Community

75. Prevention of risk factors themselves considered as?

Select one:

a. Primary prevention

b. Secondary prevention

c. Tertiary prevention

d. Primordial prevention

e. Rehabilitation

- All the followings are Non-modifiable CVD risk factors EXCEPT?
- Select one:

a. Diabetes mellitus .

b. Heredity or family history

c. Age

d. Ethnicity or race

e. Gender

- Which one of the followings is INCORRECT regarding CVD death rates?
- Select one:

a. increase in CVD morbidity and mortality in the age group of 30-44 years ✓

b. CVD is often thought to be a disease of middle-aged men ✓

c. Increased CVD deaths in whites compared to African American populations

d. Cardiovascular mortality (fatal cases) are more common among men ✓

e. Oral contraceptives and HRT considered as a gender-specific risk factors ✓

1. Descriptive epidemiology:

= Describing distribution of CVD by means of certain characteristics such as : PERSON (i.e., age, gender, ethnicity) TIME and PLACE

2. Analytic epidemiology

= Analyzing relationships between CVD and risk factors (which elevate the probability of a disease at population level), risk model and multicausal developments

3. Experimental epidemiology/Interventions

= Strategies of cardiovascular prevention (primordial*, primary, secondary, tertiary; individual and community levels)

*Primordial prevention is defined as prevention of risk factors themselves: health education to children.

Levels of prevention	Phase of disease	Target
Primordial	Underlying conditions leading to causation	Total population and selected groups
Primary	Specific causal factors	Total population, selected groups and healthy individuals

Levels of prevention	Phase of disease	Target
Secondary	Early stage of disease	Patients
Tertiary	Late stage of disease (treatment, rehabilitation)	Patients

Question: What is the relative amount of CVD in death rates in different age groups?

Early lesions of blood vessel, atherosclerotic plaques: around 20 years - adult lifestyle patterns usually start in childhood and youth (smoking, dietary habits, sporting behavior, etc.)

Increase in CVD morbidity and mortality: in age-group of 30-44 years

Premature death (<64 years of age, or 25-64 years)

Question: What is the relative amount of CVD in death rates in women and men?

Widespread idea: CVD is often thought to be a disease of Middle-aged Men.

Cardiovascular mortality (fatal cases) are more common among men.

Gender-specific risk factors (risks for women only) (oral contraceptives, hormone replacement therapy (HRT), polycystic ovary syndrome)

Question: What is the relative amount of CVD in death rates in different ethnic groups?

In the US: increased CVD deaths in African-American and South-Asian populations in comparison with Whites

Migration: Ni-Hon-San Study: Japanese living in Japan had the lowest rates of CHD and cholesterol levels, those living in Hawaii had intermediate rates for both, those living in San Francisco had the highest rates for both

Major modifiable risk factors

1. High blood pressure
2. Abnormal blood lipids
3. Tobacco use
4. Physical inactivity
5. Obesity
6. Unhealthy diet
7. Diabetes mellitus

Other modifiable risk factors

1. Low socioeconomic status
2. Mental ill health (depression)
3. Psychosocial stress
4. Heavy alcohol use
5. Use of certain medication
6. Lipoprotein(a)

Non-modifiable risk factors

1. Age
2. Heredity or family history
3. Gender
4. Ethnicity or race

"Novel" risk factors

1. Excess homocysteine* in blood
2. Inflammatory markers (C-reactive protein)
3. Abnormal blood coagulation (elevated blood levels of fibrinogen)

*a plasma homocysteine level less than 10 micromoles/L is associated with a lower risk of CVD.

Risk factors

-**Systolic blood pressure** **>140 Hgmm and/or a diastolic blood pressure > 90 Hgmm**

-**Positive family history**

-**Dietary habits** **(a high intake of salt, processed food, low levels of water hardness, high tyramine content of food, alcohol use)**

-**Modern lifestyle** **(increased sympathetic activity, psychosocial stress, leading position in job)**

Prevention

Primordial: Social, legal and other (often nonmedical) activities which may lead to a lowering of risk factors (e.g., socioeconomic development, smoke-free restaurants)

Primary: Controlling risk factors contributing to CVD (health education programs, anti-smoking campaign, sports programs, nutrition counselling, regular check of blood pressure and certain blood parameters, e.g., cholesterol, blood lipids, glucose)

Secondary: Screening and treatment of symptomatic patients, set up personal risk profile

Tertiary: Cardiovascular rehabilitation, prevention of recurrence of CVD (new heart attack: 5-7 times higher risk among CVD patients)

b. Rheumatoid arthritis

c. Family history of CAD

d. Oral contraceptive

community

1. Primary prevention of early stage of disease is called FN

a. Secondary prevention

2. Novel risk factor for CVD FN

a. Excess homocysteine levels

3. What is incorrect about epidemiology of CVD? FN

a. Japanese people living in Japan have higher risk of CHD than Japanese people living in San Francisco

4. Which of the following is incorrect about Smoking and CVD risk? FN

a. Nicotine replaces oxygen

5. When do carbon monoxide levels return to normal after smoking cessation? FN

a. After half a day of smoking cessation

6. All of the following are unhealthy eating habits for CVD, except **FN**

a. Diet low in refined carbohydrates

7. Which one of the followings considered as a Novel risk factors for CVD?

Select one: **FW**

a. Physical inactivity

b. inflammatory markers (C-reactive protein)

c. Cigarette smoking

d. Obesity

e. Hypertension

Answers

7	b		

physio

1. **about Purkinje fibers all true except ?** **MN**
   stain darker with H&E than other cardiac cells

2. **the total peripheral resistance Increase in ?** **MN**
   hyperproteinemia

3. **the total peripheral resistance Decrease in?** **MN**
   muscular exercise