Quitting Cigarettes Completely or Switching to Smokeless Tobacco: Do U.S. Data Replicate the Swedish Results?

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Disclaimer

- Grants/contracts from agencies that fund tobacco control research.
- No interest in entering emotional debate on harm reduction.

Should We Encourage Smokers to Switching to Smokeless?

- Pro: Many smokers can't or will not quit
- Con: Dilute the overall anti-tobacco message

Key Swedish Results

- Male smoking prevalence < female's
- Men have a high prevalence of snus use
- Many male smokers reported using snus to quit smoking
- Male lung cancer rate drops faster than expected

Reservations on Applicability of Swedish Results to Other Countries

- Country/Culture-specific
- Effects on smoking uptake vs. cessation
- Price
- Unrelated to perception of reduced harm
- No such thing as Swedish results
- Mostly logical exercises, little data when it comes to applications to other countries

Need Data

- Data from countries other than Sweden
 - U.S. is the other western country with a long history of smokeless tobacco use
- Longitudinal population-based data
 - Recall of ever use of smokeless tobacco has serious problems here
 - TUS-CPS 2002-2003 longitudinal data set

Our Task

- Focus on smoking cessation effects – One survey cannot solve all problems
- Summarize the relevant Swedish results
- Repeat the analysis

How to Test for a Snus Effect on Smoking Cessation in Sweden

- Men uses snus far more than women
- Need of nicotine is cause of relapse
- The test should be two-prolonged
 - Sex difference in smoking cessation
 - No sex difference in tobacco cessation (cigarettes and snus)

Annual Quit Rate for Smoking or for Smoking and Snus in MONICA Project (5-13 years), Sweden



Based on results reported in Tables 3-5 in Rodu et al. (2003),

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TUS-CPS 2002-2003

- Define tobacco use status
 - Smoking only
 - Smokeless only
 - Both
 - Neither
- Data reduction
 - Ignore cigars and pipe (after finding them unimportant)
 - Remove inconsistency

Figure 1A. Annual Quit Rate for Smoking or for Smoking and Snus in MONICA Project (5-13 years), Sweden



Based on the multi-year followed up results reported in Tables 3-5 in Rodu et al. (2003),

Figure 1A. Annual Quit Rate for Smoking or for Smoking and Snus in MONICA Project (5-13 years), Sweden



Based on the multi-year followed up results reported in Tables 3-5 in Rodu et al. (2003),

Figure 1B. Percent of 2002 Smokers Who Quit Smoking or Quit Both Smoking and Smokeless In 2003, U.S.



Other Key Results (for Male)

- Switching is infrequent
 - -0.3% from cigarettes to smokeless
 - -3.9% from smokeless to cigarettes
- Recent former smokers turn to smokeless
 - -1.7% turn to smokeless
 - -24.4% relapse to cigarettes

Quitting Among Exclusive Users (Cigarettes or Smokeless)



Quitting Among Dual Users (**Cigarettes or Smokeless**)



Figure 1A. Annual Quit Rate for Smoking or for Smoking and Snus in MONICA Project (5-13 years), Sweden



Based on the multi-year followed up results reported in Tables 3-5 in Rodu et al. (2003),

Figure 1B. Percent of 2002 Smokers Who Quit Smoking or Quit Both Smoking and Smokeless In 2003, U.S.



Possible Explanations

- It was not promoted as safer products
- Price differential is not big enough
- Product difference
- Not enough of them using it

Conclusions

- U.S. Data do not replicate the Swedish results
- U.S. male smokers seem to quit smoking at a high rate, without using smokeless
- U.S. female smokers quit on the same level as males
- Promoting smokeless tobacco as less harmful alternative may not lead to an increase of population smoking cessation rate in places like the U.S.
- Price differential may have a greater effect in increasing switching to smokeless

Thank You! szhu@ucsd.edu