

Zakład Medycyny Rodzinnej
Uniwersytetu Medycznego
w Łodzi

Family Medicine for English language students of Medical University of Lodz

Seminar 3

Prevention in Family Medicine



Our timetable for today

1.1 Definition of prevention

1.2 Definition of health promotion

1.3 The aims of prevention and health promotion in the primary care and Family Medicine.

2.1 Leading causes of death

2.2 Preventable diseases

2.3 Effectiveness and cost-effectiveness of prevention and health promotion

3.1 Main aims of the prevention and health promotion in developed countries

3.2 Main aims of the prevention and health promotion in developing countries

3.3 Prevention and health promotion within special patient groups

4.1 Design a GP's activity in prevention and health promotion in your country – students' project

4.2 ---“---

4.3 Concluding remarks

Levels of prevention:

- **Primary:** Prevention of disease occurrence (true prevention)
- **Secondary:** Screening for asymptomatic diseases (early detection)
- **Tertiary:** Treatment of symptomatic diseases to minimise complications (morbidity reduction)

Criteria of screening justification:

- 1. The prevalence of the disease and the burden of suffering caused by disease must be high enough to justify widespread screening**
- 2. The condition must have an asymptomatic period during which the treatment will significantly reduce morbidity and mortality**
- 3. Acceptable methods of treatment must be available at a reasonable cost**
- 4. The screening test and interventions must be effective, with few adverse effects**
- 5. The screening test must have a high sensitivity**

Leading causes of death in the USA

| FORMAL NAME | INFORMAL NAME | % ALL DEATHS |
|---------------------------------------|-------------------------------|--------------|
| (1) Diseases of the heart | heart attack (mainly) | 28.5% |
| (2) Malignant neoplasms | cancer | 22.8% |
| (3) Cerebrovascular disease | stroke | 6.7% |
| (4) Chronic lower respiratory disease | emphysema, chronic bronchitis | 5.1% |
| (5) Unintentional injuries | accidents | 4.4% |
| (6) Diabetes mellitus | diabetes | 3.0% |
| (7) Influenza and pneumonia | flu & pneumonia | 2.7% |
| (8) Alzheimer's Disease | Alzheimer's senility | 2.4% |
| (9) Nephritis and Nephrosis | kidney disease | 1.7% |
| (10) Septicemia | systemic infection | 1.4% |
| (11) Intentional self-harm | suicide | 1.3% |
| (12) Chronic Liver/Cirrhosis | liver disease | 1.1% |
| (13) Essential Hypertension | high blood pressure | 0.8% |
| (14) Assault | homicide | 0.7% |
| (15) All other causes | other | 17.4% |

[Source: National Vital Statistics Report, Volume 53, Number 5 (October 2004)]

5 Leading causes of death in the USA

within age group 15-24

| CAUSE | PERCENT OF TOP 5 | NUMBERS |
|-------------------|------------------|---------|
| (1) Accidents | 51.8% | 12,752 |
| (2) Homicide | 21.3% | 5,233 |
| (3) Suicide | 16.3% | 4,003 |
| (4) Cancer | 6.8% | 1,670 |
| (5) Heart Disease | 3.9% | 961 |

Leading causes of death in the USA including preventable diseases

Table 8.1.

Leading Actual and Reported Causes of Death in the United States, 1990

| Leading Actual Causes | Deaths | Leading Reported Causes | Deaths |
|--|---------|-------------------------|---------|
| Tobacco | 400,000 | Coronary heart disease | 720,000 |
| Diet (obesity, cholesterol, etc.) and inactivity | 300,000 | Cancer | 505,000 |
| Alcohol | 100,000 | Strokes | 144,000 |
| Infections/immunizations | 90,000 | Accidents | 92,000 |
| Toxins | 60,000 | COPD | 87,000 |
| Firearms and motor vehicles | 60,000 | Pneumonia/influenza | 80,000 |
| Sexual behavior | 30,000 | Diabetes | 48,000 |
| Illicit drug use | 20,000 | Suicide | 31,000 |

Preventive Services recommended in the USA

Table of Recommended Preventive Services

| Recommendation | Adults | | Special Populations | |
|--|--------|-------|---------------------|----------|
| | Men | Women | Pregnant Women | Children |
| Alcohol Misuse Screening and Behavioral Counseling Interventions | ✓ | ✓ | ✓ | |
| Aspirin for the Primary Prevention of Cardiovascular Events ¹ | ✓ | ✓ | | |
| Bacteriuria, Screening for Asymptomatic | | | ✓ | |
| Breast Cancer, Chemoprevention ² | | ✓ | | |
| Breast Cancer, Screening ³ | | ✓ | | |
| Breastfeeding, Behavioral Interventions to Promote ⁴ | | ✓ | ✓ | |
| Cervical Cancer, Screening ⁵ | | ✓ | | |
| Chlamydial Infection, Screening ^{6,7} | | ✓ | ✓ | |
| Colorectal Cancer, Screening ⁸ | ✓ | ✓ | | |

Preventive Services recommended in the USA (cont.)

| Recommendation | Adults | | Special Populations | |
|--|--------|-------|---------------------|----------|
| | Men | Women | Pregnant Women | Children |
| Dental Caries in Preschool Children, Prevention ⁷ | | | | ✓ |
| Depression, Screening ¹⁰ | ✓ | ✓ | | |
| Diabetes Mellitus in Adults, Screening for Type 2 ¹¹ | ✓ | ✓ | | |
| Diet, Behavioral Counseling in Primary Care to Promote a Healthy ¹² | ✓ | ✓ | | |
| Hepatitis B Virus Infection, Screening ¹³ | | | ✓ | |
| High Blood Pressure, Screening | ✓ | ✓ | | |
| Lipid Disorders, Screening ^{14,15} | ✓ | ✓ | | |
| Obesity in Adults, Screening ¹⁶ | ✓ | ✓ | | |
| Osteoporosis in Postmenopausal Women, Screening ¹⁷ | | ✓ | | |

Preventive Services recommended in the USA (cont.)

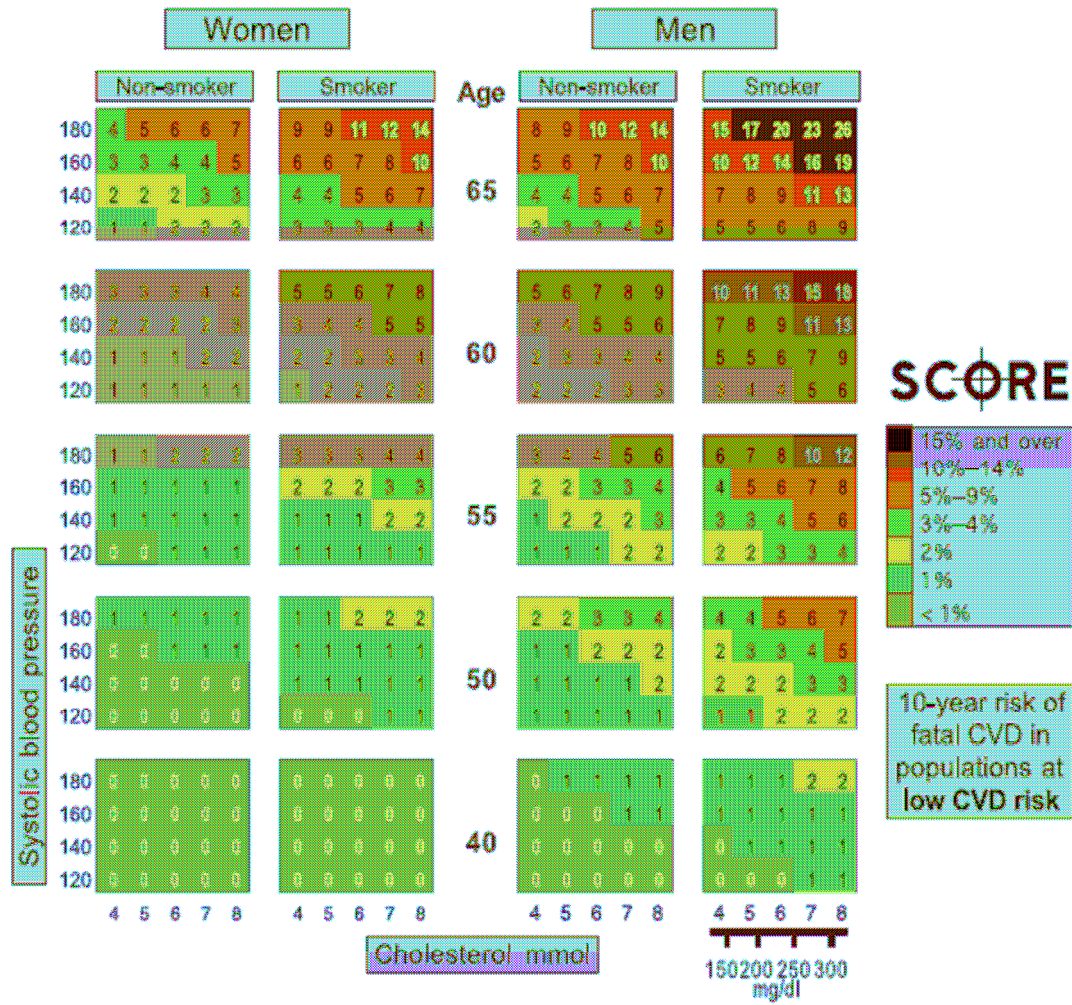
| Table of Recommended Preventive Services (continued) | | | | |
|---|--------|-------|---------------------|----------|
| Recommendation | Adults | | Special Populations | |
| | Men | Women | Pregnant Women | Children |
| Rh (D) Incompatibility, Screening ^{18,19} | | | ✓ | |
| Syphilis Infection, Screening ²⁰ | ✓ | ✓ | ✓ | |
| Tobacco Use and Tobacco-Caused Disease, Counseling to Prevent ^{21,22} | ✓ | ✓ | ✓ | |
| Visual Impairment in Children Younger than Age 5 Years, Screening ²³ | | | | ✓ |



Cardiovascular prevention



CV Risk.Ink



Ten-year risk of fatal cardiovascular disease in populations at low cardiovascular disease risk (according to the SCORE study).

Patient education and counselling



- Use your position wisely
- Focus on your patients
- Agree on priorities
- Define available goals
- Give written instructions
- Show that it is important
- Recognise effort and accomplishment
- Individualise your advice
- Take advantage of outside resources
- Encourage social support
- Arrange appropriate follow-up
- Be realistic