Health Promotion for NCD Prevention

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Prerequisites for Health

- peace,
- shelter,
- education,
- food,
- income,
- a stable eco-system,
- sustainable resources,
- social justice, and equity.

Improvement in health requires a secure foundation in these basic prerequisites.
Health Promotion

- Definition—“the process of enabling people to increase control over and to improve their health’
- Introduced into public health in Ottawa in 1986.
- Five critical areas of health promotion
  1. Healthy public policy
  2. creating supportive environments
  3. strengthening community action
  4. developing personal skills
  5. Reorienting health services
Behavioral intention

Factors affecting

* Awareness
* Money
* Appropriate & accessible health services
* Time
* Material
* Transport
* Decision making

Behavior change
THE MEDICAL MODEL

SCREEN

DIAGNOSE

Focus is on Disease.

TREAT (FIX)
THE HP MODEL

ENABLING

PREVENT

Focus is on Health

SUSTAIN

PROMOTE

ENVIRONMENT
**Causes of causes**

**Distal determinants**
- Tobacco availability and promotion
- Promotion of alcohol and easy availability
- Advertisement and availability of unhealthy foods
- Lack of facilities for physical activity
- It is cheaper to live unhealthy

**Proximal determinants**
1. Alcohol abuse
2. Tobacco use
3. Overweight/Obesity
4. Hypertension

**Health outcomes**
1. DM
2. CVD
3. Cancer
4. Chronic Lung disease
5. Road traffic accidents
6. Depression

Interventions in non health sectors can lead to impacts on health
Strong?
Making the next generation unwell!
MPOWER: 6 policies to reverse the tobacco epidemic

- **MONITOR** tobacco use and prevention policies
- **PROTECT** people from tobacco smoke
- **OFFER** help to quit tobacco use
- **WARN** about the dangers of tobacco
- **ENFORCE** bans on tobacco advertising, promotion & sponsorship
- **RAISE** taxes on tobacco
KISS A NON SMOKER AND FEEL THE DIFFERENCE!
Alcohol provokes the desire, but takes away the performance!!
Responding to alcohol problems

- Measures for the population-most effective
- Education in school is not enough
- Public information and persuasion-mostly symbolic
- Treatment-worthy and humane-but unlikely to reduce problems of alcohol
- Measures that restrict and channel sales-effective
- Most effective
  - Taxation, licensing of outlets, limits in number of outlets, times and conditions of beverage sales, minimum age limits, drink driving counter measures
- Government monopolies of retail and wholesale market-effective
- Limits on advertising and promotion, warning labels
- Governments possess the powers and policy levers to reduce and prevent alcohol problems
Change of bottles in life
Decade of the bulge
Eating habits

- Established early in life
- Diet
  - Composition
  - Periodicity
  - Amount of energy derived
- ‘Eat least’ category foods are promoted maximum
- Advertising
- Marketing
- Culture
- Fashion
- Convenience
Junk food generation

Average amount of typical snacks, fast food and treats eaten by children between the ages of four and ten in just one year.
WHO Recommendations

1. The policy aim should be to reduce the impact on children of marketing of foods high in saturated fats, trans-fatty acids, free sugars or salt.
   - Effectiveness depends on two elements
     - Reach, frequency and impact (exposure)
     - Content design and execution (power)

2. Overall policy objective should be to reduce both the exposure of children to, and power of, marketing of foods high in ....
   - Depending on national circumstances and resources
     - Comprehensive approach-restricting all marketing to children
       - Highest impact
     - Stepwise approach-either exposure or power
Controls on advertisement

- EU television without frontiers directive
  - TV adverts shall not cause moral or physical detriments to minors
- Ireland - bans cartoon characters and celebrities to promote foods
- France – mandatory health messages should accompany adverts on TV and radio
- Sweden – total ban for adverts aimed at children less than 12 yrs
Taxation as a means to change behaviour

The tobacco experience

- education is not enough: regulation, litigation, and legislation are needed too.
- Increasing taxes on cigarettes has been the single most effective strategy in reducing smoking.

The best chance for success is to impose a penny per ounce Sugar Sweetened Beverages SSB tax, resulting in a rise of a dollar or two in the price of a six pack of sodas or a 2 litre bottle.

- Most people favour such taxes.
- In New York state, projections found that a penny per ounce tax on SSBs could prevent 145 000 cases of adult obesity and 37 000 cases of diabetes in a decade. It could save $2bn in healthcare costs.

Source: The case of the sugar sweetened beverage tax: Douglas Kamerow, BMJ 2010;341:c3719
Physical inactivity 4th leading risk factor in global mortality

60% of global deaths due to NCDs

Source: WHO's report on “Global health risks”
Impact of overweight and obesity at the population level

- Burden attributable to over-weight and obesity globally:
  - 44% of diabetes burden,
  - 23% of ischaemic heart disease burden and
  - 7–41% of certain cancer burdens.

- 43 million children are estimated to be overweight (2010)

Source: WHO, 2009
Global recommendations on physical activity for health

Why?

- Evidence based starting point to promote physical activity + advocacy
- Limited existence of national guidelines in low and middle income countries; different guidelines

Physical inactivity is an independent risk factor for:

1. Cardio-respiratory health (coronary heart disease, cardiovascular disease, stroke and hypertension)
2. Metabolic Health (diabetes and obesity)
3. Musculo-skeletal health (bone health, osteoporosis)
4. Cancer (breast and colon cancer)
5. Functional Health and prevention of falls
6. Anxiety, depression, cognitive functions
### Intensity of activity

- **Moderate**
- **Vigorous**

### Domains of activity

- **Recreation and sports**
- **Transportation**
- **Household**
- **Work/school**

### Type of activity

- **Aerobic**
- **Strength**
- **Balance**
- **Flexibility**
Global recommendations on physical activity for health

- Target audience: national policy makers

- What are these?
  
  Population based physical activity for 3 age groups (5-17 yrs; 18-64 yrs and 65 yrs and older):
  
  • what type (aerobic, strength, flexibility, balance)?
  • how often?
  • for how long?
  • how intense (how hard a person works to do the activity)?
  • how much in total?
Children and youth - aged 5-17 - should:

- Accumulate **at least 60 minutes** of moderate to vigorous intensity physical activity daily.

- Amounts of physical activity greater than 60 minutes provide additional health benefits.

- Most of the daily physical activity should be aerobic. Vigorous intensity activities should be incorporated, including those that strengthen muscle and bone at least 3 times per week.
Adults - aged 18-64 – should:

- **Do at least 150 minutes** of moderate-intensity aerobic physical activity spread throughout the week **or** do at least 75 minutes of vigorous-intensity aerobic physical activity spread throughout the week **or** an equivalent combination of moderate- and vigorous-intensity activity.

- Aerobic activity should be performed in bouts of at least 10 minutes.

- *For additional health benefits*, adults should increase their moderate-intensity aerobic physical activity to 300 minutes per week, **or** engage in 150 minutes of vigorous-intensity aerobic physical activity per week, **or** an equivalent combination of moderate- and vigorous-intensity activity.

- Muscle-strengthening activities should be done involving major muscle groups on 2 or more days a week.
Older adults - 65 years old & above:

- Older adults, with poor mobility, should perform PA to enhance balance and prevent falls on 3 or more days/week.

- Muscle-strengthening activities should be done involving major muscle groups on 2 or more days a week.

- When older adults cannot do the recommended amounts of PA due to health conditions, they should be as physically active as their abilities and conditions allow.
Important elements of successful policies

- High level political commitment
- Surveillance, monitoring and evaluation
- Multi-stakeholder support
- Leadership and workforce development
- Integration into national strategies & policies
- Multiple intervention strategies
- Stepwise approach to implementation
- Culturally appropriate
- Implementation at different levels within "local reality"
- Dissemination
- National Physical Activity Guidelines
Supportive policies in promoting PA

Possible physical activity promoting interventions include:

- ensuring that walking, cycling and other forms of physical activity are accessible and safe;
- providing local play facilities for children (e.g. building walking trails);
- facilitating transport to work (e.g. cycling and walking) and other physical activity strategies for the working population;
- ensuring that school policies support the provision of opportunities and programmes for physical activity;
- providing schools with safe and appropriate spaces and facilities so that students can spend their time actively;
- providing advice or counsel in primary care; and
- creating social networks that encourage physical activity.
HEALTH PROMOTION APPROACHES

SETTINGS-BASED APPROACH

- Acknowledges the interrelationship between the environment and humans e.g, Healthy cities, villages, schools, markets etc.,

POPULATION-BASED APPROACH

- Address needs diverse population groups - children, women, elderly or workers

ISSUES-BASED APPROACH

- Targets a wide range of determinants of health or risk factors (diet, smoking, unsafe sex, road safety, patient safety etc.,)
School Health Programme
Theory to practice
WPRO Health Promoting School Framework

- A healthy setting for learning, living and working
- Allows all members of the school community to work together
- Proposed approach is to embed health promotion into school operations through policies, practices, and structures
Key factors

1. Healthy school policies
2. School’s physical environment
3. School’s social environment
4. Community links
5. Action competencies for healthy living
6. School health care and promotion services
Monitoring tool

Meeting of stakeholders

Review of policies and programmes

Identify the gaps

Develop a plan to improve the areas for action

Implement then evaluate after 6 and 12 months
HEALTHY WORK PLACE

COMMITMENT

EMPLOYEE PARTICIPATION

Surveillance
NCD risk factors
Baseline data
Current spending on health
Sickness absenteeism
Environment

INTERVENTIONS
Tobacco cessation
Diet
Physical activity
Stress reduction
Occupational health
Noise, Dust
Water
Sanitation

Check list

HWP
Primary health care

A - Management of presenting problems
B - Modification of help-seeking behaviour
C - Management of continuing problems
D - Opportunistic health promotion

Comprehensive care is a blend of the four interrelated areas. Usual clinician - Area A
Primary health care

- A Green Prescription (GRx) is a health professional's written advice to a patient to be physically active, as part of the patient's health management.

(New Zealand)
Prevention Works

Age-adjusted mortality rates of coronary heart disease in North Karelia and the whole of Finland among males aged 35-64 years from 1969 to 2001.

Mortality per 100,000 population
Age standardized prevalence of NCDs and risk factors in Singapore 1992-2004

- Hypertension
- DM
- Obesity
- High Cholesterol
- Cigarette smoking
- Regular exercise
There are no short cuts to any place worth going.....