Tobacco Control Strategies I

Frances Stillman, EdD
Institute for Global Tobacco Control
Johns Hopkins Bloomberg School of Public Health
Section A

Background
Tobacco Wars

Tobacco control

Consumers

Tobacco industry
Early Tobacco Control

Individual approach using health promotion

Smokers and potential smokers
Maturing Tobacco Control

Environmental Influences

Interaction

Individual Influences

Change in social and political structures, community norms and individual behavior
Why Tobacco Control?

To reduce morbidity and mortality from tobacco-related diseases—
- Cancer (lung and other)
- Cardiovascular disease
- Chronic obstructive pulmonary disease
Goal of Tobacco Control Programs

- Encourage smokers to quit
- Encourage smokers to reduce their exposure to harmful tobacco products
- Discourage smoking initiation
- Protect nonsmokers from secondhand smoke
Dissemination of Health Consequences of Smoking


- Smoking causes lung cancer
- Smoking is hazardous to nonsmokers' health

Tobacco Control Approaches

- Lecture 1
  - Individual Approach
  - Population/Social Environment Approach
  - Policy Approach

- Lecture 2
  - Comprehensive Approach
  - Product Regulation
  - Litigation
Section B

Individual Approach
Individual Approach

- Public information campaigns on health effects of smoking to motivate cessation
  - Successful in increasing awareness of the disease risks associated with smoking
  - Do not create substantial change in the behavior of regular smokers when used as an isolated smoking control strategy
Individual Approach

- Delivery of school-based health education curricula designed to prevent initiation by youth
  - Information model
    - Presumes that teaching adolescents that smoking is harmful will alter their smoking behavior
  - Affective model
    - Assumes that tobacco use is influenced largely by attitudes. Programs using this model attempt to enhance self-esteem and self-image, teach stress management, and improve decision making
Individual Approach

- Information model
  - Presumes that teaching adolescents that smoking is harmful will alter their smoking behavior

- Affective model
  - Assumes that tobacco use is influenced largely by attitudes. Programs using this model attempt to enhance self-esteem and self-image, teach stress management, and improve decision making

- Social influence model
  - Gives students skills to resist smoking
Individual Approach

- Development of programs and clinics that smokers can use individually or in groups to improve the likelihood of long-term success with cessation attempts
Hospital-Based Individual Approach

- Self-help materials

More Self-Help Materials

You Can Quit Smoking Now!

**Online Guide to Quitting**

1. **Thinking About Quitting**
   - Reasons for quitting
   - Why is quitting so hard?

2. **Preparing to Quit**
   - Make a step-by-step plan to quit
   - Medicines that help

3. **Quitting**
   - Steps to take on your quit day
   - Managing cravings

4. **Staying Quit**
   - Fighting urges
   - Keeping your guard up

Section C

Population/Social Environment Approach
Population/Social Environment Approach

- Public opinion/community norms
- Community mobilization
- Preventing tobacco sales to minors
- Economic incentives
Importance of Community Norms

- People in a community tend to behave in ways that are sanctioned by the community.

- Perceived community norms inform individuals about non-sanctioned and sanctioned behavior.

- A community’s “structural” rules are a strong manifestation of the community’s norms.

- The media are an important source of communicating community/societal norms.
Community interventions are highly effective.

To achieve change in a community, the target population must be involved in identifying the problem and planning and undertaking steps to correct it.
Community intervention trial for smoking cessation (COMMIT)

- Community-level, multi-channel, four-year intervention
- Increased quit rates for light-to-moderate smokers
- Did not increase quit rates of heavy smokers; reaching them may require new clinical programs and policy changes

Preventing Tobacco Sales to Minors

- In the United States today, more than three million children under the age of 18 regularly smoke cigarettes or use smokeless tobacco.

- More than half of all smokers begin before the age of 14, and 90% begin before the age of 19.

- An estimated 1 billion packs of cigarettes are sold to minors each year.
Economic Incentives

- Higher excise taxes on cigarettes
- Insurance reimbursement for cessation program
- Insurance reimbursement for pharmacological treatment including nicotine replacement therapy
- Insurance premium differentials for smokers and nonsmokers
Section D

Policy Approach: Part I
Policy Approach

- Taxation
- Clean indoor air policies
- Youth policy initiatives
- Advertising and promotion
- Warning labels
- Countermarketing
- Reimbursement of cessation and treatment
# Pros and Cons of Policy Approach

## Pros

- Powerful tool to promote behavioral change
- Changes can be immediate
- Educate/policy makers
- Community mobilization

## Cons

- Can go too far... lose public support
- Enforcement
- Time/energy/money
- TI opposition
- Need skilled people (legal, grassroots, media)
Introduction

Threats to our business

• Excise tax
• Advertising restrictions
• Smoking restrictions

Source: Philip Morris document site, Bates no. 2501213724.
Taxation: Increase the Price of Tobacco

- Increase the price of tobacco products
  - Raise government revenue
  - Earmark revenue for tobacco control
- Raising price lowers demand
  - Addiction
  - Price elasticity
  - With each ten percent increase in price, consumption falls 3–5 percent
  - Youths are 2–3 times more responsive to price increases than adults
Taxation: Arguments for and Against

- Arguments against—
  - Unfair/regressive
  - Nanny state
  - Smuggling
  - Governments become dependent on revenue

- Rationale for—
  - Cheap way to save lives
  - Raises revenue
  - Is very effective
Impact of Increasing Price through Taxation

- Impact of increasing price through taxation—
  - Reduction of consumption, with greatest impact in low- and middle-income countries
    ▶ Increase in price of ten percent produces a four percent reduction in demand in high-income countries and eight percent in low- and middle-income countries
  - Effect is most pronounced among youths

Impact of Increasing Price through Taxation

Cigarette Price and Consumption go in Opposite Trends. Real price of cigarettes and annual cigarette consumption per capita, Canada, 1989-1995

Impact of Increasing Price through Taxation

Real price of cigarettes and annual cigarette consumption per adult (15 years of age and above), South Africa, 1970-1989

Tax as Percentage of Average Retail Price

Average Cigarette Price, Tax and Percentage of Tax Share per Pack, by World Bank Income Groups, 1996

“Tobacco tax goal: over 800,000,000 yen.”

“Buy a cigarette in our city.”

Image source: Institute for Global Tobacco Control
Arguments for and against Smoke-free Workplaces

Arguments for and against smoke-free workplaces/public places

Arguments against
- Excessive regulation
- Will hurt business
- Indoor air quality dependent on ventilation rather than on the elimination of smoking
- Data on secondhand smoke (SHS) is not conclusive

Arguments for
- Health hazards of SHS
- Promotes smoke-free norm
- Assists quitting
- Sustains abstinence
- Reduces maintenance costs
- Reduces liability
- Reduces fires

Image source: [http://www.leominster-ma.gov/health_department_whats_new.htm](http://www.leominster-ma.gov/health_department_whats_new.htm) accessed 2/24/06
Clean Indoor Air Policies

- Some countries with smoke-free laws
  - Bhutan (100%)
  - India (comprehensive bans)
  - Ireland (100%)
  - Norway (100%)
  - New Zealand (100%)
  - South Africa (comprehensive bans)
  - Sweden (100%)
  - Uganda (100%)
## Remaining Challenges for Smoke-free Legislation

<table>
<thead>
<tr>
<th>Country</th>
<th>National Smoking Regulations in Public Places</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Not regulated at the national level</td>
</tr>
<tr>
<td>El Salvador</td>
<td>Not regulated; prohibited only in Ministry of Health buildings</td>
</tr>
<tr>
<td>Germany</td>
<td>Voluntary restrictions in institutions, government agencies, and transport companies</td>
</tr>
<tr>
<td>Philippines</td>
<td>Banned in schools and public transportation; Voluntary restrictions in hospitals and health care facilities</td>
</tr>
<tr>
<td>Romania</td>
<td>Banned in hospitals, schools and on public transport; restricted in others</td>
</tr>
</tbody>
</table>
Japan’s Approach to Smoke-free

- Smoking is prohibited on the street in Japan.

- A mobile smoking van, Smocar, provides a place for smokers in Japan to smoke.

- Children are also allowed into the van and given soft drinks.
Bhutan’s Approach to Smoke-free

- Illegal to buy tobacco, sell it, or smoke anywhere in public

- May bring tobacco into the country for personal consumption, but only after paying 100 percent tax on the cost price. Can smoke tobacco only at home

- Only about one percent of the population is thought to smoke
“On January 10, 2005, Italy implemented smoke-free workplace legislation for all workers, including restaurant and bar workers.”

- http://www.smokefree.net/italy/
Section E

Policy Approach: Part II
Nearly ninety percent of adult smokers started before age 18

Youth Policy Initiatives

- Types of youth approaches
  - School-based health education
  - Media literacy
  - Youth access restrictions
    - Purchasing
    - Possession
    - Free sampling
    - Vending machines
  - FCTC Article 16

Continued
Pros and Cons for Youth Policy Initiatives

Pros

- Youth are new smokers
- Broad political support
- 1990s tobacco framed as a “pediatric disease”

Cons

- To impact youths must impact adults
- Need change in social norms
- Takes decades to impact mortality and morbidity
What We’ve Learned about Youth Policy Initiatives

- It’s unclear whether youth approach has decreased youth prevalence
- May take 100 percent compliance
- Social sources are important
- Youth access can galvanize community
- Youth possession laws are controversial
“...exposure to the “truth” campaign positively changed youths’ attitudes toward tobacco, the Philip Morris campaign had a counterproductive influence.”

- Farrelly et. al. 2002.

School-Based Programs Are Ineffective

“... no evidence that a school-based social influences approach is effective in the long-term deterrence of smoking among youth.”

—Peterson et al. (2000)

Restrictions on Advertising and Promotion

Selling athleticism
Selling show biz
Selling sex
Selling fashion
Selling beauty
Selling freedom
Selling prosperity

Selling death

“The media like the money they make from our advertisements, and they are an ally that we can and should exploit.”

– Philip Morris

Each year, the tobacco industry spends billions of dollars on advertising, marketing and promotion. In the United States alone, where less than 5% of the world’s smokers live, tobacco companies spent over $8.2 billion on advertising and promotion in 1999.
Direct Effects of Tobacco Advertising and Promotion

- Attracts new users to the market
  - (increased initiation)
- Reduces current users’ willingness to leave market
  - (reduced cessation)
- Stimulates use among current users
  - (increased consumption by smokers)
- Induces former users to resume use
  - (increased re-initiation)

Indirect Effects of Tobacco Advertising and Promotion

- Discourages full discussion of the health consequences of tobacco in media dependent on tobacco advertising
- Contributes to an environment where tobacco use is perceived to be more socially acceptable and less hazardous
- Creates political opposition to strong tobacco control policies among institutions receiving tobacco industry marketing dollars
- Increases market segmentation/brand proliferation

Sources:
Warner. (1986).
“Logical arguments” imply that increased advertising increases tobacco use

Substantial evidence from survey research and experiments concludes that—
  − Cigarette advertising captures attention and is recalled
  − Strength of interest is correlated with current or anticipated smoking behavior and initiation

Sources:
Warner. (1986).
Other empirical research—

- Youth who own tobacco company promotional items are more likely to become smokers\(^1\)
- Youth smoking is much more responsive to advertising than adult smoking\(^2\)
- Econometric studies generally find small or negligible impact of advertising on overall cigarette sales\(^3\)
  - Econometric methods are poorly suited for detecting impact of advertising on demand

Sources:
1. Pierce et al. (1998); Biener and Siegel. (2000); Sargent et al. (2000).
Comprehensive Ad Bans Reduce Consumption

Trends in weighted cigarette consumption per capita in countries with a comprehensive ban compared with countries with no ban.

Comprehensive advertising bans reduce cigarette consumption

Source: Saffer, H. The control of tobacco advertising and promotion. Background paper.
Restrictions on Advertising and Promotion

- Relatively comprehensive restrictions on advertising and promotion significantly reduce cigarette consumption
  - Estimate more than a 6 percent reduction in consumption in response to comprehensive ban
- Limited/partial restrictions on advertising and promotion have little or no impact on cigarette consumption
  - Induce substitution to other media and new promotional efforts

Sources:
Saffer. (2000).
Wakefield et al. (2000). Changes at the point-of-sale for tobacco following the 1999 tobacco billboard ban.
**Warning Labels**

**Warning**

**Cigarettes Cause Strokes**

Tobacco smoke can cause the arteries in your brain to clog. This can block the blood vessels and cause a stroke. A stroke can cause disability and death.

Image source: Health Canada

**Warning**

**Tobacco Use Can Make You Impotent**

Cigarettes may cause sexual impotence due to decreased blood flow to the penis. This can prevent you from having an erection.

Image source: Health Canada

**Warning**

**Cigarettes Are a Heartbreaker**

Tobacco use can result in the clogging of arteries in your heart. Clogged arteries cause heart attacks and can cause death.

Image source: Health Canada

Warning Labels

- FCTC Article 12—warning labels should cover no less than 30 percent of the cigarette pack

Side of pack: a box of at least 10% indicating yields of tar, nicotine and carbon monoxide.

Front: a health warning of at least 30%

Back: a health warning of at least 40%

Countermarketing

Tobacco killed 11,000 people today. Yee-haw.

Image source: http://www.cdc.gov/tobacco/MCRC/countermarketing/ accessed 3/20/06
Reimbursement of Cessation and Treatment

Number of state Medicaid programs covering tobacco dependence treatments (2002)

<table>
<thead>
<tr>
<th>Tobacco dependence treatment</th>
<th>1998</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zyban</td>
<td>24</td>
<td>40</td>
</tr>
<tr>
<td>Nasal spray &amp; inhaler</td>
<td>17</td>
<td>28</td>
</tr>
<tr>
<td>Patch</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>Gum</td>
<td>16</td>
<td>26</td>
</tr>
<tr>
<td>Individual counseling</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Group counseling</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Telephone counseling</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

33% of Medicaid population are smokers

“An ounce of prevention is worth a pound of cure”