

# Global Tobacco Research



## Yesterday

- By the 1960s, evidence of the adverse health effects of cigarette smoking was undeniable. By 1980, evidence of the burden of tobacco related illnesses in low- and middle-income countries (LMICs) began to emerge.
- Since 1980, LMICs have faced a rapidly escalating epidemic of tobacco use due to many factors, including globalization, urbanization, and demographic shifts in populations.
- Historically, research and prevention efforts were primarily focused on developed countries, where the tobacco epidemic was well established. There were few coordinated global efforts to address tobacco control research and practice.

## Today

- Today, science-based research confirms that all tobacco products, including cigars, smokeless tobacco, bidis (a thin, hand-rolled unfiltered cigarette made with sun-dried tobacco), and waterpipes are hazardous. Additionally, the addictive nature of tobacco and the harmful effects of exposure to secondhand smoke on nonsmokers are clearly established.
- Tobacco use is one of the gravest public health challenges the world has ever confronted. More than five million people die of tobacco-caused illness each year – an average of one person every six seconds – and tobacco use accounts for 10% of adult mortality globally. Because tobacco-related disease strikes people in the prime of their working lives, it also negatively impacts economic development.
- Tobacco use is increasing in LMICs, which will bear the brunt of the tobacco epidemic in the 21st century. Without a significant shift in worldwide prevalence patterns, smoking is projected to cause roughly eight million deaths annually by 2030; notably, more than 80% of these deaths will occur in LMICs.
- Women now comprise 20% of the world's more than one billion smokers. In addition to tobacco-related cancer, heart disease and respiratory disease that

affect both genders, tobacco also causes additional female-specific cancers and negatively affects pregnancy and reproductive health. Understanding and controlling the tobacco epidemic among women is a critical part of the tobacco control research agenda.

- The vast majority of smokers begin using tobacco products well before 18 years of age. Adolescent smoking is a major concern in both the developed world and LMICs. Therefore, the development of effective youth interventions is essential in controlling the tobacco epidemic.
- Successful implementation of tobacco control strategies is informed by scientific evidence. However, a major obstacle to tobacco control in LMICs is the lack of capacity for local surveillance, research, and evaluation of interventions. In addition, globalization of the tobacco epidemic requires coordinated global health efforts and collaboration between researchers from high-income countries and their counterparts in LMICs.
- The International Tobacco and Health Research and Capacity Building Program ([http://www.fic.nih.gov/programs/research\\_grants/tobacco/](http://www.fic.nih.gov/programs/research_grants/tobacco/)) addresses the critical role of research and local research capacity in reducing the burden of tobacco consumption in LMICs and the need to generate a solid evidence base that can inform effective local tobacco control strategies and policies. The program supports epidemiological and behavioral research, as well as prevention, treatment, communications, health services and policy research.

## Tomorrow

By training the next generation of scientists, forging research partnerships, and creating a global network of scientists, NIH will continue to make an important contribution to global tobacco control efforts. NIH will support research that addresses key priority areas in tobacco control and build research capacity in LMICs. For example:

- Researchers at the University of Alabama at Birmingham are collaborating with Brazilian scientists to develop a Network for Tobacco Control among Women in order to promote gender-relevant tobacco control efforts among Brazilian women. The "Network" is intended to reduce tobacco use and exposure to environmental tobacco smoke among Brazilian women, and to develop a cadre of well trained researchers in tobacco control.
- In Delhi, India, researchers are testing the efficacy and cost-effectiveness of a comprehensive, community-based behavioral intervention for tobacco cessation among disadvantaged youth living in low income communities. Studies such as this can also inform efforts to curb adolescent smoking in the U.S.
- Researchers in California are working with Turkish scientists to design and evaluate a text messaging-based smoking intervention that harnesses mobile technologies adopted by adult smokers in Turkey. Given the widespread use of mobile phones, evidence from studies that utilize such technologies to promote behavior change can be utilized in the design of interventions in the US and other countries around the world.

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