The impact of tobacco and alcohol control and dietary promotion in preventing oral cancer

Oral health working group, WFP HA, Feb 11th 2015, Kolkata

Prof Bettina Borisch, MD, MPH, FRCPath

Institute of Global Health, University of Geneva

CEO, World Federation of Public Health Associations
Oral cancer – two aspects

• The individual aspect: the individual’s behavior and lifestyle, individual preventive measures

• The societal aspect: rules and “technical” surrounding environment, community-based interventions, structural preventive measures
Preventing oral cancer

- **Individual prevention**
- Campaigns to tackle a change in individuals behavior
- Educational measures for groups and individuals

- **Structural prevention**
- Change the laws regulation the harmful substances (tobacco)
- Put up taxation, technical rules (smoke-free environment)
Oral cancer – risk factors

• **Tobacco:** cigarettes, smokeless tobacco, snuse, e-cigs, risk for OC is consumption related
• **Alcohol:** all forms of alcohol, although hard liquor and beer have a higher associated risk
• **Diet**
• **HPV**
• **Age, gender**
• **Socio-economic factors**
Tobacco
Alcohol
Diet

• Dietary factors have been identified as having a possible association with oral cancer
• Preparation of food: Wood stove cooking / charcoal grilled meat / …
• Tobacco / alcohol far outweighs a deficient diet
• Across multiple cultural settings: high fruit consumption has a protective effect, high alcohol consumption has a carcinogenic effect
Co Risk-Factors

• In oral cancer tobacco AND alcohol exert a synergistic effect:

• A combination of "heavy" smoking and "heavy" drinking results in odds ratios (ORs) for oral cancer of up to 38 for men.

• An OR of 38 in men indicates a multiplicative effect, because the OR for "heavy" smoking alone among men is 5.8; for "heavy" drinking alone it is 7.4.
Individual Prevention via health professionals

• Individual programs on tobacco use cessation
• In the United States 70% of smokers see a physician each year and 52.6% visit a dentist, the potential for the health care community to affect smoking prevalence is very large; unfortunately, it is substantially underutilized
• Every health professional can be active in counselling !!!
Health professional have a high credibility
Campaigns - without intervention of health professionals

- Billboard – based information
- Internet-based programs
- School / high school based interventions
- Peer group interventions
- Worksite programs
Structural preventive measures

• Smoke-free policies in public places
• Taxes on alcohol and tobacco
• Tobacco / alcohol selling limitations (age limits)
• Limiting vending machines
• Restricting advertising
• Regulating second-hand smoke
Structural prevention

International example:
• Framework Convention on Tobacco Control (FCTC), WHO, 2003
• Political debate in to how best prevent cancer

National examples:
• Plain packaging, Australia
• Divestment strategies
• Regulations for the respective industries
Oral cancer – a paradigm for Non Communicable Diseases (NCDs)

• Oral Cancer and NCDs: Share similar risk factors
• Risk factors are preventable and available for early detection
• OC and NCDs: Go along with an ageing population
NCDs at New York UN meeting!
What we all agree upon:

• NCDs are a major health problem of both high level income countries AND of low and middle income countries

• NCDs need a whole system approach given their multifactorial nature
What we all agree upon:

• NCDs demonstrate clearly that health systems strengthening and especially the strengthening of public health is needed

• NCDs also show that there are strong influences beyond individual control
NCDs pose wicked problems:

• Food is both leading to AND preventing NCDs

• Globally, we are producing more food than the population needs

• The damaging role of subsidies:
Development of per capita dietary energy supply from 1963 until 2030
Quantities of EU butter receiving subsidies from 1995 to 2003
International equity

• Overproduction of food by developed countries (and export subsidies)
  ➔ serious obstacle for growth of the agricultural sector in developing countries

• Agricultural growth in LMIC ➔ creates employment, alleviates poverty and malnutrition, reduces the cost of food for poor consumers
Lessons learned:

• State subsidy in other than the health sector may influence the development of NCDs in a whole population

• State subsidy such as aid to farmers in one country may distort and influence the economy, life style and finally health of populations in far away countries
NCDs are a global challenge

• And need a global answer
• Should be global regarding “health in all policies”: involve economy, environment, all other sectors
• Global on the international level: there is no solutions that is adequate for only one country
The mind is like a parachute. It doesn’t work unless it’s open.