# A Mother's Responsibility: Women, Medicine, and the Rise of Contemporary Vaccine Skepticism in the United States

ELENA CONIS

SUMMARY: Federal efforts to expand childhood immunization coverage in the United States in the 1970s relied heavily on the cooperation of mothers and were concurrent with a major social movement of the past century: the women's movement. This article examines popular and scientific immunization rhetoric of the 1970s and 1980s through a feminist lens, to demonstrate how changing ideas about the social and economic roles of women in this period shaped, on the one hand, official vaccination recommendations and, on the other, women's acceptance of vaccines recommended for their children. Notably, the feminist and women's health movements changed the way women related to and perceived doctors, medical advice, and scientific expertise, with important implications for how some women perceived vaccines and their attendant risks. The influence of feminist ideas on the vaccine doubts that took shape in this period reveal the complexity of the ideologies informing the rise of contemporary vaccine skepticism.

KEYWORDS: antivaccination, vaccination, pertussis vaccine, feminism, women's health, children's health

In recent years, as childhood vaccination requirements have become a hotly debated issue in the United States, historians and health professionals alike have pointed to a 1982 NBC broadcast as the spark that set

Thanks to Elizabeth Watkins and Dorothy Porter, who provided invaluable feedback on the earliest drafts of this article, and to the anonymous reviewers for the *Bulletin of the History of Medicine*, for their trenchant comments and critiques. Special thanks to Peggy O'Mara and Sarah Patamia at *Mothering* magazine (now www.mothering.com), Albert Nason at the Jimmy Carter Library, and Barbara Loe Fisher for access to the past. The research for this article was made possible in part by support from the Program in the History of Health Sciences at the University of California, San Francisco, and from the Rollins School of Public Health, Emory University.

off the conflagration of contemporary vaccination resistance.<sup>1</sup> In NBC's hour-long investigative report, *DPT: Vaccine Roulette*, reporter–producer Lea Thompson informed a national audience that the widely administered childhood vaccine against pertussis had the potential to cause encephalitis, brain damage, and even death.<sup>2</sup> Public outcry ensued. In the months that followed, Congress convened special hearings on the vaccine, parents banded together to demand a safer vaccine for their children and greater government oversight of vaccine quality, and doctors despaired that pertussis vaccination rates would plummet, bringing the nation to the brink of an inevitable epidemic.

Although *Vaccine Roulette* may be rightly singled out as a key event spawning contemporary vaccine resistance, a deeper consideration of the forces that led to both the report and the nation's response to it has been missing. The investigative format of *Vaccine Roulette* owed to the influence of the consumer movement of the previous two decades; the report's critical eye toward organized medicine reflected the concurrent trend toward increased public scrutiny of doctors and health officials. Importantly, however, *Vaccine Roulette* was also one of several vaccine critiques from the late 1970s and early 1980s that bore the imprint of the feminist and women's health movements. Viewed in this light, the broadcast can be regarded not only as the beginning of a contemporary movement, but also as the endpoint of an episode in which a confluence of shifting gender norms and the expansion of state involvement in childhood vaccination led to a specific set of vaccine recommendations as well as critiques.

This article traces how ideas about motherhood and the changing social, civic, and economic roles of women were reflected in the vaccination discourses of the 1970s and 1980s in order to shed light on the overlooked connection between the rise of contemporary vaccine skepticism and the women's movement. Government-led efforts to expand childhood immunization in the 1960s and 1970s routinely emphasized maternal responsibility for children's immunization status. But as the 1970s wore on, the centrality of maternal engagement to federal immunization goals increasingly came into conflict with the tenets of second-wave feminism.

<sup>1.</sup> See for instance James Keith Colgrove, State of Immunity: The Politics of Vaccination in Twentieth-Century America, California/Milbank Books on Health and the Public (Berkeley: University of California Press, 2006), 211–12; Robert Johnston, "Contemporary Anti-Vaccination Movements in Historical Perspective," in The Politics of Healing: Histories of Alternative Medicine in Twentieth-Century North America, ed. Robert Johnston (New York: Routledge, 2004), 259–86, 263; Paul A. Offit, Deadly Choices: How the Anti-Vaccine Movement Threatens Us All (New York: Basic Books, 2011), 7–8, 45–56.

<sup>2.</sup> DPT: Vaccine Roulette, WRC-TV, Washington, D.C., April 19, 1982.

Feminism and the women's health movement raised women's awareness about the risks of drugs and abuses of power within the field of medicine, and this had direct implications for how some mothers, in particular, began to view vaccines recommended for their children. These mothers were not necessarily all feminists, and health feminists did not necessarily question vaccines; nonetheless, from the 1970s into the 1980s a feminist critique of medicine was increasingly apparent in vaccine skeptical rhetoric and productions, including *Vaccine Roulette*.

Examining *Vaccine Roulette* and contemporaneous critiques in this light also reveals that the social and political ideologies underpinning vaccine resistance in this period are quite complex. A shifting mix of leftist and libertarian ideas informed vaccine critics' complaints and demands. And despite their reliance on feminist-inspired rhetoric, female vaccine critics often emphasized their traditionally defined identities as mothers as they advocated for more information on vaccine risks, greater government oversight of vaccine safety, and the right to make an informed, independent vaccination decision for their children. This approach allied these critics with a long tradition of "maternalist" activism in the United States; it also complicates attempts to classify them as progressive or conservative.<sup>3</sup>

A few historians have pointed out that social movements, including women's movements, gave momentum to vaccination resistance throughout the twentieth century. Michael Willrich, for instance, has noted that women's rights advocates were among those who threw their support behind Progressive Era antivaccinationism.<sup>4</sup> The links among the social movements of the sixties and seventies, broader challenges to the paternalistic authority of science and medicine, and growing popular discontent with respect to vaccines has been pointed out by James Colgrove.<sup>5</sup> But an in-depth exploration of the specific influence of second-wave feminism and evolving gender norms on vaccination policies and reception was not the objective of his scholarship, or of Willrich's. In part, this article picks up where these scholars left off. But it also aims to expand understanding of the role of gender in our nation's vaccine politics more generally.

In addition to examining the relationship between feminism and vaccine resistance, this analysis shows that modern vaccination promotion efforts have rested heavily on gendered assumptions. Vaccination

<sup>3.</sup> On maternalist activism, see for example Amy Hay, "Recipe for Disaster: Motherhood and Citizenship at Love Canal," *J. Women's Hist.* 21, no. 1 (2009): 111–34; Molly Ladd-Taylor, *Mother-Work: Women, Child Welfare, and the State, 1890–1930* (Urbana: University of Illinois Press, 1994).

<sup>4.</sup> Michael Willrich, Pox: An American History (New York: Penguin, 2011), 252–53.

<sup>5.</sup> Colgrove, State of Immunity (n. 1), 187–91, 236.

resistance flared up in the late twentieth century not just because the movements of the New Left, including feminism, offered a new set of tools with which to critique vaccines, but because they spoke specifically to problems with the nation's inherently gendered approach to vaccination promotion. Gendered assumptions have shaped vaccination practices not only when the target infection's risks to a specific gender were made explicit, as in the cases of the rubella and HPV vaccines, examined in depth by Leslie Reagan and Keith Wailoo et al., respectively, among others.<sup>6</sup> Rather, modern vaccination recommendations have generally built on socially determined expectations of women as child bearers, members of the nation's workforce, mothers, and the primary caretakers of their children. In the modern era of vaccination, that is, policies and practices have both implicitly and explicitly recognized and reinforced socially constructed gender norms. In the instances described here, this pattern gave a particular shape to mounting vaccination resistance at the end of the twentieth century.

### A Mother's Responsibility

Late in 1978, First Lady Rosalynn Carter and Health, Education, and Welfare Secretary Joseph Califano addressed HEW's National Childhood Immunization Conference, a gathering of health workers and volunteers involved in the Carter administration's ambitious and unprecedented Childhood Immunization Initiative. Carter and Califano congratulated the assembled health workers and volunteers on their progress to date and urged them to keep working toward the goal of immunizing 90 percent of all children against seven preventable infections by the end of 1979. As Carter and Califano spoke, they stressed the need to reach out directly to parents to inform them of the importance of vaccination, and they emphasized the importance of reaching one type of parent in particular: mothers. Califano told conference attendees they'd be discussing new plans for reaching the mothers of the three million children born each year, to ensure they received the message that vaccines were vital

<sup>6.</sup> See for example Jacob Heller, *The Vaccine Narrative* (Nashville: Vanderbilt University Press, 2008), 57–83; Leslie Reagan, *Dangerous Pregnancies: Mothers, Disabilities, and Abortion in America* (Berkeley: University of California Press, 2010); Keith Wailoo, Julie Livingston, Steven Epstein, and Robert Aronowitz, eds., *Three Shots at Prevention: The HPV Vaccine and the Politics of Medicine's Simple Solutions* (Baltimore: Johns Hopkins University Press, 2010).

<sup>7.</sup> The initiative was unprecedented in marshaling varied federal resources to promote coordinated and sustained immunization of all children, across all states, with all of the federally recommended childhood vaccines.

for their children's health. Carter followed up by telling the crowd that "mothers need to know the crucial importance of shots early in their children's lives."

At the grassroots level, the Childhood Immunization Initiative, launched in early 1977, was indeed carried out largely by women and mothers—members of women's clubs, nursing leagues, and parentteacher associations who volunteered to reach out to other mothers and urge them to vaccinate their children. The Carter campaign's dependence on women volunteers was, by then, a well-established tradition in the history of immunization promotion. From the 1940s through the 1960s, the March of Dimes, the national organization that supported care for polio victims and research on potential cures and vaccines, relied heavily on its tens of thousands of volunteers to raise funds and promote its cause. It was the foundation's countless women volunteers who raised money for polio treatment and vaccine research and helped carry out vaccine field trials in the 1940s and 1950s, imprinting upon American memory the legendary image of mothers marching en masse, collection cans in hand. They were women on hospital boards and parent-teacher associations with "both the time and the passion to work against childhood disease," as well as a culturally informed sense that, as mothers, involvement in such causes was their civic duty.9

Mothers did not exclusively compose vaccination-drive volunteers in midcentury, but they often did so when children were the specific target of such campaigns. The Salk and Sabin polio vaccines that came into use in the 1950s and 1960s were administered in the early years not only to children, but to citizens of all ages. Capitalizing on postwar patriotism, the polio vaccine campaign rallied more than ninety thousand men and women volunteers to staff vaccination clinic days. Men in short-wave-radio-equipped vehicles drove the perishable vaccine from depots to clinics, while women oversaw the clerical duties necessary to vaccinating the population. In contrast, the Carter campaign, which focused exclusively on the vaccination of children, relied on volunteers in a manner that more closely resembled the early days of the March of Dimes, as well as

<sup>8.</sup> HEW Immunization Conference—Mrs. Carter's Remarks, December 12, 1978, Folder: Children, HEW Conference, Childhood Immunization, Box 7, Collection JC-FL, Jimmy Carter Library.

<sup>9.</sup> Jane S. Smith, *Patenting the Sun: Polio and the Salk Vaccine* (New York: William Morrow, 1990), 77.

<sup>10.</sup> Gordon Grant, "Volunteers Will Help Keep Polio Clinics Stocked with Vaccine," *Los Angeles Times*, November 26, 1962, E9.

the seminal statewide vaccination campaign that took place in Arkansas in the early 1970s.

In that campaign, Arkansas First Lady Betty Bumpers and beauty queen Miss Arkansas rallied mothers across the state to spread the word about immunization from door to door and to volunteer at vaccination clinics. 11 The campaign made direct appeals to women's sense of duty and potential for fulfillment as mothers: "Protect These Treasured Moments," stated campaign materials that featured a sentimental illustration of a young mother seated in a rocking chair, her son and daughter nestled at her sides. In the years preceding the Carter campaign, this type of entreaty—to a mother's sense of unique responsibility and love for her children—was popular not just in Arkansas, but across the nation. "[E]very mother who loves her children will get them vaccinated both against rubella and against ordinary measles," wrote medical columnist Walter Alvarez in 1972.<sup>12</sup> Such appeals highlight increasingly apparent tensions between conceptions of motherhood in post-1960s America: as historian Rebecca Jo Plant has noted, modern motherhood may have been an increasingly private affair, but this conception coexisted with a persistent ideology of moral motherhood, which impressed upon mothers a sense of lifelong and exclusive responsibility for the well-being of their children.<sup>13</sup>

A mother's perceived duty to vaccinate her children cut in two different directions. For health officials and politicians promoting vaccination in the 1970s, mothers were often viewed as a ready resource already dedicated to the cause of protecting their children. On the other hand, when children went unvaccinated, mothers were often held culpable and labeled thoughtless, uneducated, and irresponsible. When measles outbreaks erupted across the country in the late 1960s, two years after a nationwide antimeasles campaign, many in the medical and public health community found fault with mothers: mothers who failed to bring their children to clinics, mothers who failed to realize the vaccine was available, and mothers who failed to recognize the new vaccine's importance. In the support of the protection of the prot

<sup>11.</sup> Immunization Project Meeting Agenda, Governor's Mansion, Little Rock, AR, March 8, 1973, Folder: Children's Immunization Program, 2/77–12/78 [2], Box 7, Collection JC-FL, Jimmy Carter Library.

<sup>12.</sup> Walter Alvarez, "Epidemic of Measles Feared," Los Angeles Times, January 6, 1972, F12.

<sup>13.</sup> Rebecca Jo Plant, *Mom: The Transformation of Motherhood* in Modern America (Chicago: University of Chicago Press, 2010), 2–17.

<sup>14.</sup> Ann Landers, "Ann Landers: Consequences," Washington Post, April 14, 1975, B5.

<sup>15.</sup> Stuart Auerbach, "D.C. Has Rash of 261 Measles Cases," Washington Post, February 10, 1970, C1.

Mothers were chastised for mistaking measles for simple colds and for treating it as a "mild" infection. When measles erupted in Texarkana, a city straddling the Texas–Arkansas border, Alvarez blamed it on "unwise" mothers "too poor" or "too ignorant" to vaccinate their children. Even when the fault for low vaccination rates was distributed across multiple parties, the responsibility ultimately rested with mothers: "[T]he unnecessary case of diphtheria, measles, or poliomyelitis may be the responsibility of the state legislature that neglected to appropriate the needed funds, the health officer who did not implement the program, the medical society that opposed community clinics . . . or the mother who didn't bother to take her baby for immunization," noted one group of health officials. 18

It followed, then, that as states attempted to combat outbreaks using the set of new vaccines at hand by the early 1970s, they turned again and again to vaccination promotion efforts that specifically targeted mothers. As Washington, D.C., attempted to stem a measles resurgence in 1970, health officials there implemented a plan to mail immunization reminder notices to mothers three months after their child's hospital birth. 19 New York City health officials worked with local hospitals to identify, at birth, mothers without pediatricians, so they could later be visited by local health station representatives and encouraged to bring in their children for free vaccines.<sup>20</sup> Hospitals were an important gateway to reaching mothers, one CDC official pointed out, because hospitals had birth records of mothers and their children and could easily reach out to those mothers during the first year of their newborn's life.<sup>21</sup> Older children who had escaped vaccination were identified by examination of pediatricians' records. When measles struck New Jersey in 1974, state health officials asked doctors to cull their files for patients in need of immunizations—and then call their mothers. "We want those mothers to get their kids to their doctor as soon as possible," said the state's assistant health commissioner.<sup>22</sup>

<sup>16.</sup> Editorial, "Measles' New Muscle," Chicago Tribune, August 3, 1971, 10.

<sup>17.</sup> Walter Alvarez, "Poverty, Ignorance Halting Vaccination," *Los Angeles Times*, April 19, 1973, G20.

<sup>18.</sup> Harold Schmeck, "Health Strategy for U.S. Urged to Reduce Unnecessary Illness," *New York Times*, March 12, 1976, 47.

<sup>19.</sup> Jonathan Spivak, "Measles Resurgence Sparks New Campaign to Immunize Children," *Wall Street Journal*, February 20, 1970, 1.

<sup>20.</sup> Michael Stern, "Immunizations Lag Called Peril in City," *New York Times*, June 17, 1971, 1.

<sup>21.</sup> Dodi Schultz, "Why Childhood Diseases Are Coming Back," *New York Times Sunday Magazine*, May 7, 1978, 35.

<sup>22. &</sup>quot;645 Measles Cases Reported by State," New York Times, February 1, 1974, 64.

Such plans justified the decision to reach out to mothers as a matter of convenience, and indeed women generally and mothers in particular have long been viewed as a gateway to improved children's health. But in the 1960s and 1970s, efforts to encourage mothers to vaccinate their children—either out of a sense of duty or shame—were embedded within larger conversations about the social and economic roles of women. As medical professionals and health officials debated, beginning in the late 1960s, whether children should be universally vaccinated against measles, rubella, and mumps, an economic argument in favor of requiring vaccines for children gained currency. While some doctors posited that the diseases were "mild" relative to previous vaccine targets (such as smallpox) and mass vaccination therefore unwarranted, others argued that vaccination offered an unprecedented convenience for families with two wage earners. When a child comes down with mumps, argued a Washington state health official, "[a] working mother may have to stay home to care for him and more often than not, two to three weeks later, mumps develop in the susceptible siblings and adults . . . with another week or two of family disability." New vaccines, however, made the potential loss of income associated with disability "preventable and unnecessary." 23 Not only could vaccination protect a woman's economically productive hours, it could also make—or break—her career. In a 1973 column, Alvarez promoted rubella vaccination by telling the tale of a "very intelligent woman whose promising career as a university professor was stopped" because she caught rubella during her pregnancy. Because of her infection, her child was born deaf, and her career hopes were dashed as she devoted her time to her child instead of her work—a fate the vaccine could have reversed.<sup>24</sup>

Alvarez's column was part of a national push to promote rubella immunization, an effort that, as historian Leslie Reagan has shown, reinforced the idea that vaccination was first and foremost a mother's responsibility. Health officials promoted the vaccination of children not to protect children themselves but to protect their mothers, because rubella posed the greatest risk of harm to developing fetuses. In the wake of the nation's 1963–64 rubella epidemic, expectant and potential mothers eagerly

<sup>23.</sup> Phillip Jones, "Public Acceptance of Mumps Immunization," *JAMA* 209 (August 11, 1969): 901–5, quotation on 904.

<sup>24.</sup> Alvarez, "Poverty, Ignorance Halting Vaccination" (n. 17). Rubella infections, although mild in children, increased the risk of birth defects in pregnant women. Because the vaccine caused troubling side effects in women, health officials promoted the vaccination of children in order to eliminate the infection from communities. Discussions about the rubella vaccine were also influenced by ideas about abortion; see Heller, *Vaccine Narrative* (n. 6), 57–83 and Reagan, *Dangerous Pregnancies* (n. 6), esp. 180–220.

embraced the new vaccine for their children. Campaign efforts also appealed directly to children, emphasizing their responsibility—girls as the nation's future mothers, boys as future protectors and family men—for rubella prevention. This approach, as Reagan argues, made rubella prevention a "gendered civic responsibility" that fit into and reinforced existing gender norms. <sup>25</sup> Despite the rubella vaccine's warm reception, it was precisely this type of reinforcement that would later help give rise to creeping doubts about vaccine recommendations.

In the meantime, narratives like the ones above carried multiple meanings. They further concretized the idea that vaccination of children was the exclusive province of mothers. They also suggested that vaccines against the "milder" diseases could effectively prevent children from interfering with women's economic, professional, or personal goals. That women prioritized such goals reflected changing demographic and social realities: the continued rise in the number of women in the workforce, and shifts in the status and longevity of women in the workplace.<sup>26</sup> Despite these shifts, however, women nonetheless retained primary responsibility for their children's care and medical needs, including vaccination.

But not all working mothers were aspiring university professors, like the mother described by Alvarez. And as the seventies progressed, epidemiological studies indicated that vaccination rates were particularly low among poor, inner-city residents of color. For these mothers, class and race compounded the effects of gender in the eyes of health professionals and politicians, who attributed disease outbreaks in "ghettos" to "poor mothers" "struggling to get up the rent money," or "waiting until their children entered school for free . . . inoculations." When white, middle-class mothers failed to vaccinate their children, by contrast, vaccine scientists and bureaucrats attributed the oversight to age and naiveté, not race or income. "Today's mothers . . . don't remember the polio epidemics of the 1940s and 50s, the pictures of children in iron lungs or the mass closing of swimming pools in mid-summer," a CDC official told the *Washington Post*. The front-page article featured a large photo of Karen Pfeffer, a white, twenty-two-year-old mother whose daughter contracted a near-fatal case

<sup>25.</sup> Reagan, Dangerous Pregnancies (n. 6), 181, 194, quotation on 207.

<sup>26.</sup> Philip Jenkins, Decade of Nightmares: The End of the Sixties and the Making of Eighties America (New York: Oxford University Press, 2006), 28; Gail Collins, When Everything Changed: The Amazing Journey of American Women from 1960 to the Present (New York: Little, Brown, 2010), 96–100.

<sup>27.</sup> Auerbach, "D.C. Has Rash of 261 Measles Cases" (n. 15); Stern, "Immunizations Lag Called Peril in City" (n. 20); Rudy Johnson, "Paterson Fights Rise in Measles," *New York Times*, December 27, 1973, 78.

of whooping cough? Who's ever heard of whooping cough?" said Pfeffer. "I just didn't realize how serious it could be." <sup>28</sup>

If mothers—poor or rich, young or old—were the target of vaccination campaigns in the 1970s, nonworking mothers were sometimes seen as the key to reaching them. The frugal Carter campaign was deeply dependent on the services provided by women in voluntary groups from Alaska to Florida.<sup>29</sup> By the time the Carters entered the White House, however, second-wave feminists had spent several years chipping away at the notion that volunteerism should be the universally accepted domain of women. In the early 1970s, the National Organization of Women had taken an official position against what they called the exploitative nature of volunteer work.<sup>30</sup> Rosalynn Carter—whose high-profile involvement in political affairs and equal partnership with her husband were favorite subjects of news outlets, even as feminists criticized her for lacking an identity separate from her husband—nonetheless championed the cause of volunteerism while in the White House.<sup>31</sup>

When one reporter asked her if it wasn't "denigrating" to ask women to engage in important work without pay, however, Carter acknowledged that it wasn't a widely popular cause. "Voluntarism has a little bit of a bad connotation," she explained. "I've been trying to say 'public initiative' or 'public responsibility." Carter's support for voluntarism was just one example of how her political choices sometimes rested uneasily in the shifting landscape of women's social roles. As First Lady, she declined to wear her motherhood on her sleeve, repeatedly turning down invitations to chair both the Childhood Immunization Initiative and the International Year of the Child—even as some of her female constituents saw her as uniquely qualified to support such causes. "Mrs. Carter, Please use your influence as a concerned mother and as an intelligent participant

<sup>28.</sup> Meg Rosenfeld, "Many Va. Children Not Getting Shots," Washington Post, April 27, 1975, 1.

<sup>29.</sup> List of Lead Voluntary Organizations, Folder: Children—Health, Education and Welfare (HEW) Conference—Childhood Immunization, 12/12/78, Box 7, Collection JC-FL, Jimmy Carter Library.

<sup>30.</sup> Rhoda Gilinsky, "Volunteerism and Women: A Status Report," *New York Times*, November 12, 1978, WC16.

<sup>31.</sup> Diane M. Blair and Shawn Parry-Giles, "Rosalynn Carter: Crafting a Presidential Partnership Rhetorically," in *Inventing a Voice: The Rhetoric of American First Ladies of the Twentieth Century*, ed. Molly Meijer Wertheimer (Lanham, Md.: Rowman & Littlefield, 2004), 341–64.

<sup>32.</sup> Notes from an interview conducted by Suzanne Wilding, Folder: Suzanne Wilding, Town and Country Magazine Interview with RSC, November 16, 1978, Box 7, Collection JC-FL, Jimmy Carter Library.

in national planning to reinstate money in the budget for vaccines," one mother pleaded in a letter to the White House.<sup>33</sup>

Similarly moral conceptions of motherhood, which held motherhood as the basis for female civic engagement, also informed letters that mothers wrote to advice columnist Ann Landers on the subject of vaccines in the 1970s. "Heartsick Mother," whose son suffered permanent hearing loss after a bout of measles, wrote to ask that "thoughtless, irresponsible" mothers see to it that their children got vaccinated. "I am sending my letter to Ann Landers," she wrote, "because this problem is bigger than our own two children. It involves all children everywhere." "Mom Who Cares" wrote to ask, "Why do mothers and fathers who claim they love their children neglect to have them vaccinated . . . ? Don't they realize they can get these shots free at the county or city health centers? "Such writers wielded their identity as mothers to legitimize the civic act of chastising other parents for neglecting the care of their children and (given the communicable nature of vaccine-preventable diseases) their communities at large.

Testimony from mothers who chose not to vaccinate their children in the late 1960s and 1970s is harder to find, but it is clear that some mothers made this choice deliberately. In the late 1970s, letters to Landers began to hint at a sense of doubt regarding the need for across-theboard immunizations against all childhood infections. A mother in Baton Rouge described a disagreement with her sister-in-law over whether it was better for children to get the childhood diseases themselves rather than the vaccines, so that they would have lifelong immunity.<sup>36</sup> A mother in Champaign, Illinois, described an argument with her sister over the need for polio vaccine. "I have not heard of a child getting polio for several years," she wrote, "[w]hy go to the trouble if there is no danger?"37 As the Carter campaign got under way, vaccination was an increasingly visible topic not only in the advice columns, but in a variety of women's and parenting magazines, including Good Housekeeping, Redbook, and Ladies Home Journal. Most of these magazines parroted federal proimmunization materials, but their coverage hinted at reader doubts and fears, which had been aggravated by the botched swine flu immunization campaign of 1976. "Misguidedly, some of us fear that vaccines are dangerous; but the

<sup>33.</sup> Letter from Mrs. James Conrad McLarnan to Rosalynn Carter, 5/22/79, Folder: WE 1, Box 138, Collection JC-FL, Jimmy Carter Library.

<sup>34.</sup> Landers, "Ann Landers: Consequences" (n. 14).

<sup>35.</sup> Ann Landers, "Ann Landers," Washington Post, June 1, 1976, B4.

<sup>36.</sup> Ann Landers, "Ann Landers," Washington Post, February 9, 1979, C5.

<sup>37.</sup> Ann Landers, "Ann Landers," Washington Post, November 8, 1977, B7.

minimal risk must be weighed against the much greater benefit," stated *Harper's Bazaar*. "Parents frequently ask whether it's really necessary to immunize their children against measles, rubella, mumps, and poliomyelitis, as well as against diphtheria, whooping cough, and tetanus . . . the answer is an unequivocal yes," reported *Parents*. Such articles often played up the dangers of vaccine-preventable diseases, sidestepping readers' specific vaccine worries in the process. But the very presence of reader doubts and fears indicated an information gap, which a growing number of mothers began to question.

## **Questioning Authority**

The women's health movement, a component of second-wave feminism that emerged in the 1960s, strove to democratize women's health-related knowledge and wrest control of women's health issues from the predominantly male medical profession. Health feminists took multifaceted approaches to putting women's health in women's hands. 40 They founded clinics, held cervical-self-examination workshops, conducted abortions, and wrote books for women on health issues directly relevant to them. In a few highly visible instances, activists focused on exposing the negative effects of specific drugs commonly prescribed to women. Over the course of a decade, their efforts helped bring national attention to the serious risks associated with oral contraceptives, estrogen taken for menopause, and diethylstilbestrol (DES) taken during pregnancy. The unveiling of these hazards drove feminist demands for informed consent in medical decision making and increased access to information about medical treatments. 41 Feminist critiques of drug promotion practices were also informed by the concurrent antimedicalization and consumer rights movements, and were felt beyond the arena of women's reproductive health. For example, as historian Susan Speaker has shown, a general

<sup>38.</sup> Elaine Fein, "Immunization: Is Your Child Protected?," *Harper's Bazaar*, July 1979, 75–76.

<sup>39.</sup> Morris Wessel, "Immunizations Are Important," Parents, December 1979, 28.

<sup>40.</sup> See for instance Wendy Kline, *Bodies of Knowledge: Sexuality, Reproduction, and Women's Health in the Second Wave* (Chicago: University of Chicago Press, 2010); Sandra Morgen, *Into Our Own Hands: The Women's Health Movement in the United States, 1969–1990* (New Brunswick, N.J.: Rutgers University Press, 2002); Sheryl Ruzek, *The Women's Health Movement: Feminist Alternatives to Medical Control* (New York: Praeger, 1978).

<sup>41.</sup> Elizabeth Siegel Watkins, On the Pill: A Social History of Oral Contraceptives, 1950–1970 (Baltimore: Johns Hopkins University Press, 1998), 103–31; Elizabeth Siegel Watkins, "'Doctor, Are You Trying to Kill Me?' Ambivalence about the Patient Package Insert for Estrogen," Bull. Hist. Med. 76 (Spring 2002): 84–104.

disillusionment with the prescribing practices of doctors and growing doubt about the safety of commonly prescribed drugs directly influenced large-scale rejection of minor tranquilizers in the 1970s. For women, what was "wrong" with the industry of medicine generally was that physicians, who were mostly male, "refused to listen to or believe female patients, withheld knowledge or lied to them, overcharged them, [or] performed unnecessary procedures."<sup>42</sup>

The reach of this general disillusionment with medicine began to spread to vaccines at the tail end of the 1970s. Vaccine worries are evident, for instance, in the child-rearing guide Ourselves and Our Children, whose feminist authors acknowledged the "controversy surrounding the medical risks of immunization" (even as they argued that government should do more to make vaccines available to those who wanted them).<sup>43</sup> Perhaps no venue was more open to discussing vaccine risks than Mothering, a magazine devoted to "natural family living," founded in Colorado in 1976. As mainstream parenting magazines urged mothers to vaccinate their children (often at the direct behest of the Carter campaign), Mothering began printing samples of the skeptical reader letters it was receiving on the topic.<sup>44</sup> Mothering's readers were likely all drawn to the vaccine's back-to-nature ethic, but they came from all corners of the country, and on the issue of immunization they were sharply divided. Readers chimed in on the matter from California, Indiana, Ohio, Maryland, Texas, Montana, Alaska, Massachusetts, Washington, New York, Hawaii, and beyond. Their letters represented the views of staunch immunization advocates (including pediatricians and general practitioners), lifelong antivaccinationists (including natural hygienists and homeopaths), and parents working to sort through it all to make an informed decision for their own children. 45 Some seemed convinced by provaccination arguments, others held off in worried doubt.

- 42. Susan Speaker, "From 'Happiness Pills' to 'National Nightmare': Changing Cultural Assessment of Minor Tranquilizers in America, 1955–1980," *J. Hist. Med.* 52 (July 1997): 338–76, quotation on 372–73.
- 43. Boston Women's Health Collective, Ourselves and Our Children: A Book By and For Parents (New York: Random House, 1978), 217.
- 44. Mothering readers in general—and those who debated vaccines—embraced varied feminisms. However, as with all of the vaccine critics in this article, whether they self-identified as one type of feminist or another was not always obvious from their thoughts on vaccines. But as historian Wendy Kline has noted, women could identify as feminists or adopt feminist ideas without participating in organized feminist groups. Kline, Bodies of Knowledge (n. 40), 25.
- 45. See letters to the editor in *Mothering* issues 1–47 (1979–86), held at *Mothering*'s offices in Santa Fe, N.M. Selected correspondence and features on immunization were compiled in Peggy O'Mara, *Vaccinations*, 3rd ed. (Santa Fe: Mothering Magazine, 1989); Peggy O'Mara, *Vaccination: The Issue of Our Times* (Santa Fe: Mothering Magazine, 1997).

As more mainstream women's magazines urged mothers to vaccinate their children, Mothering advised mothers to "be cautious with vaccines." 46 The magazine warned those allergic to eggs and chickens to avoid the measles vaccine, informed readers that vaccinating a child against polio could cause the disease in other family members, and listed encephalitis and death as possible side effects of the pertussis vaccine. These warnings, noted the editors, were taken directly from vaccine package inserts, which mothers should ask to see before having their children immunized.<sup>47</sup> Other articles encouraged readers to become informed consumers by doing their own research on the subject beforehand advice directly informed by the women's health movement. Mothering editor Peggy O'Mara captured the movement's influence when she told readers she began questioning vaccination while pregnant with her first child, in 1973: "Because I was accustomed to making personal healthcare decisions, it seemed like the obvious thing to do," she wrote. 48 Her own questioning mirrored that of her readers, who from the late 1970s through the early 1980s sent more letters on vaccination than any other topic (save circumcision).

In the decade after *Mothering*'s readers first took up the issue of immunization, two key exposés alerted the broader public to the occasionally devastating side effects of the pertussis vaccine in particular. Following in the tradition of Barbara Seaman's *The Doctor's Case Against the Pill*, the NBC broadcast *Vaccine Roulette* and the 1985 book *A Shot in the Dark* lambasted scientists and physicians for producing and promoting a vaccine known to cause convulsions, paralysis, and deaths. Reports of the vaccine's risks had been publicized in the United Kingdom, Sweden, and Japan in the 1970s. <sup>49</sup> But before *Vaccine Roulette* aired in the Washington, D.C., area in April 1982, discussion of the vaccine's risks in the United States had been largely confined to scientific journals. The broadcast, subsequently excerpted nationwide on the *Today* show, showed extensive footage of mentally and physically disabled American children whose handicaps were attributed, by parents and doctors, to the pertussis (or whooping cough) component of the DPT vaccine. The report informed parents that

<sup>46.</sup> See for example Lynne Lamberg, "Immunization: A Call to Action," *Better Homes and Gardens*, September 1979, 70.

<sup>47.</sup> Carol Horowitz, "Immunizations and Informed Consent," *Mothering*, Winter 1983, 37–41.

<sup>48.</sup> Peggy O'Mara, "Editorial," Mothering, Summer 1996, 25.

<sup>49.</sup> As a result, pertussis vaccination rates declined dramatically. Jeffrey P. Koplan, Stephen C. Schoenbaum, Milton C. Weinstein, David W. Fraser, "Pertussis Vaccine: An Analysis of Benefits, Risks and Costs," *New England J. Med.* 301 (October 25, 1979): 906–11.

one in seven thousand children suffered serious adverse effects related to the vaccine, including high fevers, inconsolable crying, seizures, brain damage, and death. Said reporter–producer Lea Thompson, "the medical establishment" had been "aggressive in promoting . . . the most unstable, least reliable vaccine we give our children." <sup>50</sup>

Doctors and scientists were swift and harsh in their response to Vaccine Roulette. They called it imbalanced, distorted, and inaccurate and accused Thompson of misinterpreting the science and committing "journalistic malpractice."51 In the nationwide panic that ensued, physicians fielded endless calls from concerned parents, whom they often labeled "hysterical." Thousands of parents called the D.C. television station to report that they believed their children had been harmed by the vaccine, too.<sup>52</sup> Station representatives put a few of the parents in touch with each other, and a handful of them—Kathi Williams, Barbara Loe Fisher, Jane Dooley, Donna Middlehurst, and Middlehurst's husband, Jeffrey Schwartzbanded together to form an advocacy group they dubbed Dissatisfied Parents Together, or DPT for short. The following month, Williams and Marge Grant, one of the mothers who had appeared in *Vaccine Roulette*, testified before a Senate subcommittee. The May 1982 hearing had originally been scheduled to address federal immunization funding cuts and strategies for reaching children who remained unvaccinated in the wake of the Carter-era campaign. Instead, the hearing, called by Senator Paula Hawkins of Florida (whose own son had contracted polio from the polio vaccine), featured extensive testimony by parents of vaccine-injured children, health officials, and other parties on the risks of vaccination.<sup>53</sup>

Viewed through a feminist lens, *Vaccine Roulette* and its fallout—including media reports on the vaccine and the parents group, congressional

50. DPT: Vaccine Roulette (n. 2). Government publications noted that 1 in 7,000 children could suffer a "serious" side effect, such as high fever or convulsion. See for example Department of Health Education and Welfare, Parents' Guide to Childhood Immunization, Oct 1977, Folder: Children's Immunization Program, 2/77-12/78 [2], Box 7, Collection JC-FL: Records of the First Lady's Office, Jimmy Carter Library. Risk of severe brain damage or death was much lower but widely disputed; estimates ranged from 1 in 174,000 to 1 in 1 million shots. See Roy Anderson and Robert May, "The Logic of Vaccination," New Scientist 96 (November 18, 1982): 410–15.

- 51. U.S. Senate Committee on Labor and Human Resources, *Immunization and Preventive Medicine: Hearing before the Subcommittee on Investigations and General Oversight of the Committee on Labor and Human Resources, 97th Congress, 2nd Session* (Washington, D.C.: Government Printing Office, 1982), 7.
- 52. Donna Hilts, "The Whooping-Cough Vaccine: A Protector or a Killer?," Washington Post, April 28, 1982, Va2.
- 53. U.S. Senate Committee on Labor and Human Resources, *Immunization and Preventive Medicine* (n. 51).

hearings, and the publication of A Shot in the Dark, coauthored by Fisher and independent scholar Harris Coulter—reveal that women's gendered experiences shaped popular responses to the news of pertussis vaccine risks. Thompson, a "consumer reporter" for WTOP-TV who received an award for her reporting from the American Academy of University Women in 1978, did not focus exclusively on women's issues, but she did indicate that her reporting was at times directly shaped by her experiences as a woman and mother.<sup>54</sup> Her report on asbestos-lined hair dryers led to a recall of 12.5 million hair dryers, and her report on nutritive deficiencies in baby formulas, which she pursued following her own child's birth, helped bring about a federal law enforcing routine formula testing.<sup>55</sup> In Vaccine Roulette, she interviewed male doctors and health officials who denied the pertussis vaccine's risks, and intercut these with interviews and footage of mothers struggling to care for their severely handicapped children. In several shots, these mothers were seated alongside their husbands, but in each case, the mother was the spokesperson for her child and the expert on her child's condition. By giving voice and credence to their personal experiences and observations, the broadcast's format elevated mothers to the level of scientific experts on the subject of children's vaccine reactions; this very form of experiential knowledge production was fostered by the women's health movement, as historian Wendy Kline has shown.<sup>56</sup> Moreover, the content of Thompson's interviews echoed the themes of feminist critiques of medicine: mothers of vaccine-damaged children complained that their doctors hadn't listened to them, dissident doctors testified that the vaccine was no longer necessary, and government scientists suggested federal agencies had ignored and suppressed data implicating the vaccine in causing harm.<sup>57</sup>

The mothers who spoke onscreen in *Vaccine Roulette* delivered a common narrative; the same narrative appeared in *A Shot in the Dark*, which also interwove personal accounts of vaccine injuries with detailed exposition of the scientific research on pertussis vaccine. In this common narrative, a mother sensed something was wrong with her child; she questioned her usually male doctor and was told not to worry; she then watched her child suffer dramatic and irreparable harm despite this assurance; later, she learned that her doctor had concealed critical information about the

<sup>54.</sup> Robert Galano, "Crusading Camera'd Champions of the Consumer," Washington Post, March 30, 1980, TV3.

<sup>55.</sup> Susan Okie, "How Two Angry Mothers Beat Uncle Sam at His Own Game," *Washington Post*, October 11, 1980, A3.

<sup>56.</sup> Kline, Bodies of Knowledge (n. 40), 1-4.

<sup>57.</sup> DPT: Vaccine Roulette (n. 2).

vaccine. A Montana mother described her doctor's dismissive reaction to her calls about her son Mark's inflamed leg and incessant piercing cry after his pertussis shot: "He said, 'Don't worry. Just give him Tylenol and he'll be fine.' So I didn't call him back again, because I thought, well, this is the way it is supposed to be."58 Over the next three months, Mark stopped eating, developed allergies, and weighed only twenty pounds by the age of two—prompting his mother to fight his doctor against giving Mark any more pertussis shots. Mark survived; Richie, the son of a twentyseven-year-old nurse named Janet Ciotoli, died the day after his first DPT shot. Janet described her battle with the doctor and coroner over the attribution of her son's death to SIDS, and not the vaccine. Her identity as a mother legitimized not only this struggle, but the larger one she vowed to take on. "These doctors and officials in the government, who keep talking about the benefits and risks of this vaccine, better take fair warning. My baby may be just another statistic to them, but he was my child, and there is nothing more powerful than a mother's fight for her child. . . . I will fight no matter what I have to do and no matter how long it takes to keep this from happening to other babies," she said.<sup>59</sup>

Janet described herself, before Congress and in *A Shot in the Dark*, as an educated, professional woman who took her doctor's medical advice at face value, only to learn that this quiescence had cost her son's life. Her story is one of several in *A Shot in the Dark* that link the book to a series of popular books published in the late 1970s that chastised organized medicine for its intimidation and mistreatment of women, especially mothers and mothers-to-be. Influenced by *Our Bodies Ourselves*, the groundbreaking lay manual to women's health first published by the Boston Women's Health Course Collective in 1971, books including Gena Corea's *The Hidden Malpractice*, Suzanne Arms's *Immaculate Deception*, and Gail and Tom Brewers's *What Every Pregnant Woman Should Know* argued that the medical establishment had instilled a sense of fear and powerlessness in women, subjecting them to unnecessary, overmedicalized procedures that harmed them and their babies. <sup>60</sup> Women, they argued, were administered unnecessary sedatives and subjected to procedures, such as public-hair shaving

<sup>58.</sup> Harris L. Coulter and Barbara Loe Fisher, *DPT: A Shot in the Dark* (New York: Harcourt, Brace, Jovanovich, 1985), 61.

<sup>59.</sup> Ibid., 13.

<sup>60.</sup> Suzanne Arms, Immaculate Deception: A New Look at Women and Childbirth in America (Boston: Houghton Mifflin, 1975); Gail Sforza Brewer and Tom Brewer, What Every Pregnant Woman Should Know: The Truth about Diet and Drugs in Pregnancy (New York: Penguin, 1977); Gena Corea, The Hidden Malpractice: How American Medicine Treats Women as Patients and Professionals (New York: William Morrow, 1977).

and fetal monitoring, without their consent; they were "frightened into believing" that anesthesia and other drugs were crucial for childbirth, and that birth, "once a natural process" must take place in the hospital, among strangers. <sup>61</sup> A few years later, vaccine critics would pick up these very same themes. "I, like so many mothers, lacked the information necessary to even ask intelligent questions . . . [i]nstead I trusted the experts," said Gerri Cohn, whose daughter Traci suffered brain damage subsequent to her DPT vaccine. <sup>62</sup>

The authors of the aforementioned volumes focused on the process of reproduction, and usually left off shortly after childbirth. They promoted breastfeeding over formula but ventured no further into childrearing; as a result, they rarely, if ever, touched on immunization. Their work, however, was related to a separate but contemporaneous body of work that took broader aim at transgressions of the medical profession and that did specifically critique mass deployment of vaccination as a disease-prevention strategy. In his book Medical Nemesis, historian and philosopher Ivan Illich argued that factors other than "medical progress"—including water and sewage treatment, better nutrition, and sociopolitical equality—were primarily responsible for improvements in health, and that professional medicine was thus undeserving of the live-saving reputation it was so universally and exclusively accorded. To Illich, the medical profession could duly accrue only partial credit for the defeat of smallpox through vaccination; in his analysis, the importance of mass vaccination as a medical intervention had been dramatically overstated. Deaths due to diphtheria, whooping cough, and measles, he pointed out, had declined 90 percent prior to widespread immunization.<sup>63</sup>

Illich was often cited by physician-turned-popular-author Robert Mendelsohn, who became an outspoken and widely quoted critic of vaccines in the early 1980s. Mendelsohn, who wrote in his book *Male Practice* that women were the "primary victims" of "medical and surgical overkill," listed vaccines as one of several controversial and risky practices and procedures women were coerced into accepting for their newborns. <sup>64</sup> In his 1979 book *Confessions of a Medical Heretic*, he questioned the need for vaccines against mumps, measles, and rubella, diseases that, in his view, weren't nearly as

<sup>61.</sup> Arms, Immaculate Deception (n. 60), 22-23.

<sup>62.</sup> Sandra Sugawara, "Two Parents Groups Speak Out Against Multiple DPT Vaccine; Side Effects Blamed for Brain Damage," *Washington Post*, February 8, 1985, D5.

<sup>63.</sup> Ivan Illich, Medical Nemesis: The Expropriation of Health (New York: Pantheon Books, 1976) 16

<sup>64.</sup> Robert S. Mendelsohn, *Male Practice: How Doctors Manipulate Women* (Chicago: Contemporary Books, 1981), x.

severe as smallpox, tetanus, and diphtheria. He pointed to evidence that the diphtheria vaccine was sometimes ineffective, and he described the controversy over the safety of pertussis vaccination that was, at that point, still brewing only within the profession.<sup>65</sup>

Vaccine Roulette, A Shot in the Dark, and the media coverage they prompted transmitted this notion of medical overkill to a national audience, linking it to a critique of the pertussis vaccine. These exposés pointed out that whooping cough rarely caused children to die in the modern era, and that (borrowing Illich's point) the disease had declined significantly prior to widespread vaccination. Both Sweden and West Germany had abandoned the vaccine over concerns about its side effects, Vaccine Roulette and A Shot in the Dark reported, and neither country had suffered epidemics as a result.<sup>66</sup> The widespread attack on pertussis vaccination shared this idea and several others with widely read works that had critiqued medicine at the end of the previous decade.

In *A Shot in the Dark*, women referred to as "a mother on the West Coast," "a mother in Massachusetts," "Sharon's mother," "Marie's mother," and "Patrick's mother" were just a handful of the mothers who recounted asking their doctors about their children's high-pitched screaming, high fevers, and muscular spasms following vaccination, only to be told not to worry. In each mother's story, the child developed a seizure disorder or brain damage; a few died. Their accounts stressed the need for mothers to question their doctors' opinions; they also suggest a dramatic loss of faith in medicine, expressed in sometimes starkly gendered terms. "We are so conditioned to the idea that our doctor's word is to be trusted without question that we don't think for ourselves. I am a nurse. I watched my son die that day, and I didn't even know what was happening until it was all over," said Janet in *A Shot in the Dark*; "If this had not happened to my baby . . . I would still be taking my doctor's word as the word of God, like most mothers do." Ellen, who described her demand for answers about

65. Robert S. Mendelsohn, *Confessions of a Medical Heretic* (Chicago: Contemporary Books, 1979), 143–45. Vaccine resistors were mostly but not exclusively mothers; among the men who spoke out against vaccines were unorthodox physicians like Mendelsohn, adherents of natural or alternative healing methods, and some fathers.

66. Britain, by contrast, faced a pertussis outbreak in 1977–79 that health officials blamed on a vaccination rate that had fallen 50 percent since 1970. Three deaths and seventeen cases of brain damage resulted. See Anderson and May, "Logic of Vaccination" (n. 50). In 1998, a group of researchers contested the argument that Sweden, West Germany, and other countries did not face increased rates of pertussis in the wake of popular vaccine resistance; see E. J. Gangarosa, A. M. Galazka, C. R. Wolfe, L. M. Phillips, R. E. Gangarosa, E. Miller, and R. T. Chen, "Impact of Anti-Vaccine Movements on Pertussis Control: The Untold Story," *Lancet* 351 (January 31, 1998): 356–51.

67. Coulter and Fisher, DPT: A Shot in the Dark (n. 58), 9.

her daughter's post-DPT shot brain damage, recalled being "officially labeled a 'troublemaker' and 'hysterical mother' in Sherry's medical records." Her outrage at her daughter's doctors' paternalism was unmistakable: "They can be so damn patronizing," she said. "You know, pat the little mother on the head and tell her to calm down."

Other vaccine-critical mothers blamed not just doctors but also the government and drug industry, alluding as they did so to a large-scale cover-up of the dangers of the by then widely administered vaccines. (By 1980, upward of 96 percent of all children entering school were vaccinated against measles, rubella, polio, diphtheria, pertussis, and tetanus, achieving some of the highest rates of vaccine coverage the country had ever seen.) 69 "It appears to me that the manufactures [sic] and/or certain government agencies are intentionally withholding vital information," said Wendy Scholl, who testified before Congress in 1983 about her daughter Stacy's measles-vaccine-induced paralysis, learning disabilities, and seizures.<sup>70</sup> Senator Hawkins shared this perception of deliberate dissemblance when she asked federal vaccine officials, "What symptoms or warning signals should the parents look for from the adverse reaction from the vaccine, which I believe is the secret that has been held from them?"71 The sense of a conspiracy was only heightened when officials defended the practice of administering vaccines without informing parents of potential risks, as one FDA official appeared to do in Vaccine Roulette. "If we told parents there was a risk of brain damage," he said, "there's no question what their response would be."72

The benevolent paternalism belied by the official's comment was proof that if parents wanted objective information on medical risks, they would have to demand it, or seek it out themselves. The women's health movement had adopted "informed medical consumerism" as a core principle, and indeed women who spoke out against vaccines in the early 1980s followed in this tradition.<sup>73</sup> In *Mothering* magazine, Carol Horowitz, a

<sup>68.</sup> Ibid., 40.

<sup>69.</sup> U.S. Senate Committee on Labor and Human Resources, *Immunization and Preventive Medicine* (n. 51), 4.

<sup>70.</sup> U.S. Senate Committee on Labor and Human Resources, *Task Force Report on Pertussis: Hearing before the Committee on Labor and Human Resources, United States Senate, 98th Congress, 1st Session* (Washington, D.C.: Government Printing Office, 1983), 74.

<sup>71.</sup> U.S. Senate Committee on Labor and Human Resources, *Immunization and Preventive Medicine* (n. 51), 41.

<sup>72.</sup> DPT: Vaccine Roulette (n. 2).

<sup>73.</sup> On the women's movement's commitment to "informed medical consumerism," see Morgen, *Into Our Own Hands* (n. 40), 95; Elizabeth Watkins, *The Estrogen Elixir: A History of Hormone Replacement Therapy in America* (Baltimore: Johns Hopkins University Press, 2007), 130.

Berkeley health educator, described her search for information on vaccine risks in the medical literature. "What is known about vaccines is a whole other story from what is told," she concluded. "Health care consumers should insist on reading the package inserts which come with vaccines." At the end of *Vaccine Roulette*, vaccine scientist Saul Krugman appeared on screen, saying that convulsions were not a contraindication against DPT vaccination. The camera then cut to reporter Lea Thompson, who read directly from an American Academy of Pediatrics's warning against giving the shot to children who had previously suffered convulsions. When the coroner refused to attribute her son's death to DPT vaccination, Janet, in *A Shot in the Dark*, recounted returning to him with a copy of *The Physician's Desk Reference*, in which her son's precise condition was described. Indeed, informed medical consumerism was one of the core messages of *A Shot in the Dark*, which concluded with the following admonishment: "The time has come to educate ourselves about vaccines."

#### Framing Their Demands

The effect of the feminist and women's health movements was such that over the course of the 1970s, women were more and more likely to receive information from their doctors regarding the risks and benefits of their own medical treatments. In turn, as historian Elizabeth Watkins has argued, women were increasingly expected to participate in their own medical decisions.<sup>78</sup> The late 1970s debate over the risks and benefits of taking estrogen, for example, had focused on the need for women to make an "informed choice," rather than simply listening to their doctor, "who, after all, does not have to live the woman's life," as New York Times writer Jane Brody put it. 79 By the end of the 1970s, as a result of the feminist and women's health movements, this type of engagement in medical decision making had become mainstream. In the 1980s, women who expressed concern about vaccine safety applied this behavior to their children, noting that, after all, their children were "part of us." And the vaccination of their children did affect them directly. Many who spoke out against the pertussis vaccine detailed how their lives were irreparably altered by

```
74. Horowitz, "Immunizations and Informed Consent" (n. 47), 37.
```

<sup>75.</sup> DPT: Vaccine Roulette (n. 2).

<sup>76.</sup> Coulter and Fisher, DPT: A Shot in the Dark (n. 58), 10.

<sup>77.</sup> Ibid., 408.

<sup>78.</sup> Watkins, Estrogen Elixir (n. 73).

<sup>79.</sup> Ibid., 111.

<sup>80.</sup> Coulter and Fisher, DPT: A Shot in the Dark (n. 58), 408.

their children's vaccine-related injuries. In *Vaccine Roulette*, Gail Browne described how her son's disabilities had led her and her husband to abandon hopes of another child as they struggled to pay for his extensive care. <sup>81</sup> Testifying before Congress, Wendy Scholl described an endless quest for providers and financial aid for her disabled daughter's care, made worse when her husband lost his job and their new insurer wouldn't cover Stacy's condition. <sup>82</sup> Parent after parent in *A Shot in the Dark* described how their lives had been completely restructured to accommodate their vaccine-injured child's costly and all-consuming needs.

Whereas feminists and women's health activists demanded a form of social justice, however, vaccine activists demanded political justice. DPT, as a group, acknowledged the importance of vaccines and the dangers of vaccine-preventable diseases. Instead, they criticized the risk-benefit calculus cited by public health officials, who pointed out that the vaccine might cause a few dozen cases of brain damage, but that the alternative, whooping cough, would cause thousands of deaths each year. "No parent should be put in the untenable position of having to choose between a bad vaccine and a bad disease," argued DPT founder Barbara Fisher.83 To the parents of vaccine-injured children, it was unjust that they alone should suffer the high cost of achieving better health for the nation as a whole. "Did these children, like soldiers . . ., give their lives so that others might live?" asked mother Gerri Cohn at a Maryland hearing.84 Because they believed the answer was yes, DPT demanded that government take the lead in providing safer vaccines, more information for parents, support for better studies of adverse reactions, and justice, in the form of remuneration, for the families of vaccine-injured children.

That parents were able to view vaccines as a threat to their children's health in this period relates to epidemiological and demographic shifts that had occurred over the previous decades. Because of widespread vaccination, pertussis cases had diminished to just a couple thousand cases a year. In the burgeoning vaccine-safety movement led by DPT, many vaccine-worried parents nonetheless expressed simultaneous trepidation about both pertussis and its vaccine, but to most the threat of vaccine injury loomed larger. "I live with the fear that they might get whooping cough. It's scary. But until they come up with a purer vaccine, I will

<sup>81.</sup> DPT: Vaccine Roulette (n. 2).

<sup>82.</sup> U.S. Senate Committee on Labor and Human Resources, *Task Force Report on Pertussis* (n. 70), 74–87.

<sup>83.</sup> Barbara Loe Fisher, "Why Not Use a Safer Vaccine?," Washington Post, May 9, 1988, A14.

<sup>84.</sup> Elsa Walsh, "State Defends Vaccine," Washington Post, June 30, 1982, MD6.

have to live with these fears," said the mother of Cindy, a little girl who developed neurological symptoms following her first dose of DPT. 85 The chances of contracting pertussis still outweighed the chances of a vaccine injury; CDC statistics indicated that collapse or convulsions occurred once in every 1,750 shots, and brain damage once in every 100,000 to 172,000 shots. 86 But such statistics held no sway with the parents of vaccine-injured children and their friends, neighbors, and relatives. As Marge Grant explained in her Senate testimony: "I can tell you most assuredly, when it happens to your own child, there are "no benefits" and the risks are 100 percent!"

The dispute between parents and health officials over the appropriate risk-benefit calculation for justifying mass vaccination took place not only in the context of diminishing pertussis disease rates, but also in the context of diminishing birth rates, particularly among white, middle-class American women, who composed the bulk of the vaccine safety movement's members. The value of the individual child to the American family took on a new meaning at this time, epitomized by the emergence of a national obsession with the protection of children. With the advent of the child protection movement at the very end of the 1970s, antismoking and antidrug campaigns focused on the sanctity of children and citizens mobilized against a host of perceived social threats to children, including not just drugs, but also mass murderers, sexual deviants, cultists, homosexuals, child pornographers, and child abusers.<sup>88</sup> The child protection movement itself was also, to an extent, an outgrowth of feminism; it was feminists who brought the issue of child abuse to public light, and rape crisis centers founded by feminists that revealed the extent of sexual crimes committed against children.<sup>89</sup> But although feminism may have helped put child protection on the national agenda, aspects of the child protection movement took the forms of conservative or retrogressive reactions to the previous decades' advancement of a liberal social agenda.<sup>90</sup>

The organized vaccine safety movement that emerged contemporaneously rightly fits within this larger child protection movement, and its underlying political ideologies are similarly mixed. The movement

<sup>85.</sup> Coulter and Fisher, DPT: A Shot in the Dark (n. 58), 83.

<sup>86.</sup> U.S. Senate Committee on Labor and Human Resources, *Immunization and Preventive Medicine* (n. 51), 6.

<sup>87.</sup> Ibid., 55. DPT later adopted this phrase as a motto, placing it on the front page of its newsletters.

<sup>88.</sup> Jenkins, Decade of Nightmares (n. 26), 108-33.

<sup>89.</sup> Susan Brownmiller, In Our Time: Memoir of a Revolution (New York: Dial Press, 1999).

<sup>90.</sup> Jenkins, Decade of Nightmares (n. 26), 109, 256–60.

coalesced in the early 1980s, when a pronounced shift toward political conservativism had taken place across the nation, signaled by the 1980 election of Ronald Reagan and his promises to slash big government. In this context, some outspoken vaccine critics decried the Carter-era expansion of vaccine laws as an undue encroachment of government upon personal freedoms. As a solution, these critics fought to undo the "Great Society"–type laws that had made vaccines mandatory for their children in the first place. Partnering with other Wisconsin parents, for instance, Marge Grant founded the Research Committee of Citizens for Free Choice in Immunization, which advocated dismantling all state vaccine mandates, and which effectively lobbied Wisconsin legislators to amend a philosophical exemption clause to that state's vaccine laws. <sup>91</sup> In Pennsylvania, parents pressured state officials to remove pertussis completely from the list of vaccines required for school. <sup>92</sup> In Idaho, parents lobbied for and achieved the same. <sup>93</sup>

That vaccine resistors in the late 1970s and early 1980s saw the newly invigorated vaccine laws as an undue expansion of government is exemplified by the frequency with which, in the context of heightened Cold War tensions, they compared the laws to those of the Soviet Union and Eastern European nations. When Maryland began enforcing its law requiring vaccines for school entry, Barbara Syska's son was expelled for lacking vaccines, and Syska, in response, filed suit against the board of education. Syska, who had immigrated from Poland, told reporters, "I'm a refugee from a communist country. There the good of the largest number of people is important, not the individual. I came here where the individual is supposed to have a say."94 The comparison of U.S. vaccine laws to the practices of oppressive regimes was soon a common refrain among vaccine critics. In her Senate testimony, mother Isabelle Gelletich, whose son suffered brain damage following DPT vaccination, called the cover-up of vaccination risks "an American Holocaust." "I wonder," she wrote, "are my son and I the survivors of a modern day Auschwitz, both of us left crippled and maimed by apathy and deceit?"95 Wrote Fisher and Coulter in A Shot in the Dark: it is only in "totalitarian societies where powerful bureaucrats routinely decide what is best for the rest of the population."96

<sup>91.</sup> DPT: Vaccine Roulette (n. 2).

<sup>92.</sup> Peter Kelley, "Whooping Cough Vaccine's Tragic Side Effects Unmasked," *Patriot-News*, October 8, 1986, C1.

<sup>93.</sup> Sonia Nazario, "A Parental-Rights Battle Is Heating Up over Fears of Whooping-Cough Vaccine," *Wall Street Journal*, June 20, 1990, 17.

<sup>94.</sup> Emily Isberg, "No School for Non-Immunized Child," *Montgomery County Sentinel*, February 22, 1979.

<sup>95.</sup> U.S. Senate Committee on Labor and Human Resources, *Immunization and Preventive Medicine* (n. 51), 137.

<sup>96.</sup> Coulter and Fisher, DPT: A Shot in the Dark (n. 58), 406.

As pervasive as this ideology was, it did not shape the demands that took center stage within the nascent vaccine safety movement. DPT, which rapidly became a prominent national organization, initially demanded more government as a solution to the problem of unsafe vaccines. In Maryland in 1983, DPT members drafted model legislation to require doctors to keep records of and report vaccine reactions to the state.<sup>97</sup> Over the next few years, organization members leaned on members of Congress, health officials with the FDA and CDC, members of the American Public Health Association, representatives of the American Academy of Pediatrics, and others to drum up support for a federal bill to establish greater government oversight of vaccine safety and a new compensation system for vaccine-injured children. 98 The plan succeeded: in late 1986, Reagan signed the National Childhood Vaccine Injury Act into law.<sup>99</sup> In addition to establishing a vaccine tax that would provide funds for the families of vaccine-injured children, the act required doctors to record and report vaccine reactions to federal authorities, and it required the Department of Health and Human Services to develop and disseminate informational materials on vaccine benefits and risks for parents. 100

DPT members initially celebrated their 1986 victory. But in the months and years that followed, they expressed growing frustration with government as a solution to the vaccine safety problem. DPT members bemoaned DHHS delays in the production of informational pamphlets for parents and Congress's sluggishness in appropriating funds for the new compensation program; they wrangled with federal health officials over the determination of vaccine-injury-related deaths; and they expressed outrage over a New Jersey law that restricted parents' right to sue vaccine makers. <sup>101</sup> "The federal government, organized medicine, and the pharmaceutical industry are closing ranks, determined to prevent the growing number of educated parents from exercising their right to make informed

<sup>97.</sup> Gerri Cohn, "DPT Pushes Vaccine Bill in Maryland," *Dissatisfied Parents Together News* 1, no. 1 (1983): 1.

<sup>98.</sup> Jeff Schwartz, "Support for Vaccine Damage Compensation Bill Grows," *Dissatisfied Parents Together News* 1, no. 1 (1983): 10–11.

<sup>99.</sup> The coalition formed in favor of the National Vaccine Injury Compensation Act was fragile by the time the act was signed. Although he openly opposed the act, Reagan signed it upon inclusion of a provision allowing pharmaceutical companies to sell abroad drugs unapproved for use in the United States. See Robert Pear, "Reagan Signs Bill on Drug Exports and Payment for Vaccine Injuries," *New York Times*, November 15, 1986, 1; "President Reagan Signs Vaccine Injury Compensation and Safety Bill into Law," *DPT News* 3, no. 1 (1987): 1.

<sup>100.</sup> Public Law 99-660, 99th Cong., November 14, 1986.

<sup>101. &</sup>quot;CDC Unclear about DPT Vaccine Death Definition," *DPT News* 3, no. 1 (1987): 9; "New Jersey Passes Law Limiting Most Vaccine Injury Lawsuits," *DPT News* 3, no. 2 (1987):

vaccination decisions for their children," wrote Fisher in late 1987.<sup>102</sup> With Kathi Williams and Fisher at the helm of the organization, DPT spent the last years of the decade continuing to lobby for a safer pertussis vaccine, helping families navigate the new federal compensation system, and, importantly, collecting and disseminating materials on the risks of vaccination, state-by-state vaccine-related rights and obligations, and the latest research on safer pertussis vaccine alternatives. Public education, that is, became increasingly central to the organization's mission. In 1989, DPT founded the National Vaccine Information Center, a side project initially devoted to sponsoring conferences and informational publications. Within two years, DPT had assumed NVIC as its new name as the organization definitively expanded its focus beyond the pertussis vaccine and adopted a broader mission.<sup>103</sup>

DPT/NVIC's commitment to the democratization of vaccine knowledge mimicked a primary tactic of the women's health movement. But this liberal inheritance was increasingly blended with distinctly libertarian complaints regarding the nation's vaccine enterprise. In the early 1990s, DPT/NVIC's faith in government as a means of both disseminating information on vaccine risks and guaranteeing safe vaccines became subsumed by their view of government as an obstacle to parents' rights to make educated vaccine decisions for their children. By 1993, short on funds and demoralized by the never-ending battle for government compliance with the 1986 law, Fisher and Williams considered shuttering the organization for good.<sup>104</sup> But a speech Fisher gave to a group of pediatric chiropractors later that year caused them to reconsider. Fisher's enthusiastic reception by the chiropractors—and their generous pledges of financial support—reenergized NVIC. "Our original goal was to get a safer pertussis vaccine for American babies," Fisher said, but after her speech, "we understood our fight was part of a larger fight for freedom of choice in health care."105 In 1993, NVIC's new focus was influenced by

<sup>1; &</sup>quot;House Votes to Appropriate Funds to Compensate Children Injured by Vaccines before October 1988," *DPT News* 4, no. 1 (1988): 1.

<sup>102.</sup> Barbara Loe Fisher, "Editorial," DPT News 3, no. 2 (1987): 11.

<sup>103.</sup> NVIC's mission included "1) informing the public about childhood diseases and vaccines in order to prevent vaccine injuries and deaths; 2) assisting those who have suffered severe reactions to vaccinations; 3) representing the vaccine consumer by monitoring vaccine research and development, vaccine policymaking, and vaccine related federal and state legislation; 4) working to obtain the right of parents to choose which vaccines their children will receive; and 5) promoting the development of safer and more effective vaccines." "NVIC/DPT," NVIC News 2, no. 2 (1992): 3.

<sup>104.</sup> Johnston, "Contemporary Anti-Vaccination Movements" (n. 1), 271.

<sup>105.</sup> Maria M. Lameiras, "Fighting for a Choice: Vaccination—One Mother's Crusade," *Today's Chiropractic Lifestyle*, August 2006, 31–36, quotation on 32.

national debate over the Clinton administration's proposal to reform the nation's health care system, which pitted those who supported federal involvement in the expansion of health care coverage against those who perceived such efforts as government infringement on individual freedom and choice. That chiropractors lent their support to the movement spoke to antivaccinationists' historical resonance with "alternative" and natural healing advocates—as well as the swelling of popular support for such therapies in the 1990s. 107

Libertarianism and allied values have been important factors shaping vaccination resistance throughout American history. Just as important at this historical moment—as in previous ones—was a yearning for bodily sovereignty that was framed by the day's most accessible metaphors and comparisons. 108 But this particular moment also signaled the presence of an internal dialectic that shaped and reshaped the contemporary vaccine safety movement in its early years. From the 1970s into the 1980s, vaccine critics perceived a wrongful concealment of important information on vaccine risks and an abuse of social and political power embodied in the practice of vaccination. These perceptions allied vaccine critics' nascent cause with a leftist political ideology. Some, like Marge Grant, saw a smaller government role in vaccine promotion as an important solution to these problems. To the founders of DPT, the solution lay with an expanded government role in overseeing vaccine safety, ensuring the dissemination of information on vaccine risks, and helping families injured by governmentrecommended vaccines. As progress toward these goals was frustrated, the organization reframed its stated demands, bringing their demands more in line with classic libertarian objections to vaccination. But this development would not undo the complex ideological inheritance that gave rise to their critiques and demands in the first place.

#### Conclusion

Even as the ideologies undergirding the nascent organized vaccine safety movement seemed to shift, one element dictating NVIC's direction remained constant. Fisher, whose son Chris suffered a convulsion and

106. See Theda Skocpol, Boomerang: Clinton's Health Security Effort and the Turn Against Government in U.S. Politics (New York: Norton, 1996).

107. James C. Whorton, *Nature Cures: The History of Alternative Medicine in America* (New York: Oxford University Press, 2002), ix–x, 299.

108. Similarly, comparisons to slavery, for instance, were commonly made by British and American antivaccinationists a hundred years before. See Nadja Durbach, "'They Might as Well Brand Us': Working-Class Resistance to Compulsory Vaccination in Victorian England," *Soc. Hist. Med.* 13 (2000): 45–62; Willrich, *Pox* (n. 4), 253–54.

encephalitis following his fourth DPT shot, often described her dedication to the cause in terms that made reference both to her gender and to her awakening to the fallibility of professional medicine. "I was an educated woman," she said. "But, when it came to medicine, I was clueless about vaccines. . . . To know that I participated in what happened to my son because I did not become informed and because I trusted medical doctors without question is a difficult thing to live with, even now." <sup>109</sup> It was a lesson she aimed to inculcate among DPT's constituency from early on: "Mothers, who are primarily responsible for taking children to the doctor and holding them while vaccinations are given, must stop being intimidated by physicians," she wrote in the organization's first newsletter. "We must educate ourselves about vaccines, start asking questions and demanding answers." <sup>110</sup>

Fisher (still at the helm of NVIC) embodied the influence of both feminist and maternalist ideas on vaccine reception and activism at the end of the twentieth century. She and her organization capture the challenges inherent in attempts to categorize vaccine critics, either by gender, politics, class, or geography. The founding members of DPT held professions ranging from lawyer to cosmetologist. They were men and women, Republicans and Democrats. Fisher describes herself as both a Republican and an original subscriber to *Ms.* magazine, one who looked to Gloria Steinem as a role model.<sup>111</sup> The social and political diversity of DPT's members echoed the geographic and ideological diversity of *Mothering*'s readers (whose debates on whether working mothers did a disservice to their families were almost as contentious as their debates on immunization). This diversity, combined with shifting political winds, in turn shaped the confluence of political ideologies that informed vaccine critics' ultimately varied demands.

The organized vaccine safety movement that was spearheaded by Dissatisfied Parents Together was entirely distinct from the women's health movement, but its origins nonetheless reveal the imprint of feminism. Women who spoke out against vaccines in the early 1980s made clear that, like health feminists, they felt patronized and oppressed by the medical profession. Like women's health activists, they also argued that the profession's tight control over information on drug risks prevented them from making informed health care decisions—in this case, for their children. The earlier movement produced, in effect, what Ellen in *A Shot in the* 

<sup>109.</sup> Lameiras, "Fighting for a Choice" (n. 105), 36.

<sup>110.</sup> Barbara Loe Fisher, "Editorial," Dissatisfied Parents Together News 1, no. 1 (1983): 17.

<sup>111.</sup> Personal communication, June 15, 2012.

*Dark* referred to as two broad categories of mothers: "those mothers who blindly accept a pediatrician's every word and can be easily reassured or controlled; and those mothers who question a diagnosis, ask for more information, and cannot be easily controlled." <sup>112</sup>

The idea that feminism resulted in "two types of mothers" was—if an oversimplification of matters—directly relevant to the movement that began to loudly criticize vaccination policies in the 1980s. It was relevant precisely because doctors and health officials had long viewed mothers as primarily responsible for children's vaccination status, and because mothers, too, often saw themselves in this light. It was relevant because vaccinerelated discourse had reflected changing conceptions of women's social roles, both as mothers and as citizens. And it was relevant because both the women's health and antimedicalization movements had equipped women specifically with a framework for demanding information on vaccines and responding to vaccine risks as they came to light. A set of collective gendered experiences was just one factor that shaped popular responses to vaccines in this period. Concern for the protection of children and shifting political winds also loomed large, and these and other factors complicated the ideological inheritance of the organized vaccine safety movement. But overall, a history of vaccination promotion based on gendered assumptions combined with the emergence of the women's health and related movements of the seventies to give shape and content to the vaccine critiques that gained visibility and credence in the eighties. These critiques, in turn, gave rise to a movement that would continue to influence vaccine reception into the next century.

\*

ELENA CONIS is an assistant professor in the Department of History at Emory University in Atlanta.