Puffs and Pounds: Lessons from Tobacco Control for Combating the Obesity Epidemic

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Health consequences of the antismoking campaign

• Since 1964, > 5 million premature deaths averted in U.S. as a result of campaign-induced decisions to quit smoking or not to start.

• On average, each individual has gained 15-20 years of life expectancy.
Coverage

1. Overview of success of US antismoking campaign
2. Which interventions have worked to reduce smoking; which haven’t
3. Lessons for grappling with the obesity epidemic
4. “And now a word from our sponsors”: Comparing “Big Tobacco” and “Big Food”
5. Conclusions
Tobacco control: The greatest public health success story of the past half century

- Half of all ever-smokers alive today have quit.
- Smoking prevalence has more than halved (from >45% to 20%).
- Millions of lives have been saved.
- Image and place of smoking in society have been changed forever.
Adult per capita cigarette consumption, U.S., 1900-2006

- Great Depression
- End of WW II
- 1st Smoking-Cancer Concern
- 1st Surgeon General's Report
- Fairness Doctrine Ads
- Broadcast Ad Ban
- Non-Smokers' Rights Movement Begins
- Surgeon General's Report on Federal Cigarette
  Tax Doubles
- Master Settlement Agreement
- 1st Smoke-Free State (DE)
- Federal Cigarette Tax Increases 42%
Smoking...then...
and now...
But the job is not done…

- Tobacco remains leading cause of avoidable premature death
  - *In U.S.*, ≈ 435,000 deaths/year
    - 1/6th of all deaths
    - 1/3rd of deaths during middle-age

- 9 million sick or disabled

- 20% continue to smoke
Smoking kills more people (435,000/yr) than all of the following **combined**:

- Alcohol (85,000)
- Motor vehicle crashes (43,000)
- Poisoning (33,000)
- Guns (29,000)
- AIDS & other STDs (20,000)
- Heroin, cocaine, & other illicit drugs (17,000)

*but so too do obesity & physical inactivity (300,000+)*
We know what works in TC (or has worked) and what doesn’t (or hasn’t)

<table>
<thead>
<tr>
<th>Effective</th>
<th>Not effective</th>
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<tbody>
<tr>
<td>1. Public information/education <em>(early period)</em></td>
<td>1. School health education <em>(now)</em></td>
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<td>2. Tax/price</td>
<td>2. Warning labels <em>(New ones?)</em></td>
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<td>3. Smoke-free air laws, policies</td>
<td>3. Minors possession, use, &amp; purchase laws</td>
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<td>4. Counter-advertising</td>
<td>4. Sales to minors laws</td>
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<td>5. Ad bans</td>
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Taxation

• Strongest research base of all tobacco control (TC) policies

• From public health pariah to First Principle of TC
Tax increases - Pros

• 10% price increase reduces demand by 3-4%
  – ½ quitting, ½ reducing cigs/day
• Kids ≥ twice as price responsive as adults; very effective deterrent to youth smoking
• Generates lots of tax revenue
• Politically popular
• Progressive health impact
Tax increases - Cons

• “Behavioral engineering”
• Increased incentive for smuggling
• Regressivity (equity issues)
  – Overall tax highly regressive
    • Why might a tax increase not be?
  – Even if increase is not regressive, why should we remain concerned about increasing the tax?
Smoke-free workplaces

- Strong research base
- 26 states and ≈ 20 countries smoke-free
- Heart of tobacco control movement
Second-hand smoke (SHS): Evidence base

- Adverse health effects of SHS
  - 40-50,000 deaths/year

- Smoke-free workplaces
  - Reduce worker exposure to SHS by 80-95%
  - Increase quitting ≈ 3.8%
  - Decrease daily smoking by continuing smokers by ≈ 3 cigs/day
  - Do not harm businesses financially
  - Reduce AMIs significantly
Counter advertising

• truth campaign, CA and MA campaigns, Fairness Doctrine ads all documented to decrease smoking

• Requirements:
  – Well-funded
  – Professionally produced
  – Sustained
Advertising & promotion ban

- Evidence strong but not conclusive
- Best study: complete ban can reduce smoking ≈ 6%
- Partial ban ineffective due to ability to substitute other forms of promotion
School health education

• Some programs show **efficacy** (impact with best-practice) but…

• Limited evidence of **effectiveness** in everyday practice
  • *Teachers not well trained nor interested*
  • *Competing demands on time*
  • *Relatively low school-board priority*
  • *Few resources devoted to programs*
  • *“Booster” programs rare*
Pack warning labels

- Old (U.S.-style) labels ineffective
- New-style labels may increase intention to quit and, possibly, quitting
Sales to minors & PUP laws

• Sales to minors laws do not reduce youth smoking unless very seriously enforced
  • \( \approx 95\% \) compliance needed for major impact

• PUP laws do not work (and generally are not even recognized by youth or parents)
How about treatment?

• Does it work? Yes
  – For certain people; doubles or triples “cold turkey”
  – Requires proper instruction & counseling
    • How should nicotine “gum” be used?

• Does it work? No
  – Problems with OTC use
  – Can be costly
  – Limited population impact (thus far)
Aggregate impacts of TC

- Dramatic…but over time
  - Smoking prevalence in U.S. ↓ by > ½
  - Per capita cigarette consumption < 1/3 of what it would have been in absence of antismoking campaign
  - > 5 million smoking-produced premature deaths averted as a result of campaign, with average beneficiary gaining 15-20 years of life expectancy
Problem

- 20.6% of Americans remain smokers
- In U.S., 70% of smokers want to quit
- 30% try each year
- *How many succeed?*

*Only 2.5%!*
Problem...and opportunity

- Problem of smoking with us for decades to come
- Continue current effective interventions, but must find new ones
- Opportunity: Lessons from TC for reducing scope & consequence of obesity epidemic
Lesson #1: Critical role of public education early on

• Principal tool in antismoking campaign in first decade = education
  – First Surgeon General’s Report
    • Smoking ↓ 15% in first 3 months after issued
  – Fairness Doctrine antismoking messages on broadcast media 1967-70
  – Work of voluntaries, mainly ACS, AHA, ALA
Lesson #1: Critical role of public education early on (cont’d.)

- Impacts
  - Began knowledge phase of KAP
  - Began process of denormalizing smoking
  - Highly educated began to quit

- Message for obesity control:
  - *Education critical*
  - “*Rewards*” slow in coming…and subtle
    - Smoking leveled off in first decade; that was success!
Lesson #2: Prices of foods matter; use taxes to encourage/discourage

- Consider taxes on sugary drinks, high-fat foods, non-nutritional snacks, junk foods
- 10% increase in price of soft drinks will reduce demand by 8-10%
  - If price of a bottle of soft drink = $1.00, a 5 cent (5%) tax would decrease demand by up to 2.5%
  - Also generates significant revenue
Lesson #3: Get creative with pricing strategies

- Earmark new tax revenues for anti-obesity campaign
  - *What’s problem with this?*
- Target some food stamps to fresh fruits & vegetables only
- Subsidize green grocers moving into inner cities (*See food stamp proposal*)
Lesson #4: Explore advertising & counter advertising options

• Ad bans or restrictions on, e.g., sugary kids cereals on TV stations oriented toward kids
  – Note impossibility...and irrationality...of total ban

• Media counter ads can use truth-like industry “attack” ads or more straightforward education re nutrition
Lesson #5: Revise food labeling

• Easy to see (prominent)
• Attract attention (graphic imagery)
• Easy to understand
• Compelling
Lesson #6: School health education?

• Give up on it?
• No, but figure out how to do it meaningfully.
Lesson #7: Put the horse before the cart

- Recognize that we can’t solve childhood obesity without addressing adult KAP
ONE ORDER OF FRIES . . . AND SUPERSIZE IT.

WE STOPPED SUPERSIZING . . . WHEN IT COMES TO DIET, AMERICANS SHOULD THINK TWICE . . .

OK, TWO ORDERS OF FRIES.
Lesson #8: Contemplate relevance of smoke-free law successes

• No easy equivalent re obesity

• But protection of nonsmokers from second-hand smoke, and hence smoke-free laws & policies, = cornerstone of tobacco control
Lesson #9: Expect to work at the local level & with coalitions

- Diffusion of state & local tobacco control policies across the nation
  - Taxes
  - Smoke-free policies

- State-based coalitions, including local affiliates of ACS, AHA, ALA
Lesson #10: Do not expect (much) assistance from the federal government or industry
Is ‘Big Food’ the next ‘Big Tobacco’?

• Many similarities
  – Big money at stake
  – Big political influence (See previous point)
    • Large campaign contributions
    • Hiring major lobbying firms in state capitals & DC
  – PR campaigns emphasizing “personal responsibility” and industry self-regulation
  – Marketing to youth
  – Misuse of science & scientists
Is ‘Big Food’ the next ‘Big Tobacco’?

• Important differences
  – *Different kinds and sizes of companies*
  – *Some parts of industry focus on healthful options*
    • Fruit, gain, & vegetable farmers
    • Organic, local
  – *Many large companies produce healthy as well as unhealthy foods*
  – *‘Big Food’ has benefit of knowing history of ‘Big Tobacco’*
Will public health community be able to work *(ahem)* fruitfully with food industry?
8 bottom-line messages, based on experience in tobacco control

1. Be patient. Understand, and accept, difficulty of challenge
   - *Progress in behavior-related PH takes time*

2. Set ambitious but realistic goals

3. Be creative in developing approaches to obesity control

4. Focus on both prevention & “cure”
8 bottom-line messages, based on experience in tobacco control (cont’d.)

5. Contemplate mix of research and politics and activism in all we do
6. Celebrate successes
7. Never rest on our laurels
8. And did I say…

Have patience!
AUDIENCE RESPONSE
QUESTIONS
Do you think that some portion of food stamps (Supplemental Nutrition Assistance Program SNAP benefits) should be restricted to use for fresh fruits and vegetables only?

1. Yes
2. No
Which of the following actions do you think would have the biggest effect on obesity?

1. Taxing unhealthy foods
2. Regulating marketing of unhealthy foods to children
3. Regulating availability of unhealthy foods in schools and workplaces
Do you think that the tobacco control experience is truly relevant in addressing the obesity epidemic, or do you think it is of limited relevance?

1. Very relevant
2. Somewhat relevant
3. A little relevant
4. Not really relevant
Thank you!

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