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Science on Trial? The Role of Scientific Evidence in Korean Tobacco Lawsuits

Doogab Yi / Seoul National University

Cigarettes: Science & Law

Korean tobacco litigation

- Product of harmfulness and addictiveness
- Tobacco litigations in South Korea: Korean courts have ruled that tobacco companies bear no liability for cancer in smokers...
- Without cigarettes as the primary cause, Korea faces a significant unexplained cancer epidemic...

Korean tobacco litigation

- Harmful Product Epidemiological Evidence
 - Distinction b/w specific vs. non-specific disease
 - Epidemiological vs. individual causation

Addictive Product - Addiction

- An item of personal preference
- Free will

Scientific Evidence

- Epidemiology -> Individual Causal Relationship
 - US Relative Risk 2 (the doubling of risk standard)
 - Japan Relative Risk 5
- A. Broadbant: epidemiological vs individual causation?
 - Epidemiological data contains includes individuals with lung cancer

Probability of Causation

- Population-level attributable risk to individual causation
- NHIS: Small Cell / Squamous Cell Lung Cancer (PC: 1)

- Korean Supreme Court
 - Usually defers to scientific facts, empirical rules
- Why not tobacco litigations?

What is a Cigarette?

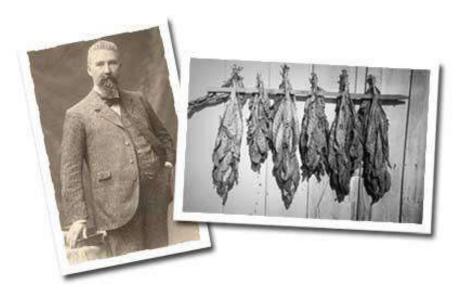
Sub Title

•"...introduced into Korea in the early 1600's ... consumed by way of combusting dried tobacco leaves and inhaling the smoke since those days... an item of personal preference"

 Korean court (Seoul Central District Court, Nov 2020, 2014Gahab525054)

Cigarette: High-tech Product

- Cigarette 19th Century Invention
- Cigarette's Growth
 - Flue Curing & Bonsack Machine



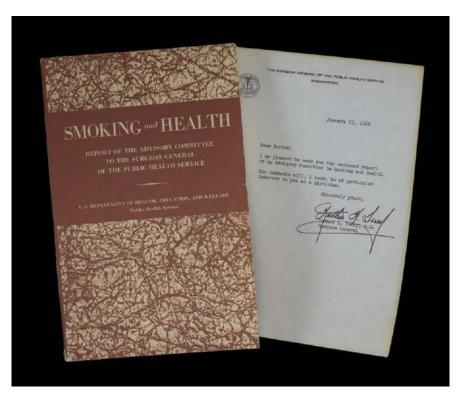


1875 Richard J. Reynolds



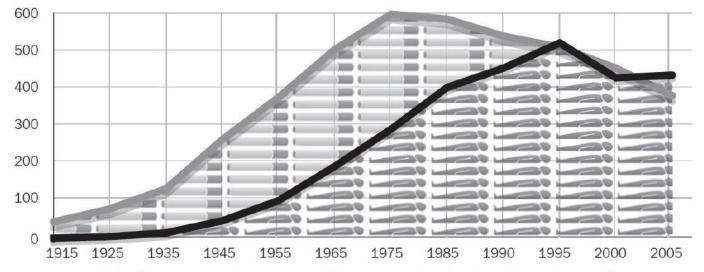
Cigarette: High-tech Product

The Nature of Cigarettes – Science & Medicine (1) Epidemiology - Health Risk



Cigarettes sold in billions

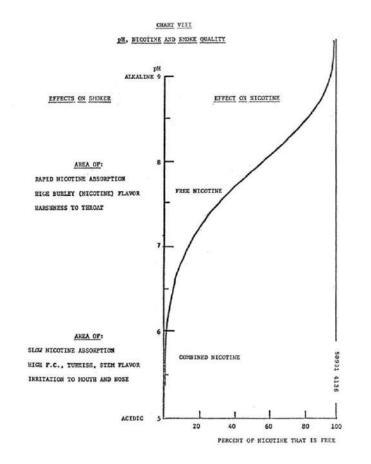
Deaths in thousand



Sources: Federal Trade Commission; Centers for Disease Control; Richard Peto, Alan D. Lopez, Jillian Boreham, Michael Thun, and Clark Heath Jr., *Mortality from Smoking in Developed Countries*, 1950-2000 (Oxford: Oxford University Press, 1994).

Cigarette: High-tech Product

The Nature of Cigarettes – Science & Medicine Pharmacology – Addiction Risk



1999: United States v. Philip Morris USA Inc.

Tobacco industry's internal documents: nicotine's addicti veness and manipulation

Philip Morris: the use of ammonia compounds to contro I the pH level (to generate free-base form of nicotine) / to use acetaldehyde as a positive reinforcer of nicotine, producing supra addictive effects / other additives

Stevenson & Proctor (2008)

Big Tabacco Industry

1980-90s The Trials of Big Tabacco

Litigations, Health & Addiction Risks Documented



• Doubt is our product since it is the best means of competing with the "body of fact" that exists in the mind of the general public. It is also the means of establishing a controversy. Within the business we recognize that a controversy exists. However, with the general public

United States v. Philip Morris USA Inc.

Addictiveness of Nicotine

 Judge Gladys Kessler ordered major tobacco companies to say in nation al advertising and on cigarette pack ages that they lied to the American public about the addictiveness of nicotine in 2006



Sub Title

"Cigarette companies intentionally designed cigarettes with enough nicotine to create and sustain addiction"

2017 Ads by Altria, R.J. Reynolds Tobacco (BAT), Lorillard , and Philip Morris USA

Pharmaceutical Product

• FDA - Regulation of Cigarettes (2009)

Korean Court

- Cigarette's Health Risk: Legal Responsibility
- An item of personal preference?
- Causation Individual "Assumption of Risk"
- Addictiveness Individual "Free Choice"

Addiction & Tobacco Litigation

- Cigarette's Addictiveness: 1980s
- The history of tobacco litigation in the US: Tobacco comp anies' legal victory!
 - "Everyone Knew, but No One Had Proof": the assumption of risk
- Marc Edell: The Addictiveness of Cigarettes
 New (2nd) Wave of Tobacco Litigation
 - 1988 Cipollone v. Liggett Group Inc: Knowledge about the addicti veness of cigarette & the assumption of risk -> Tobacco compan ies' legal defeat

Big Tabacco Industry

"American Liberation of Cigarette Market"

• Japan (1985-86); Korea (1987-88)



U.S. planes bombing Japan with eigarettes. Courtesy of Ryuji/Japan Times.

1999-2014 Korean Tobacco Litigation filed by Individuals

- 1999, individuals, with the Korean Association of Smokin g and Health, filed a lawsuit against KT&G
 - US toxic torts, product liability cases, evidences on cigarette's h ealth and addiction risk
 - Information Disclosure Request Litigation: evidence on addiction design
- 2014 Korean Supreme Court decision

• 2014-20 NHIS Tobacco Litigation

• KT&G + Multinational Tobacco Corporations (Philip Morris Korea, BAT Korea)

Epidemiological Evidence

- 3,465 Patients of Small Cell / Squamous Cell Lung Cancer (PC: 1)
- Mobilization of evidences on addiction & cigarette design
 - KT&G: Reports on nicotine's addictiveness and its manipulations
 - Philip Morris Korea, BAT Korea: Kessler's verdicts, systematic ev idence of the tobacco industry's concealment of their knowledg e of addiction and their manipulation of cigarettes' design
 - Free-base nicotine (amonia), sugar (reinforce) etc

Benefit-Risk Test

- Cigarette: a high-tech product
- Nicotine's pharmacological benefits, but its health and addiction risk is too high
- Product Liability: Benefit-Risk Test
 - Cigarette is a highly risk product

Reflections on Science & Law

Scientific Evidence?

- Nov 2020, Seoul Central District Court, dismissed all NHIS 's claims against defendants
 - Health Risk
 - Addiction Risk
 - Then, Legal Responsibility?

Divergence?

- American court: Kessler's verdicts, found US cigarette manufa ctures guilty, on the charge of the manipulation of nicotine et c
- Korean court: KT&G, Philip Morris Korea, BAT Korea, no legal liability
 - Causation: Cigarettes -> Harm
 - Non-specific Disease: individual causation?
 - Cultural assumptions about free will, quitting, and risk
- How to understand the divergence?
 - Unusual, given Korean court's deference to scientific facts and empiri cal rules?
 - Cigarette: a high-tech product

Agnotology

Agnotology (R. Proctor, Stanford, 2008)

• Creation of Doubt?

 Need to recognize the tobacco industry's history of denying scie ntific facts, of defrauding consumers by concealing their knowle dge and manipulation regarding addiction, and of obstructing leg al justice by illegal means and shameless public campaign