Chronic disease risk factors in Ethiopia

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Wolliso

Chronic diseases

- Great diversity
- Common risk factors
  - Preventing risk factors
    - preventing wide range of diseases
    - Tobacco control prevents
      - Cancer,
      - CVD,
      - COPD
Disease burden

- There are more people dying from chronic diseases than from other conditions,
  - Except in sub-Saharan Africa

- CVD, worldwide
  - 30% of all deaths worldwide,
  - 10% of DALY (years of healthy life lost due to disease),

- CVD, low/ lower-middle-income countries
  - 27% of all deaths in
  - 9% of DALY

- Tuberculosis, HIV/AIDS, Malaria
  - 10% of deaths and 11% of DALY worldwide
  - 12% of deaths and 13% of DALY in low-income countries

- Recent estimate by WHO
  - In 2005, one quarter of all people worldwide who died from chronic disease were younger than 60 years of age
World
Deaths in 2000 attributable to selected leading risk factors

High Mortality Developing Countries
Deaths in 2000 attributable to selected leading risk factors
Coronary heart disease (CHD)
- Leading cause of premature death and disability in developed countries,
- Projected to become leading cause of death among developing nations by 2020,
- Most important modifiable risk factors of CHD
  - High blood cholesterol,
  - High blood pressure,
  - Cigarette smoking

Occurrence of high cholesterol and high blood pressure in a population determined by
- Diet,
- Physical inactivity,
- Body weight
- And their interplay
Lifestyle transition

- Emerging epidemic of NCDs
  - rapid changes in diets,
  - declining physical activity,
  - increase of tobacco use

- Determinants;
  - urbanisation,
  - changes in occupations,
  - global influences

High and rising prevalence of common NCD and risk factors in urban areas;

- Diabetes prevalence in adults
  - 5% in urban Tanzania
  - 8% in South Africa

- Hypertension (SBP/DBP:160/95)
  - 20% in urban Tanzania
  - 33% in South Africa
Myths and misconceptions

- disease of the wealthy,
- diseases of affluence
- natural ageing, degenerative processes,
- lifestyle diseases, individual choice/responsibility

Reality

- CVDs declining in developed nations;
  - success of primary prevention, treatment,

- 79% of all NCD deaths occur in developing countries,
- Twice as many CVD deaths in developing countries as in developed countries,

- Early age of CVD deaths in developing countries,
- NCDs are predictable and preventable
Significance of risk factors

- On average, cigarette smoking increases the risk of CHD death by 70% compared with not smoking.
- Every 5-mmHg change in usual diastolic blood pressure corresponds to a 21% change in CHD risk.
- Long-term change of 23 mg/dL in serum cholesterol concentration among men aged 55-64 years corresponds to a CHD risk change of at least 25%.

Three risk factors account for 75-85% of new cases of CVD
- Tobacco use
- Reduced levels of physical activity
- Nutrition transition;
  - increase fat,
  - salt and sugar,
  - depleted fruit and vegetables
Major established risk factors explain approximately 75% of the occurrence of CHD within populations,

Only five risk factors account for 89.2% of the risk of an initial MI,

Nine risk factors provide a PAR of 97.4% in Africa (INTERHEART)

Prevalence of risk factors

Butajira 2003
Addis Ababa 2006
Hypertension among adults in Addis and Butajira.
(SBP/DBP > 140/90 or antihypertensive treatment)

BMI distribution among males and females in Addis Ababa.
Body mass index distribution among adults in Addis and Butajira.

Cigarettes smoking among adults in Addis Ababa and Butajira.
Alcohol consumption among adults in Addis and Butajira

Khat chewing among adults in Butajira. December 2003

Consumption of fruits and vegetables among adults in Addis and Butajira.
Physical activity level among adults in Addis and Butajira

Physical activity domains in Addis and Butajira
Conclusions

- Growing burden of chronic disease risk factors, mainly in urban settings,

- Surveillance information needed to bring the NCD problem to attention of stakeholders, policy makers,

- Prevention and control efforts to be initiated in a coordinated, life-cycle approach,

- Risk factors of today predict diseases of tomorrow!

- Chronic diseases and risk factors are here and now!