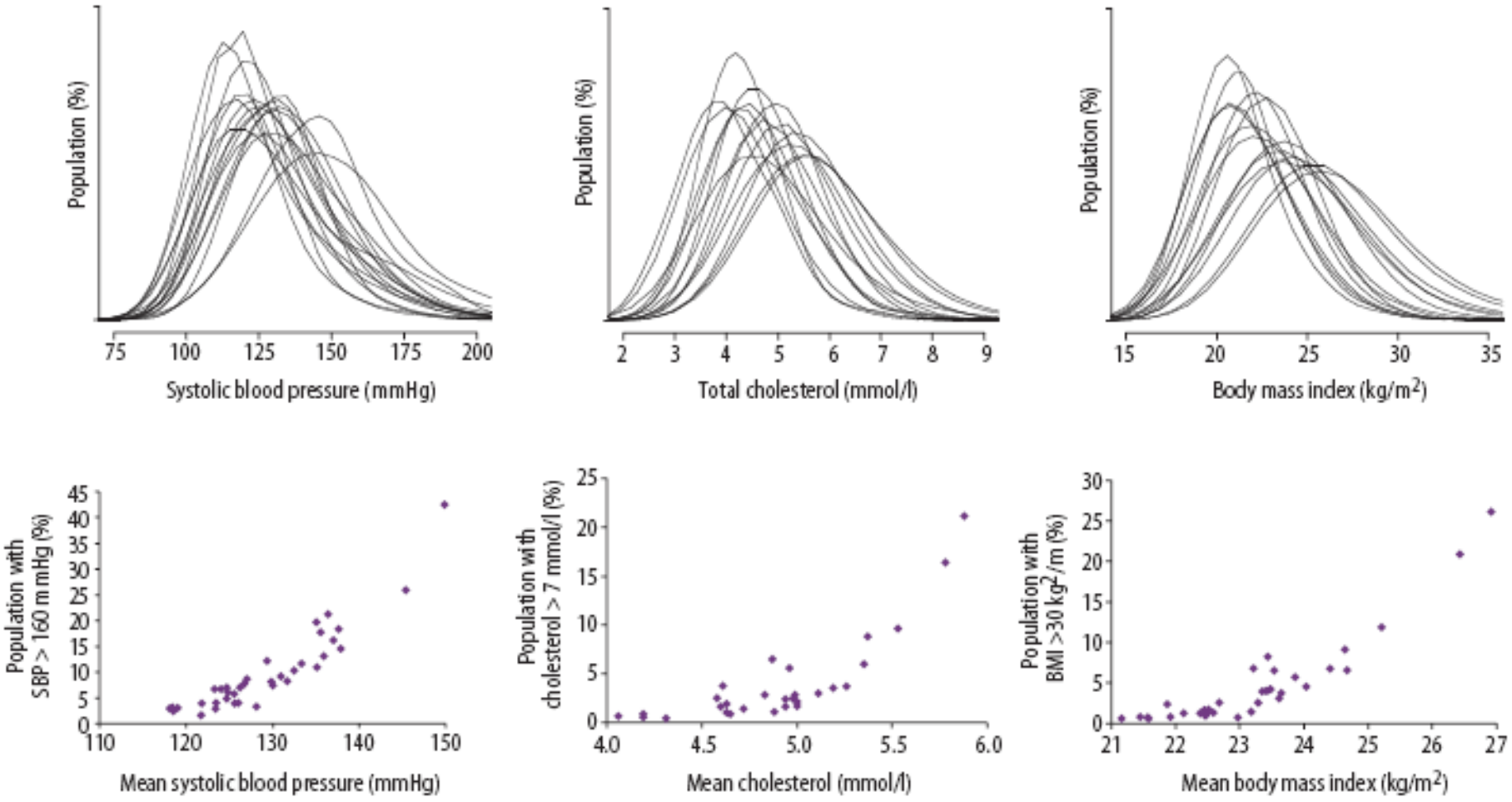


Fig. 6.5. Relationship between serum cholesterol (histogram) and mortality from coronary heart disease (interrupted line) in men aged 55–64 years



Source: WHO, 1982

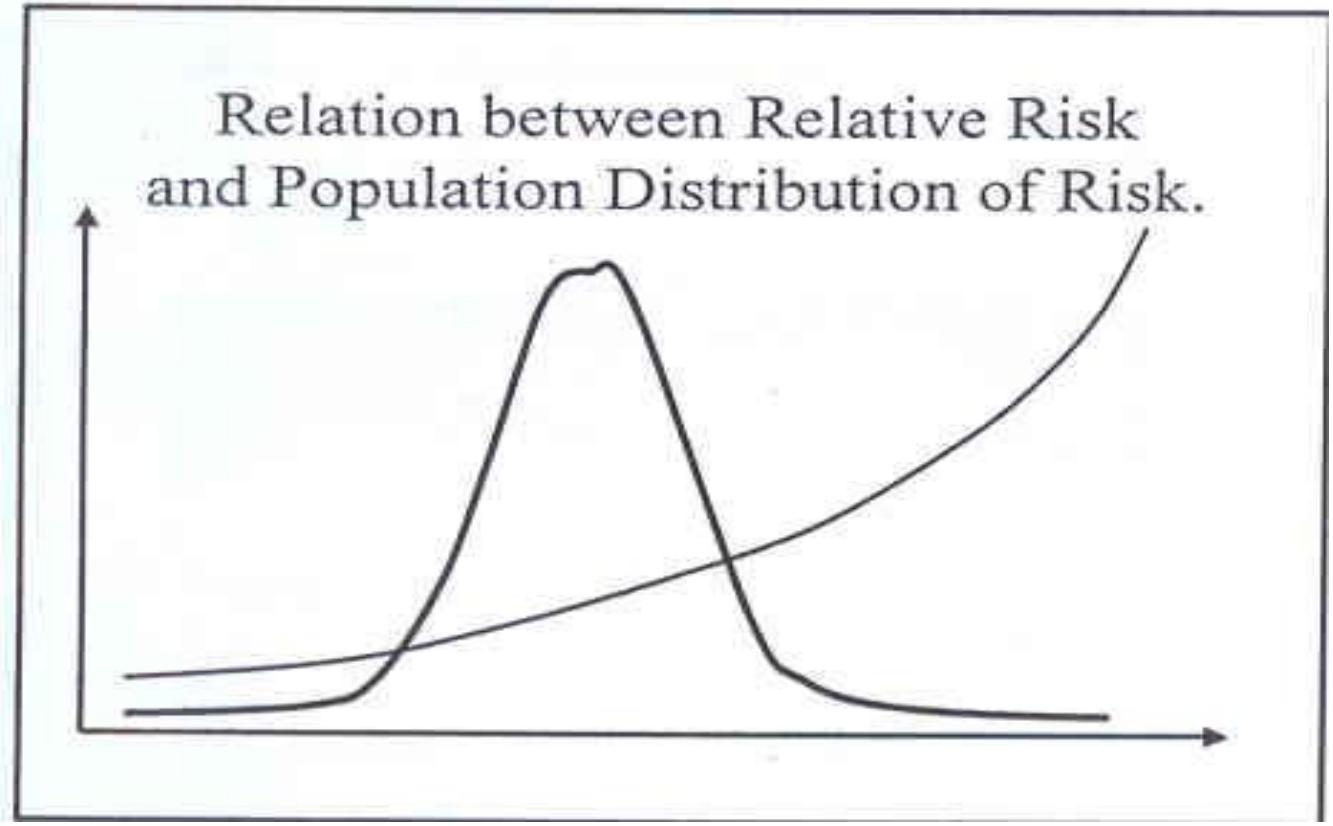


Source: Asia Pacific Cohort Studies Collaboration.

Note: The distributions of blood pressure, cholesterol and body mass index are plotted for 14 different populations in the top panel, showing that all are bell-shaped. As a consequence, lower mean population levels are associated with dramatically reduced proportions of the population that are hypertensive, hypercholesterolaemic or obese. Rose G. *The strategy of preventive medicine*. Oxford: Oxford University Press; 1992.

Relation

Between Relative Risk and Population distribution of Risk



High risk strategy

The high-risk strategy is derived from a one-on-one consultation or screening.

Its **advantages** are:

1. it is appropriate to the individual
2. it avoids interference with those who are not at special risk
3. It is readily accommodated with the ethos and organizations of medical care.
4. It offers a cost-effective use of resources
5. It selectively improves the benefit-to-risk ratio

Disadvantages of the high- risk approach

Note some of the problems:

1. the difficulties and costs of screening
2. doesn't attack causes – so it is palliative, not radical
3. predictive power is poor
4. is often behaviorally inappropriate*
5. is difficult to sustain, control, finance and evaluate.

Rose's Message

Geoffrey Rose
(1926 – 1993)

"A large number of people at small risk may give rise to more cases of disease than the small number who are at high risk"

-form the book "Rose's Strategy of preventive medicine"

From high-risk strategy to population strategy

- High-risk strategy resues vulnerable individuals
- To identify minority and control in isolation
- It is inadequate response to a common disease or widespread cause.
- The population strategy deal with common diseases and exposures reflected the characteristics of society as a whole.

Strengths of the population strategy

1. Deal with roots of diseases, interventions on the underlying causes
2. A cumulative benefit for the whole population.
3. It is more appropriate to seek a general change in behavioral norms and in the circumstances which facilitate their adoption.

Limitations of population strategy

1. A difficulty on acceptability
2. Lack of immediately visible consequence
3. Lower cost-effectiveness and adverse effects easy to be exaggerated.

Trade-offs

- High risk strategy
  - ✓Big individual benefit
  - ✓Modest population benefit
- Population strategy
  - ✓Small individual benefit
  - ✓Big population benefit

CLINICAL PREVENTIVE SERVICES

Case discussion

- A 40-year-old woman goes to your clinic for a cold. She looks healthy and you can just provide some usual medicine . However, in your talk, you find that she is a smoker, sexually active and often drunk in the past years.

- What will you do for her?

Five star physician :5 characters of the perfect physician

1. health care provider
2. health decision maker
3. health knowledge communicator
4. health communicator in the community
5. health resource manager

Clinical Preventive Services:

Treating and Preventing Disease, Promoting Health, and Reducing Healthcare Costs

Clinical preventive service is the combination of the primary prevention and secondary prevention.

Prevention Helps Individuals Avoid Disease

Primary prevention is aimed at preventing the disease (Before the onset).

One way of doing this is by controlling risk factors in healthy people that may lead to disease.

- Examples of primary prevention include
- immunizations to prevent communicable diseases such as influenza or polio
- the promotion of physical activity to prevent conditions such as obesity that can lead to disease (e.g., type 2 diabetes).

Prevention Modifies Risk

- **Secondary prevention is aimed at treating a disease after its onset, but before it** causes serious complications.

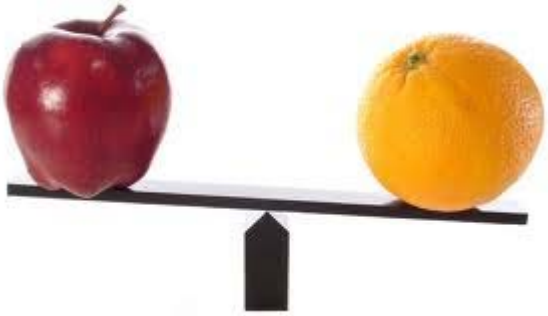
  Secondary prevention includes

  – identifying individuals with existed disease (Screening);

  – treating those individuals on time so as to prevent further problems (e.g., mammography screening to detect and treat breast cancer in its earliest stages).

Comparison of different preventive service

- Clinical preventive service
- Community-based preventive services
- Worksite-based preventive services



Clinical preventive services

- **include those services that are typically** performed in a clinical setting and are conducted by a health professional such as a physician, nurse practitioner, physician assistant, or health educator.

Although most clinical preventive services should be conducted during individual face-to-face office visits, some services may be conducted in groups, via the telephone, or by email communication.

Community-based preventive services

- **Community-based preventive services (also known as population-based preventive services)** include any kind of planned activity or group of activities (including programs, policies, and laws) designed to prevent disease or injury or promote health in a group of people (e.g., fluoridation of drinking water, bans on tobacco use in public places).

Worksite-based preventive services

- **Worksite-based preventive services are health promotion programs provided to employees** and their dependents.
- Examples include:

Employer-sponsored worksite fitness centers or healthy cafeteria programs that encourage healthy lifestyles.

Employer-sponsored health risk appraisals (HRAs) that identify employees at risk for certain conditions and diseases (e.g., type 2 diabetes, heart disease, or hypertension)

Case study I

A 52-year-old woman went to the Department of Gastroenterology. She complained of progressive pain in left lower abdomen, with weight loss and fatigue for three months. In the past few days she found blood in the fecal matter.

Examination showed that she was suffering obstructive adenocarcinoma.

History showed that the patient was diagnosed as ulcerative colitis when she was 24 years old, but did not receive further treatment. Over the last decades she only saw obstetricians, but no physicians advised her to conduct regular colonoscopy.

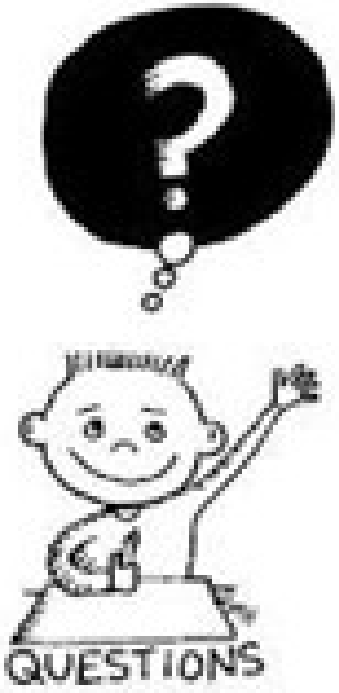
Case Study II

A 29-year-old actor was sent to the emergency room after a car accident. He did not wear seat belts when driving in high-speed and was seriously injured by a fatal head injury. His alcohol concentration reached 0.24%.

According to his medicine records of the past years, he was suffering from chronic gastritis. In addition, he often drunk since high school and was used to driving without fastening the seatbelt.

Questions

- What are the common points in these cases?
- What can we do in the future as physicians?



- In many cases, the illness even death experienced by patients can be effectively prevented.

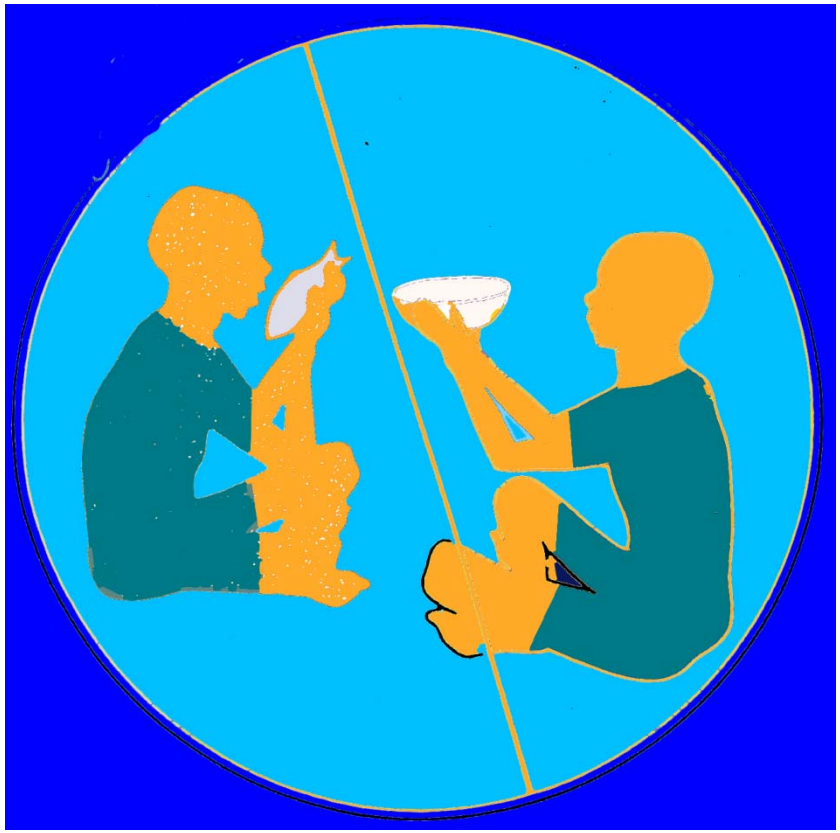
- In months, years or decades ago prior to event of illness (such as coronary heart disease and colon cancer), trauma (such as a car accident), some risk factors can be found. However, most of them were not given enough attention.

- If the patient can be detected early and the risk factors can be intervened appropriately, many patients can avoid long-term effects caused by risk factors which eventually led to invasive treatment (such as chemotherapy, surgery, blood dialysis, etc.) and the development of chronic diseases (pain, paralysis, mental illness, disability, death, etc.).
- In fact by simple interventions (such as smoking cessation counseling, immunization, screening) we can prevent many chronic diseases and premature death.

As physicians, when we deal with the current discomfort of the patients we should also focus on his / her future health problems.

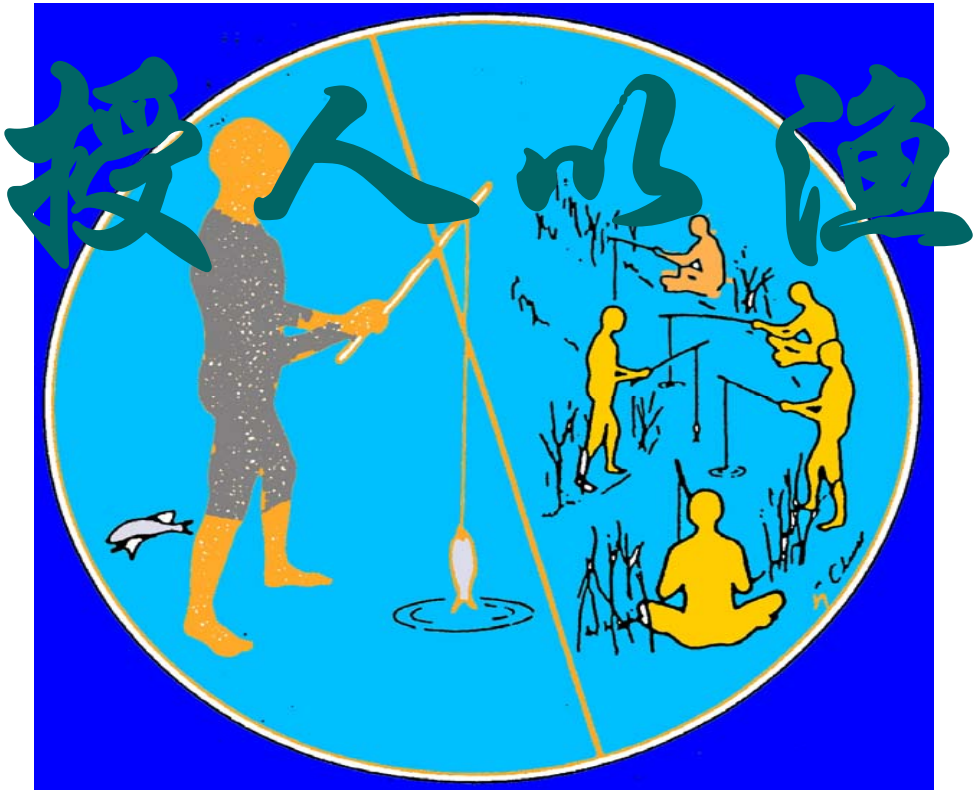
Give a man a fish?

Give a man a fish and you feed him for a day



Tomorrow… …he may be still a beggar

Teach a man to fish and you feed him for life



Tomorrow…if well taught… …he will be teaching others

We have such strength

- Physicians and patients have a lot of opportunities in communicating health.
- It is easy for physicians to communicate with patients, and easy to follow their behavior change.
- Patients always have high compliance to follow physician's advice.

Types of preventive interventions

- Counseling
- Screening
- Immunization
- chemoprophylaxis

Counseling

- ***Counseling refers to a discussion between a clinician and patient about ways that*** changes in personal behavior can reduce risk of illness or injury.
- The goal of counseling is for clinicians to educate patients about their health risks as well as to provide them with the skills, motivation, and knowledge they need to address their risk behaviors

5 As behavioral counselling

- **Assess:** Ask about/assess behavioral health risk(s) and factors affecting choice of behavior change goals/methods.
- **Advise:** Give clear, specific, and personalized behavior change advice, including information about personal health harms/benefits.
- **Agree:** Collaboratively select appropriate treatment goals and methods based on the patient's interest in and willingness to change the behavior.
- **Assist:** Using behavior change techniques (self-help and/or counseling), aid the patient in achieving agreed-upon goals by acquiring the skills, confidence, and social/environmental supports for behavior change, supplemented with adjunctive medical treatments when appropriate (e.g., pharmacotherapy for tobacco dependence, contraceptive drugs/devices).
- **Arrange:** Schedule follow up contacts (in person or by telephone) to provide ongoing assistance/support and to adjust the treatment plan as needed, including referral to more intensive or specialized treatment.

The guide to clinical preventive services

Links to Download

USPSTF

- U.S. Preventive Services Task Force – was established in 1984

- It is an independent panel of non-federal experts who use an evidence-based approach to evaluation of the effectiveness of clinical preventive services as shown in the medical literature

USPSTF: Strength of Recommendations

Grade	Definition
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.
C	The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

USPSTF: Suggestion of practice

Grade	Suggestions for Practice
A	Offer or provide this service.
B	Offer or provide this service.
C	Offer or provide this service for selected patients depending on individual circumstances.
D	Discourage the use of this service.
I Statement	Read the clinical considerations section of USPSTF Recommendation Statement. If the service is offered, patients should understand the uncertainty about the balance of benefits and harms.

Tobacco Use

- The U.S. Preventive Services Task Force (USPSTF) recommends that clinicians ask all adults about tobacco use and provide tobacco cessation interventions for those who use tobacco products. *Grade: A Recommendation.*

- The USPSTF recommends that clinicians ask all pregnant women about tobacco use and provide augmented, pregnancy-tailored counseling for those who smoke. *Grade: A Recommendation.*

Alcohol Misuse

- The U.S. Preventive Services Task Force (USPSTF) recommends screening and behavioral counseling interventions to reduce alcohol misuse by adults, including pregnant women, in primary care settings.

- *Grade: B Recommendation.*

- The USPSTF concludes that the evidence is insufficient to recommend for or against screening and behavioral counseling interventions to prevent or reduce alcohol misuse by adolescents in primary care settings.

Grade: I Statement.

- Light to moderate alcohol consumption in middle aged or older adults has been associated with some health benefits, such as reduced risk for coronary heart disease.

  Moderate drinking has been defined as 2 standard drinks (e.g., 12 ounces of beer) or less per day for men and 1 drink or less per day for women and persons older than 65, but recent data suggest comparable benefits from as little as 1 drink 3 to 4 times a week.

Counseling to promote physical activity

- **Insufficient evidence to recommend for or against behavioral counseling in primary care settings to promote physical activity: "I"**
- (Regular physical activity helps prevent CAD, HTN, DM, obesity, osteoporosis. Benefits increase with level of activity. Multi-component interventions are most promising. But variable quality and mixed results of trials to date measuring effect of PC counseling)

Healthy Diet counseling

- **Routine counseling to promote a healthy diet in unselected patients in PC settings - "I" rec.**
  - fair evidence that brief behavioral dietary counseling in PC can → small/medium changes; but: ? quality of studies, ? study participants representative of PC, and possible harms

- **counseling for adult patients for diet-related chronic disease (chol) - "B" rec.**

IMMUNIZATION

Recommended Adult Immunization Schedule—United States - 2014

Note: These recommendations must be read with the footnotes that follow containing number of doses, intervals between doses, and other important information.

Figure 1. Recommended adult immunization schedule, by vaccine and age group[1]

VACCINE ▼ / AGE GROUP ▶	19-21 years	22-26 years	27-49 years	50-59 years	60-64 years	≥ 65 years
Influenza [2,*]	1 dose annually					
Tetanus, diphtheria, pertussis (Td/Tdap) [3,*]	Substitute 1-time dose of Tdap for Td booster; then boost with Td every 10 yrs					
Varicella [4,*]	2 doses					
Human papillomavirus (HPV) Female [5,*]	3 doses					
Human papillomavirus (HPV) Male [5,*]	3 doses					
Zoster [6]					1 dose	
Measles, mumps, rubella (MMR) [7,*]	1 or 2 doses					
Pneumococcal 13-valent conjugate (PCV13) [8,*]	1 dose					
Pneumococcal polysaccharide (PPSV23) [9,10]	1 or 2 doses					1 dose
Meningococcal [11,*]	1 or more doses					
Hepatitis A [12,*]	2 doses					
Hepatitis B [13,*]	3 doses					
Haemophilus influenzae type b (Hib) [14,*]	1 or 3 doses					

*Covered by the Vaccine Injury Compensation Program

For all persons in this category who meet the age requirements and who lack documentation of vaccination or have no evidence of previous infection; zoster vaccine recommended regardless of prior episode of zoster

Recommended if some other risk factor is present (e.g., on the basis of medical, occupational, lifestyle, or other indication)

No recommendation

Report all clinically significant postvaccination reactions to the Vaccine Adverse Event Reporting System (VAERS). Reporting forms and instructions on filing a VAERS report are available at www.vaers.hhs.gov or by telephone, 800-822-7967.

Information on how to file a Vaccine Injury Compensation Program claim is available at www.hrsa.gov/vaccinecompensation or by telephone, 800-338-2382. To file a claim for vaccine injury, contact the U.S. Court of Federal Claims, 717 Madison Place, N.W., Washington, D.C. 20005; telephone, 202-357-6400.

Additional information about the vaccines in this schedule, extent of available data, and contraindications for vaccination is also available at www.cdc.gov/vaccines or from the CDC-INFO Contact Center at 800-CDC-INFO (800-232-4636) in English and Spanish, 8:00 a.m. - 8:00 p.m. Eastern Time, Monday - Friday, excluding holidays.

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

The recommendations in this schedule were approved by the Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices (ACIP), the American Academy of Family Physicians (AAFP), the American College of Physicians (ACP), American College of Obstetricians and Gynecologists (ACOG) and American College of Nurse-Midwives (ACNM).

Chemoprophylaxis

- Chemoprophylaxis refers to the administration of a medication for the purpose of preventing disease or infection.

- Antibiotics, for example, may be administered to patients with disorders of immune system function to prevent bacterial infections (particularly opportunistic infection). Antibiotics may also be administered to healthy individuals to limit the spread of an epidemic, or to patients who have repeated infections (such as urinary tract infections) to prevent recurrence.

- The use of chemoprophylaxis is limited primarily by two factors: risk and financial costs.

- All medications have the potential to cause side effects. In general, chemoprophylaxis should be initiated only when the benefits of treatment outweigh the risks.

Aspirin for the Prevention of Cardiovascular Disease

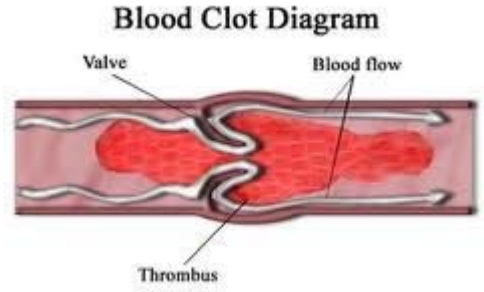
- The U.S. Preventive Services Task Force (USPSTF) recommends the use of aspirin for men age 45 to 79 years when the potential benefit due to a reduction in myocardial infarctions outweighs the potential harm due to an increase in gastrointestinal hemorrhage. *Grade: A*

- The USPSTF recommends the use of aspirin for women age 55 to 79 years when the potential benefit of a reduction in ischemic strokes outweighs the potential harm due to an increase in gastrointestinal hemorrhage. *Grade: A*

- The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of aspirin for cardiovascular disease prevention in men and women 80 years or older. *Grade: I Statement.*
- The USPSTF recommends against the use of aspirin for stroke prevention in women younger than 55 years and for myocardial infarction prevention in men younger than 45 years. *Grade: D Recommendation.*

- Aspirin interferes with your blood's clotting action.

- The net benefit of aspirin depends on the initial risk for coronary heart disease events and gastrointestinal bleeding. Thus, decisions about aspirin therapy should consider the overall risks for coronary heart disease and gastrointestinal bleeding.



- Risk assessment for coronary heart disease should include ascertainment of risk factors: age, diabetes, total cholesterol levels, high-density lipoprotein cholesterol levels, blood pressure, and smoking.

What's the best dose of aspirin to take?

- Very low doses of aspirin — 75 milligrams (mg), which is less than a standard baby aspirin — can be effective.

Should you avoid daily aspirin therapy if you have another health condition?

You shouldn't take a daily aspirin if you have some health conditions that could increase your risk of bleeding or other complications. These conditions include:

- A bleeding or clotting disorder (bleeding easily)
- Asthma
- Stomach ulcers
- Heart failure
- For people who have diabetes, the American Diabetes Association recommend a low-dose aspirin only for men older than 50 and women older than 60 who have at least one additional risk factor for heart disease, such as smoking, family history of heart disease, high cholesterol or high blood pressure.

Preventive Services Recommended by the USPSTF

The U.S. Preventive Services Task Force (USPSTF) recommends that clinicians discuss these preventive services with eligible patients and offer them as a priority. All these services have received an "A" or a "B" (recommended) grade from the Task Force.

For definitions of all grades used by the USPSTF, see Appendix A (beginning on p. 228). The full listings of all USPSTF recommendations for adults and children are in Section 2 (beginning on p. 11) and Section 3 (beginning on P. 193).

Recommendation	Adults		Special Populations	
	Men	Women	Pregnant Women	Children
Abdominal Aortic Aneurysm, Screening[1]	✓			
Alcohol Misuse Screening and Behavioral Counseling Interventions	✓	✓	✓	
Aspirin for the Prevention of Cardiovascular Disease[2]	✓	✓		
Asymptomatic Bacteriuria in Adults, Screening[3]			✓	
Breast Cancer, Screening[4]		✓		

continued

Preventive Services Recommended by the USPSTF *(continued)*

Recommendation	Adults		Special Populations	
	Men	Women	Pregnant Women	Children
Breast and Ovarian Cancer Susceptibility, Genetic Risk Assessment and BRCA Mutation Testing[5]		✓		
Breastfeeding, Primary Care Interventions to Promote[6]		✓	✓	
Cervical Cancer, Screening[7]		✓		
Chlamydial Infection, Screening[8]		✓	✓	
Colorectal Cancer, Screening[9]	✓	✓		
Congenital Hypothyroidism, Screening[10]				✓
Depression (Adults), Screening[11]	✓	✓		

continued

Recommendation	Adults		Special Populations	
	Men	Women	Pregnant Women	Children
Folic Acid Supplementation[12]		✓		
Gonorrhea, Screening[13]		✓		
Gonorrhea, Prophylactic Medication[14]				✓
Hearing Loss in Newborns, Screening[15]				✓
Hepatitis B Virus Infection, Screening[16]			✓	
High Blood Pressure, Screening	✓	✓		
HIV, Screening[17]	✓	✓	✓	✓
Iron Deficiency Anemia, Prevention[18]				✓
Iron Deficiency Anemia, Screening[19]			✓	
Lipid Disorders in Adults, Screening[20]	✓	✓		

continued

Preventive Services Recommended by the USPSTF *(continued)*				
Recommendation	Adults		Special Populations	
	Men	Women	Pregnant Women	Children
Major Depressive Disorder in Children and Adolescents, Screening[21]				✓
Obesity in Adults, Screening[22]	✓	✓		
Obesity in Children and Adolescents, Screening[23]				✓
Osteoporosis, Screening[24]		✓		
Phenylketonuria, Screening[25]				✓
Rh (D) Incompatibility, Screening[26]			✓	
Sexually Transmitted Infections, Counseling[27]	✓	✓		✓
Sickle Cell Disease, Screening[28]				✓

continued

Preventive Services Recommended by the USPSTF *(continued)*

Recommendation	Adults		Special Populations	
	Men	Women	Pregnant Women	Children
Syphilis Infection, Screening[29]	✓	✓	✓	
Tobacco Use and Tobacco-Caused Disease, Counseling and Interventions[30]	✓	✓	✓	
Type 2 Diabetes Mellitus in Adults, Screening[31]	✓	✓		
Visual Impairment in Children Younger than Age 5 Years, Screening[32]				✓


Thank You