The effectiveness of pictorial warning on cigarette packs on the initiation of smoking and quitting intentions among school children

Hala Alaouie, MPH
Research Assistant
Dept of Health promotion and Community Health
Faculty of Health Sciences
American University of Beirut

1st ICPH
Tabriz, Iran
May 18, 2011

Outline

- Research team
- Background
- Objectives of the study
- Methodology
- Results
- Challenges
- Conclusion

Research team

Rima Nakkash, DrPH
Assistant Professor of Research
Department of Health Promotion and Community Health
Center for Research on Population and Health
Faculty of Health Sciences
American University of Beirut
Beirut, Lebanon

Rima Afifi, PhD
Professor
Department of Health Promotion and Community Health
Center for Research on Population and Health
Faculty of Health Sciences
American University of Beirut
Beirut, Lebanon

Hala Alaouie, MPH
Research Assistant
Department of Health Promotion and Community Health
Center for Research on Population and Health
Faculty of Health Sciences
American University of Beirut
Beirut, Lebanon

George Nahhas, MPH
Research Assistant
Department of Health Promotion and Community Health
Center for Research on Population and Health
Faculty of Health Sciences
American University of Beirut
Beirut, Lebanon

Background

Background 1
Prevalence

- Tobacco use is the leading cause of morbidity and mortality in the World (1).
- By 2030:
  - 10 million deaths will have been associated with tobacco use (1).
  - 70% of these deaths occurring in developing countries (1).

In Lebanon:

- Among adults:
  - 35% of females smoke cigarettes
  - 46% of males smoke cigarettes
- This suggests a narrowing of the gap between men and women.
- Among health professionals:
  - over 27% of medical and dental students smoke cigarettes (3).
- Among youth, (Global Youth Tobacco Survey, 2005) for grades 7-9 in 92 private and public schools:
  - found that 60% currently smoked any tobacco product, but with the majority smoking narghile (4).
Background 2
National Tobacco Control Policies
1995

- Law 394/95 adapted the 1983 decree on labeling by requiring the warning: “MOH warns smoking leads to dangerous and deadly diseases” (وزارة الصحة تحذر التدخين يؤدي إلى امراض خطيرة ومميتة).
- Be 'clear to the naked eye' on the pack (no size specified).
- And occupy 15% of advertising space.

Background 2
National Tobacco Control Policies
2005

Lebanon ratified the WHO Framework Convention on Tobacco Control (FCTC)

WHO FCTC binds all parties to implement policies within 5 years following the ratification.

Background 3
Evidence related to impact of warnings of cigarette packs

Advances in the science of warnings on cigarette packs have suggested that:

- Pictorial warnings are even more effective than text warnings.
- Perhaps especially for low-literacy populations.

- Never the less, there have been differences found in which warnings are most effective in various countries.

- Therefore, it has been recommended that countries test their own warning labels prior to implementation of article 11: Packaging and labeling of tobacco products.
Factors that influence the impact of graphic warnings includes:

- size
- placement (front or back),
- the specific pictures (with more gruesome pictures rated as more effective even by smokers),
- the content of the accompanying text warning,
- the attribution of the warning (Ministry of Health or Syndicate of Physicians or others).

Health warnings and messages that should address different issues related to tobacco use:

- harmful health effects
- the impact of exposure to tobacco smoke
- advice on cessation
- the addictive nature of tobacco
- adverse economic and social outcomes
- impact of tobacco use on significant others.

Objectives of our study

To test various pictorial warnings and text warnings with three target populations in Lebanon.

a. Students in schools
b. Students in universities (18-24 years)
c. Adults (25-65 years)

Methodology

Initial phase: preparation of the pictorial health warnings

- Review of the [www.tobaccolabel.ca](http://www.tobaccolabel.ca)
- Identify from the website different possibilities
- Met with graphic designer
- Met with a group of tobacco control expert from NTCP and with communication and health education expert
- Seven different themes and accompanying text messages and/or graphic health warnings were identified to be tested
Methodology 1

Initial phase: preparation of the pictorial health warnings

- the themes include:
  1. impact of second hand smoke (pregnancy and in general) – university, adults and schools
  2. long term health impact (heart disease, lung cancer, vascular disease) – university, adults and schools
  3. short term health impact (teeth color, clothes smell - for adolescents) – school and university
  4. reproductive health impact (impotence) – university and adult
  5. dependence – university, adult
  6. cessation - university and adult
  7. financial loss university and adult

- Pilot tested the pictures

Pictorial warnings on cigarettes packs tested with school students

Methodology 2

Survey items

- Include measures of:
- Messages related variables
- Impact related variables
- Demographics variables
- Theories referred to:
  - Communication Theories: impact (effectiveness), self efficacy (confident/feel capable)
  - Behavioral change theories: attitudes and intentions
  - Health believe model: intention (for quitting or not to start, remain quit)
Ethics

- IRB approval was sought prior to embarking on this study to enhance beneficence, respect for persons, autonomy, and justice.
- Approval of the MEHE
- Consent of school principal
- Consent of parents
- Assent of the student
- Information sheet

Results
Intention not to start smoking / try to quit smoking compared to the current warning

Confidence that will not start smoking / can quit smoking compared to the current warning

Challenges/limitation
- Consent of school
- Data collection timing: exam period
- Length of the questionnaire
- Linking the pictorial to the questions
- Consent of parents
- Data collectors and data entry personnel
- Reach the needed numbers

Conclusion
- This research is the second that we are aware of to test pictorial warnings with youth in school setting.
- Finding need to be combined with the finding from universities and adults to:
  - Inform policy related to health warning labels on cigarette packs in Lebanon
  - Increase the possibility that once a law is issued, its implementation is in line the findings.
- Health warning labels on cigarette packs in Lebanon will achieve the desired result of enhancing intention to:
  - Quit and actual quitting
  - Intention to remain smoke free for those who do not yet smoke
  - Reduce uptake of cigarettes by youth

Acknowledgement
- Funders: URB; AUB and ASH international
- Data collectors and data entry personnel
- Epidemiologist
- All students who gave of their time to engage with us in this research
References

   Washington: Human Development.
3. Warren CW, Jones NR, et al. (2008). Tobacco use and cessation counseling: cross-country data from the 
   Control, 17(4): 238-247.
   Control, 17(4): 238-247.
   accessed March 29th 2009.
7. World Health Organization, Conference of Parties 3: Elaboration of guidelines for implementation of 
   Integrated Behavioral Model. Chapter 4 in Glanz K, Rimer BK, Viswanath S. (eds). Health Behavior and 