

VIEWPOINT

“Independence” Day

Jay Lemery, MD, FACEP, FAWM, Richard J. Jackson, MD, MPH, AIA (Hon), ASLA (Hon)
Aurora, CO; and Los Angeles, CA

INDEPENDENCE, 2020?

On July 4th, 2020, the United States of America will be a net oil and gas exporter, according to energy industry mavens. Patriots from both sides of the aisle are keen to declare a new era of American “energy independence,” invoking the Spirit of ’76 as the United States again discards the yoke of overseas tyranny, albeit from a different kind of taxation: paying for energy from distant lands. Huzzah! Free from oily foreign entanglements and compromised American values!

There has been a surge in a national sentiment that technological salvation does indeed lie within and that domestic development of biofuels and hydraulic fracturing will equate to a 21st-century Declaration of Independence. But sadly, this is far from geopolitical reality. Global integration of energy exchanges allows for volatility to enter the marketplace from anywhere, regardless of where we buy oil or other fossil fuels, meaning the United States will remain vulnerable to unpredictable oil price spikes from faraway places. Current instabilities will endure “post-independence.” Uncertainty in the oil-producing regions of the world will still cost Americans at the pumps, and the United States will still be pressured to engage overseas as a force for market stability.

Unfortunately, policymakers are blinded by the glimmer of subterranean gold, their cost-benefit acumen lost in a cloud of methane. Sensible citizens who would have otherwise worried about community health and environmental protection are easily convinced to start drilling when told that a few extra million barrels of oil per day will rid us of the vice of foreign energy dependence.

Even the most optimistic reports state that, at current consumption rates, domestic oil production

will not achieve more than 75% of domestic demand by 2030 (compare that to 85% in 1973—remember how that turned out?). But before we pull on our cardigan sweaters and get in line at the local gas pump, there is another factor at play—the demand side of the equation. This is where social decision making is a driving force and where the medical community is supremely positioned to play a role. It is here that physicians can reframe the conversation within the context of health and help to clarify the detrimental risks from accelerating a carbon-based energy policy. It is time for the nation’s white coats to play Paul Revere and forewarn America about the assault on its very health.

COMMON SENSE, 2015

Let’s start with the American psyche. Consider the current national discourse on energy—there is a gap of understanding across the spectrum of public opinion about long-term threats and the imperative for change. Trading volleys of info-bytes have become the accepted norm for discourse, packaged in abstract sound clips: “Clean Coal!” “Parts per million of sulfur dioxide!” “Save the Whales!” Meanwhile, meaningful debate is pinned in the trenches by a barrage of platitudes. Enter the “quick fixes” of technology and infusions of cash. The promises to keep the party going by mobilizing never-before imagined domestic pockets of energy for domestic consumption are temptations too good to resist. They come in many forms and even become symbolic patriotic flags to rally around in their own right—*Keystone pipeline, join or die!*

But there is a much larger metaphorical “enemy.” By 2050, the global population will be just over 9 billion people—a 25% increase in just 40 years. That means more factories and automobiles, more

toxins and pollutants, and increased stress on clean water and arable land, all factors that are intricately coupled to human health and the resiliency of healthy ecosystems. The environment's long-term vitality will certainly not lie in hyper-technology, which is ultimately unsustainable, and it is a mistake to think that our fate will be separate from the fate of the earth's ecosystems.

The reality is that politically “hot” energy sources such as biofuels and hydrofracking are merely doubling down on the notion that continued exponential growth in energy consumption is possible. This is the real struggle for independence, and it is here that proponents of a robust public discourse must make a stand for a grand strategy for long-term well-being. The rallying militia must be comprised of the health care providers of the nation, using their patient communication skills to effectively articulate the link between climate science and health.

At a time when the public discourse is failing, science communication may be the only effective counterpunch to the ambrosia of quick fixes and short-term return on investments. The deleterious health effects from anthropogenic climate change are increasingly apparent and accelerating at an ominous pace. Extreme weather exacerbates chronic disease through heat waves and threatens homes through floods and wildfires. Infectious disease textbooks are being rewritten as tropical diseases are encroaching on populations in temperate latitudes. Droughts are threatening food and water security across the planet, acting as threat multipliers to vulnerable regions already mired in poverty and lacking good governance.

Consider the opportunity cost: without basic scientific knowledge, it is difficult for laypeople to distinguish between scientific consensus and legitimate

areas of scientific uncertainty and to be meaningful participants in civil discourse. It is likewise impossible for policymakers to gain broad support to implement ambitious energy policies—often vulnerable to manipulation by a vocal, partisan minority. That can lead to an exaggerated sense of confusion, breed hopelessness, and undermine an imperative for action. With an absence of a sober understanding of the costs and benefits, decisions are undercut by a fear of commitment to any particular course of action, leaving inertia or paths of least resistance as the best rational choice. As educators and respected interlocutors, health care providers can play a role in a cultural shift—and caution that more guzzling of the technological Kool-Aid is not a sound energy policy.

IN PURSUIT OF HAPPINESS

We are entering another era of a boomtown mentality, and history is replete with boomtown's broken promises and downstream costs, typically borne by future generations. More economic volatility and more health vulnerability hardly sound like the energy revolution we crave. It is time now for the medical community to actively engage in our national discourse to say that technology has its limits, and like any addiction, it not only undercuts our own self-determination but also compromises our posterity. By crafting an energy policy to account for such risks, we can again invoke our nation as a “shining city on a hill” and as a model for a new revolution in the anthropogenic era. To succeed in this task would indeed be a true declaration of independence for the United States and a shot heard around the world for enhanced global health.