

interest around the world as it flew through the Internet, it disappeared and only reappeared when the reports were published or another lawsuit was filed.

If the institutional arrogance and exploitation that made the research possible are not to be repeated in new contexts, then the studies cannot be remembered merely as the “bad old past,” and pressure for reparations should be exerted now. CDC did provide more money to Guatemala for STD care after the story became public, but their case history is short and buried somewhere in another report. The presidential bioethics commission wrote two reports and argued, somewhat tentatively, for a study “to determine if there is need for a national system of compensation or treatment for research-related injuries,” as other bioethics reports and codes have called for repeatedly since the 1970s.⁶

Nothing else to compensate the victims has happened, even though determining exactly who all the victims are is difficult. One lawsuit lost on narrow legal grounds, and another has gone after the universities whose

researchers supported the study and the drug company that supplied the penicillin. The latest lawsuit, filed in December 2015, at the Inter-American Commission on Human Rights by the Archdiocese of Guatemala, is against the United States and Guatemala for “human rights violations and crimes against humanity.” As civil rights attorney Robert Garcia has argued, “Apologies are not good enough. Truth and reconciliation require treatment, compensation, and restorative justice.”⁷ The American Public Health Association should stay aware of this lawsuit, add to its support, suggest its members write, talk and teach about this, and keep the pressure up in the public for a monetary settlement to the victims.

Additionally, we need to consider “restorative history.” In 2013, the American Sexually Transmitted Diseases Association held an open discussion and voted to take Thomas Parran’s name off their lifetime achievement award because he was the US Surgeon General (1936–1948) most associated with the campaign against syphilis who supported the studies in Guatemala and Tuskegee.

The University of Pittsburgh also closed down its Cutler lectures that were funded by his friends and family. Reputations that are damaged forever in historical memory can be a form of justice, but just labeling these men as “infamous” or “immoral” is too simple.

It is way too easy to tell the history of the Guatemala and Tuskegee studies, as research melodramas filled with bad guys, hapless racialized victims, imperial power, and an ancient past before regulations. We need to understand why those who supported the research thought it was right to do so under the exigencies of the need for knowledge. We must consider why the Guatemalan authorities, as with the leadership at Tuskegee Institute, were willing to let this happen in a resource-poor setting. We have a moral responsibility to honor the victims of the Guatemala studies by making sure public health communities never forget what happened through restorative history as we fight for restorative justice through compensation. We must consider how easy it can be to be caught up in our own research, and fail to see the harms we may be

causing that can last for generations in memory and meme, or perhaps worse, are forgotten. **AJPH**

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REFERENCES

1. Reverby SM. *Examining Tuskegee: The Infamous Syphilis Study and its Legacy*. Chapel Hill, NC: University of North Carolina Press; 2009.
2. Rodriguez MA, Garcia R. First, do no harm: the US sexually transmitted disease experiments in Guatemala. *Am J Public Health*. 2013;103(12):2122–2126.
3. Presidential Commission for the Study of Bioethical Issues. “Ethically impossible” STD research in Guatemala from 1946–1948. Available at: <http://bioethics.gov/node/654>. Accessed February 1, 2016.
4. Magnuson HJ, Thomas EW, Olansky S, Kaplan BI, De Mello L, Cutler JC. Inoculation syphilis in human volunteers. *Medicine*. 1956;35(1):33–82.
5. National Archives. Available at: <https://www.archives.gov/research/health/cdc-cutler-records>. Accessed February 1, 2016.
6. Presidential Commission for the Study of Bioethical Issues. *Moral science: protecting participants in human subjects research*. Available at: <http://www.bioethics.gov/node/558>. Accessed February 1, 2016.
7. Archdiocese of Guatemala files international petition against US and Guatemala for human rights violations and crimes against humanity STD experiments. Available at: <http://www.cityprojectca.org/blog/archives/41463>. Accessed January 30, 2016.

Tobacco Control: How Are We Doing?

Follow-up on: Warner K, Sexton D, Gillespie B, Levy D, Chaloupka F. Impact of tobacco control on adult per capita cigarette consumption in the United States. *Am J Public Health*. 2014;104(1):83–89.

The tobacco epidemic still looms large as one of the greatest human-created threats of all time.¹ In the last century alone, a staggering 100 million people lost their lives to it¹, and in this century—unless something changes drastically—a billion people could die needlessly or be

plagued by disability. To avoid this calamity, a broad range of policy, public health, and health service interventions must be employed in an orchestrated manner. In this journal, on the 50th anniversary of the first surgeon general’s report on smoking and health, Warner et al. analyzed the impact of tobacco control efforts on US per capita cigarette consumption, concluding that these efforts represent a major public health victory.² The war on tobacco-related death and disease is of course

a global one, and the success of high-income nations must be replicated.

Given the steady reduction in smoking rates in most countries, there is much to be optimistic about. However, in many middle- and low-income nations where

usage rates were previously all on the rise, we must anticipate that the tobacco industry will endeavor to maximize its market reach and thwart the new policy efforts of civil society. Although smoking rates worldwide may be falling, the sheer number of smokers globally is still on the rise, driven by overall population growth and a handful

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of populous nations where rates are still rising, most notably China.¹

Thanks to the passage of the Framework Convention for Tobacco Control, now ratified by 180 nations³—although sadly not the United States—progressive work worldwide is changing policies and truncating the growth in smoking rates. This is the only path that can avert the loss of a billion lives this century short of an end game that makes tobacco illegal.

The efforts of Bloomberg Philanthropies and the Gates Foundation in partnership with the Campaign for Tobacco-Free Kids, as well as those of governments and nongovernmental organizations around the world, represent a true public-private model that may turn the tide on the global tobacco epidemic. In just one decade, we have moved from a world in which smoking rates were increasing to one in which they are falling in most countries. Levy et al. estimated that, from 2007 to 2010 alone, 7.5 million lives were saved by initiatives related to the framework convention,⁴ paralleling the US tobacco control progress described by Warner et al.

ENHANCING CESSATION AND REDUCING INITIATION

The strongest tools for promoting cessation are increasing the price of cigarettes, passing comprehensive clean air laws, and facilitating access to cessation through promotion and quit services. Access to cessation services is slowly rising, but, for a variety of reasons (e.g., competing health priorities), few low-income countries support cessation with evidence-based approaches.¹

As with cessation, price, clean indoor air initiatives, marketing restrictions, and media campaigns are also key in reducing the chances that adolescents and young adults will initiate smoking. Although rates of youth smoking are at their lowest levels in developed nations, new forms of combustible and noncombustible tobacco products are joining the mix of products used. We have made considerable progress in reducing the prevalence of tobacco advertising in traditional venues such as television and billboards, but promotion of smoking still persists in blockbuster Hollywood movies seen here in the United States and exported globally. Although smoking imagery has been cut in half in youth-rated films, the United States remains a principal exporter of smoking imagery in film and television, reaching and adversely affecting millions of young people worldwide.

E-CIGARETTES: THE NEWEST BATTLEGROUND

The introduction of electronic nicotine delivery systems has spawned a heated debate among tobacco control advocates, scientists, and public health leaders around the world. The debate is hampered by a pair of critical problems: we have no crystal ball to predict over time how this new technology will evolve, particularly given the role of the tobacco industry in its growth, and—at least for now—we have no high-quality, large-scale clinical trials demonstrating the relative efficacy of these products in helping smokers quit. The latter data are sorely needed, and the fact that these trials have not occurred may one day be

blamed for a considerable loss of life.

Public Health England has concluded that many UK smokers have quit and are quitting with e-cigarettes, and one underpowered but otherwise well-designed trial and a number of observational trials have shown e-cigarettes to be as effective as nicotine replacement therapy. Notably, in one study e-cigarettes were far more likely to be recommended by users to others as a quit aid than nicotine replacement therapy.⁵

Understandably, initiation of e-cigarette use among young people is sounding alarms; however, what this pattern implies remains complicated by the steep downward trend among youths in combustible cigarette use.⁶ It is feasible that e-cigarettes are in part replacing combustibles as starter products among youths who would largely have tried combustibles in any event. Young people who describe themselves as “not planning to smoke” are trying e-cigarettes. This finding may not be as problematic as it appears given that many youths transition to being open to smoking in middle school. The FDA’s recently proposed legislations will rightly restrict youth access to e-cigarettes, though the full impact of this policy will take time to evaluate once implemented.

E-cigarettes likely represent a substantial order of risk below that of combustible products and appeal to many consumers, and thus have a high potential to displace combustible tobacco, particularly if tax policies are established to encourage their use in lieu of combustible products.⁷ The existence of a noncombustible, nonmedicinal alternative to combustible cigarettes could well be the game changer that accelerates the demise

of deadly combustible cigarettes, especially if nations have the fortitude to ban combustible tobacco.

THE LOOMING TSUNAMI OF DEATH

Deaths from lung cancer have now eclipsed AIDS deaths globally and will continue to grow until the smoking epidemic long subsides.⁸ In many developed nations, lung cancer deaths are still rising among women and have already peaked among men. Thankfully, we now have a cost-effective, diagnostic intervention—computerized tomography scanning—to both save lives from lung cancer through early diagnosis and offer routine annual opportunities to persistently promote cessation among those who still smoke. The US Preventive Services Task Force has given a B rating to computerized tomography screening for early lung cancer diagnosis, and millions of current and former US smokers are eligible under the narrow guidelines.

Computerized tomography annual screening of current and former smokers will identify more people with stage 1 cancers over time as greater numbers are routinely screened under the guideline. This is true because if people are screened annually as recommended by the guideline, few of the cancers will progress to stage 2 and beyond, and instead they will be diagnosed while in stage 1 where the chances of being cured are greatest. The price of screening will decline as use rises, and if we approach screening correctly, many more people will survive through early diagnosis and quitting smoking.

Sadly, uptake has been slow owing to a variety of factors such as misunderstanding concerning the radiation dose, which is low and falling with new generation scanners and concerns regarding false alarms (those findings that turn out not to be cancer but require additional testing) have now greatly decreased as a result of improving technology and improvements in the way protocols recommend how these findings are managed. Similarly as a result of these efficiencies fewer cancers are being missed. This trend should continue to improve over time as screening becomes more accepted and more knowledge is accumulated. Finally, a bias against “smokers” may indeed be a malady of some health professionals themselves, who daily offer costly diagnostic tests and treatment to people for whom a “behavioral” component contributed to an illness yet fail to make referrals for life-saving lung cancer screening. Current and former smokers—the latter accounting for the majority of new lung cancer diagnoses—deserve the same access and life-saving care as everyone else, including support in quitting an addiction considered by experts as uniquely recalcitrant.

The world has the opportunity to swiftly truncate the epidemic of tobacco-related death and disease by applying the successful efforts of the United States and other nations on a global scale. Hopefully it will. **AJPH**

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REFERENCES

1. Eriksen M, Mackay J, Schluger N, Gomeshtapeh FI, Drope J. *The Tobacco Atlas*. Atlanta, GA: American Cancer Society; 2015.
2. Warner KE, Sexton D, Gillespie B, Levy D, Chaloupka F. Impact of tobacco control on adult per capita cigarette consumption in the United States. *Am J Public Health*. 2014;104(1):83–89.
3. Framework Convention Alliance. Latest ratifications of the FCTC. Available at: <http://www.fctc.org/about-fca/tobacco-control-treaty/latest-ratifications>. Accessed April 5, 2016.
4. Levy DT, Ellis JA, Mays D, Huang A-T. Smoking-related deaths averted due to three years of policy progress. *Bull World Health Organ*. 2013;91(7):509–518.
5. Bullen C, Howe C, Laugesen M, et al. Electronic cigarettes for smoking cessation: a randomised controlled trial. *Lancet*. 2013;382(9905):1629–1637.
6. Truth Initiative. The truth about electronic nicotine delivery systems. Available at: http://truthinitiative.org/sites/default/files/The_Truth_About_Electronic_Nicotine_Delivery_Systems.pdf. Accessed April 5, 2016.
7. Chaloupka FJ, Sweanor D, Warner KE. Differential taxes for differential risks—toward reduced harm from nicotine-yielding products. *N Engl J Med*. 2015;373(7):594–597.
8. World Health Organization. Top 10 causes of death. Available at: <http://www.who.int/mediacentre/factsheets/fs310/en>. Accessed April 5, 2016.

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