Nature Rx: Nothing New Under the Sun?

See also Crnic and Kondo, p. 1371.

Crnic and Kondo (p. 1371) examined two public health interventions, separated by more than a century, that took very similar approaches to very different arrays of health issues affecting urban children. The clear similarities raise a perennial question: is history repeating itself? If so, is that because we failed to learn history's lessons, or does history inevitably follow a cyclical pattern regardless of our attentiveness to its lessons? Perhaps the repetition is mere illusion, no more than the form of story the authors chose. These meta-historical questions may best be answered by a robust exploration of the yawning gulf of decades between the two moments Crnic and Kondo examined. Of course, a full accounting is far beyond the scope of their short comparative essay, and although it is even less reasonable to expect this article to fill that void, I offer, in the crudest outline, some of the most salient factors reinforcing the turning away from nature-centered approaches to health a century ago, a glimpse at factors sustaining that indifference for more than seven decades, and the changes in the last 30 years that rekindled interest in the power of nature contact in health promotion.

NATUREPHILIC HEALTH PROGRAMS

It is useful to keep in mind that from the perspective of the years between—the heyday of the so-called "Golden Age of Medicine"—the naturephilic health programs of both the early 20th and early 21st centuries are pure pseudoscience—the earlier period with its outdated "theories" of miasmas and bad smells and its uninformed or uncritical attraction to the healing properties of fresh air and sunshine, the latter period with its dismissal of specifically targeted interventions derived through the calculus of Kochian proof of causality, a "postmodern" era increasingly reliant upon epistemologies of evidence from the social sciences, eager to embrace the chaos of symptom-based conditions.[1] Golden Age absolutists, in short, would see both responses drenched in sunshine, but groping in the darkness of superstition and scientific imprecision.

"Nature Rx: Reemergence of Pediatric Nature-Based Therapeutic Programs From the Late 19th and Early 20th Centuries" is strongest on the phase-out of nature-based interventions almost a century ago, the years when "technology . . . replicated nature, and being outdoors was no longer medically necessary" (p. 1375). The authors correctly point to the rise of clinical medicine and faith in big science. But other historical forces, harder to attribute directly, were at play in taking the wind out of environmental therapeutic programs. Changing urban demographics played a major role. After decades of explosive growth around the turn of the century, city populations rose at a much lower rate, easing some of the crisis that drove so much Progressive Era health activism. More difficult to gauge is the two-fold impact of immigration restrictions after World War I, even as internal migration of rural African Americans reshaped the racial demographics of American cities north and south. Did one ease pressure while the other created different difficulties for proponents of free services to children and mothers? Economics and national priorities played an even greater role. The expansive energies of the Progressive Era and 1920s flagged with the economy's crash. The Great Depression, followed by the Second World War, stole focus and reframed priorities away from ameliorative or preventive programs.

One factor that should have kept environmental interventions such as Children's Seashore House or NaturePHL in business was the persistence of environmental threats in the urban environment. Even as mortality rates continued to improve in the interwar years, key environmental risk factors worsened. Despite some success with nuisance smoke abatement, new and deadly chemicals were added to the atmospheric stew each decade.[2] The home was no haven; these were the years of peak childhood fatalities caused by environmental lead, even without the additional threat tetraethyl lead consumption would bring in the 1950s and 1960s.[3] More nature surely would have helped.

AFTER WORLD WAR II

A different set of factors came into play in the prosperous decades after World War II. Biomedical progress continued, amped up by unprecedented federal investment in research, hospital building, and medical training. At the same time, the nation spent heavily in parks, recreation programs, and school playgrounds, investments that facilitated increased nature contact. Great Society programs for school nutrition and food stamps reduced childhood hunger.[4] And although the leaders of the Golden Age of Biomedicine might minimize these programs' relevance to medical science, these and other government projects dwarfed the magnitude and reach of an earlier era's efforts

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to promote children's access to nutritious food, exercise, fresh air, and sunshine. On that particular front, hard-fought victories in pollution control in the last decades of the century meant there was more sunlight and cleaner air for city children to breathe. A generation of progress in cleaning up urban environments had a significant impact on human health.

It is easy to view this era nostalgically—kids on bikes, long days playing stickball or skipping double Dutch in the streets, Little League or pickup ball at the park, moms telling their kids to "go out and play and don't come home 'til dinner," long evenings on the stoops. These images mask less-flattering realities—growing rates of crime and drug abuse, unrelenting poverty, persistent environmental dangers whose burdens fell hardest on the poor and non-White minorities. But, for all of life's hardships, Americans in the third quarter of the 20th century spent far more of their time outdoors, face to face with their neighbors, and were far more active than now.[5] In 1970, Soupy Island was far from the important refuge it had seemed in 1920.

FREON AND SILICON

So how did we get to the point where such programs make sense once more? There are two distinct parts to that answer: why and how did we turn from the sun, and what is it about the modern burden of health that makes nature cures attractive again? The first question is fairly obvious, almost elemental: much of the responsibility rests with the combined impact of freon and silicon. Freon produced the climate-controlled interiors where we spent more and more time; silicon provided the computer technologies that keep us entertained and connected within our air-conditioned cubicles. The shifting burden of health is largely a product of successful biomedical and public health responses to yesteryear's health burdens: pharmaceutical or surgical interventions reduced fatal infectious diseases and acute conditions; improved hygiene and nutrition lightened the burden of diseases of crowds and poverty. But our new sunless, climate-controlled, and digitally enhanced built environments also contributed to a new epidemiological landscape dominated by chronic conditions, many tied to lifestyle, often complex with overlapping or conflicting risk factors and contested etiologies. They are difficult to diagnose, impervious to straightforward remedies, and seemingly intractable even to complex ones—in short, poor candidates for biomedicine's traditional toolbox.

Today's nature programs add new tools to the mix, though, as Crnic and Kondo note, their advocates must "account for the experiential knowledge and holistic benefits of nature-based programs that are not easily quantified" (p. 1372). Nature's promoters then and now are better at finding associations between nature contact and health outcomes than at finding the underlying mechanisms for those outcomes. In part this is because the programs focus at key points where social determinants shape health. Prescribing nature may increase the time children spend outdoors and their physical activity, but the programs themselves build social capital, forge new relationships, and expand patients' knowledge of the physical and social geography of their worlds. Tweaking the social determinants of health this way may not produce the precisely quantifiable results of a vaccination campaign or a successful campaign to reduce environmental toxicants. This lack of accountability to conventional biomedical proof is just one trait today's programs share with their counterparts a century ago.

NOTHING NEW?

Yet, for all their similarities, today's nature-based interventions do not mark a return, a recapitulation, or history repeating itself. From a longer perspective, they are merely a modern expression of ancient traditions of thinking about bodies in environments, dating back at least to Hippocrates's treatise *On Airs, Waters and Places*. They are public health and medicine responding to the problems they are given with the tools at hand, not those in some promised future. Both eras examined in "NatureRx" fell on the cusp of a new age of fantastic promise that offered little new to the present. A century ago, old miasmatic ideas were expected to make way for the grand but as yet unfulfilled promises of germ theory. Today's promises—of what? Genomic medicine? Precision medicine? Bionics?—offer nothing to the clinician faced with yet another young patient already prediabetic and mildly hypertensive. Growing evidence for nature contact's benefits make the decision to "prescribe" time in green sun-lit spaces a sound one. Now, as a century ago, health specialists in a time of bold but unfilled promises for the future turn to nature for its cures. AJPH

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CONFLICTS OF INTEREST

The author has no conflicts of interest to declare.

REFERENCES

1. Jones DS, Podolsky SH, Greene JA. The burden of disease and the changing task of medicine. *N Engl J Med*. 2012; 366(25):2333–2338.

2. Landrigan PJ, Fuller R. Global health and environmental pollution. *Int J Public Health*. 2015;60(7):761–762.

3. Warren C. *Brush With Death: A Social History of Lead Poisoning*. Baltimore, MD: Johns Hopkins University Press; 2000: 152–177.

4. Hoynes H, Schanzenbach DW, Almond D. Long-run impacts of childhood access to the safety net. *Am Econ Rev*. 2016;106(4):903–934.

5. Young T. *Heading Out: A History of American Camping*. Ithaca, NY: Cornell University Press; 2017:300.