Engendering the Dread Disease: Women, Men, and Cancer

ABSTRACT

This paper, based on an analysis of cancer articles published in popular periodical literature since the early part of the century, argues that gender has played a key role in medical and popular understandings of cancer. Cancer education, the author finds, has taught women and men different things. Public health materials created with the intention of improving health through education actually send a multiplicity of messages, not all of them helpful. This essay suggests that public health messages targeted by sex are problematic, although perhaps necessary. The paper also contributes to scholarship concerned with the question of how people develop their ideas about risk of disease. (*Am J Public Health.* 1997;87: 1779–1787)

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Introduction

For Americans, James Patterson has argued, cancer is the "dread disease" of the 20th century.[1] Since early in the century, public health educational materials have been designed to combat this dread of cancer and to convince the public that cancer can be cured. My analysis of 20th-century periodical literature shows that gender has been a key organizing principle in popular cancer discourse. Embedded within our knowledge of cancer are social attitudes toward women and men as well as gendered concepts of risk and responsibility.

Twentieth-century public health movements have been marked by their use of popular culture—from the production of pamphlets to radio shows to health fairs modeled on religious revivals—to attract and educate the public about how to protect their own health, but the relationship between public health and popular culture is understudied.[2] This essay shifts the focus from the structure and activities of public health movements to periodical literature, an important source of public health information. I examine the cancer stories that have appeared in American magazines, many of which drew on materials supplied by the American Society for the Control of Cancer, later renamed the American Cancer Society.[3]

Public health educational materials do more than simply provide information. They are cultural products that participate in and produce cultural meanings as they name, describe, and depict disease. Cancer texts and representations produced for the public have consistently used gender as the primary device for attracting attention and conveying information. Through these materials, people have learned not only about cancer but about gender norms. Although the content of cancer literature has changed with shifts in medical technology and the social context, the use of gender conventions to get the message across has not. Early cancer educational campaigns consistently directed most attention at women. After 1950, however, in response to the realization that health educational materials were being read in unintended ways, the American Cancer Society made a conscious effort to reach more men.

Although much of the struggle to control cancer in the past was aimed at overcoming people's fears, fear of cancer continues to concern health practitioners and educators today. For instance, recent studies have found that educated American women tend to overestimate their risk of dying of breast cancer. Other observers have suggested that inaccurate assessments of risk, misunderstanding of probability, and the way that information is given to women by doctors and educators are to blame for women's overestimation of their own risk of cancer.[4] My investigation suggests that at least part of the explanation for women's anxiety about cancer lies not in their misunderstanding of information but in their grasp of nearly a century of cancer public health campaigns. Women have long been taught that cancer is their special concern and that, indeed, to worry about cancer is their duty.

Gendered Messages

In popular literature, information about cancer risk, deaths, and cures has

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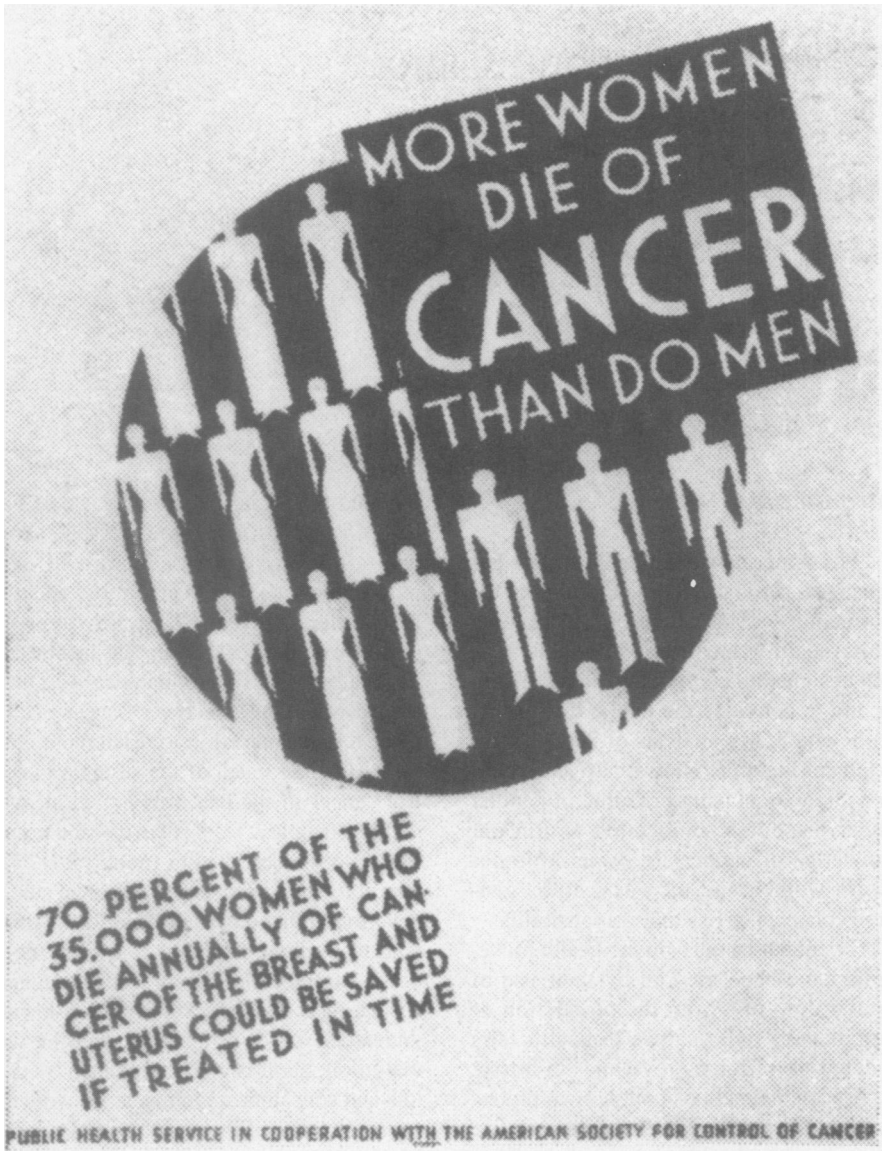

FIGURE 1—Federal Arts Project cancer poster, from Maurice B. Judd, "Art Aids the Doctor," *Hygeia* 17 (February 1939): 135.

invariably been presented in terms of differences between the sexes.[5] Sex, along with race, continues to be a conventional method for analyzing vital statistics. The assumption of essential differences along these lines is rarely questioned.[6] One of the earliest cancer education articles appeared in 1913 in a widely read women's magazine, *The Ladies Home Journal*, a placement that foretold the importance of women's periodicals and organizations to cancer education. The article appeared thanks to the efforts of the new American Society for the Control of Cancer, formed to educate the public about cancer. At the outset, the article pointed to differences in mortality rates between men and women, although it also noted that stomach cancer was the type "commonest in . . . both sexes."[7] "Unfortunately," the vice-president of the society told women in 1927, "cancer afflicts women in a very much larger proportion than it does men." Women's magazines taught their female readers that cancer threatened their sex in particular: after the age of 45 years, "one in five will ultimately die of cancer."[8]

When the Federal Art Project of the Depression era created a series of cancer posters in 1939, four of the five posters featured women as symbols or as potential victims. The series emphasized the effort of the American Society for the Control of Cancer to fight fear of cancer and, as one poster commanded, to teach Americans to "[o]bey cancer's danger signals. Go to a physician."[9] Another poster declared: "More Women Die of Cancer Than Do Men" (Figure 1). Finally, another pictured a woman's figure alongside a chart showing that when women went to the doctor early, a high percentage of those with cancers of the uterus or breast were cured, as opposed to the very low percentage cured when they went to the doctor late.[10] The posters' strongest warning was to women. Furthermore, since the posters proved to be popular, their messages were widely disseminated. No doubt, part of the reason that two of these posters emphasized the cancer risk of women and the hope of cure was the recent formation of the Women's Field Army.

In 1935, the many women's clubs of the nation joined in alliance with the American Society for the Control of Cancer to form the "Women's Field Army." The 2 million organized women in women's clubs were a formidable resource. Through club work, the Women's Field Army had the potential to greatly expand the audience of the cancer education campaign beyond the White, middle-class readership of mainstream magazines. The clubs, including the Young Women's Christian Association, the Associated Women of the American Farm Bureau Federation, the National Association of Colored Women, Hadassah (the Jewish women's club), and many others, represented ethnically and racially diverse populations.[11] Furthermore, many of these clubs had programs that included not only well-to-do and middle-class women but working-class women as well. By mid-century, with the help of women's clubs, some cancer education projects were explicitly working to reach more than middle-class White Americans. During National Negro Health Week, African Americans included cancer in their public health work, and African-American magazines occasionally carried a cancer article.[12] In 1954, one Texas community home demonstration club tried to reach the "Latin American" population, representing almost 80% of the county, by showing Spanish-language as well as English-language cancer films.[13]

The Women's Field Army focused on women's health. Army volunteers taught women to recognize early signs of "the most prevalent forms of cancer in women, . . . cancer of the breast and womb," and encouraged them to see their doctors regularly.[14] Through periodic pelvic examinations, they promised, cancer could be detected at an early stage and deaths prevented. The Woman's City Club of Chicago was one of the "pioneers" in the effort

to educate women about cancer of the cervix and the need for examination.[15]

"False Modesty"

Acceptance of periodic pelvic exams by women when they were neither ill nor in labor, however, required decades of cultural training. The vulnerability that many 19th-century women felt in being asked to allow male physicians to examine, manually and visually, their "private parts" is well known.[16] Despite the fact that male physicians attended most deliveries by the 1930s, cancer literature reveals that women continued to feel uncomfortable going to male physicians for gynecological examinations well into the 20th century.[17]

Indeed, articles for popular audiences suggested that women's attitudes toward pelvic exams caused cancer deaths. "False modesty," Virginia Gardner reported in 1933, was "in large measure responsible" for the persistently high rates of "cancer of the cervix of the womb."[18] Gardner also blamed the "prudery" of the public for this state of affairs because public lecturers on cancer avoided the topic of female reproductive health even though cancer of the cervix was the greatest "menace" to women.[19] As a result, women who had unusual vaginal bleeding remained in ignorance of the need to go to a doctor for a pelvic examination. With the development of the "vaginal smear" or "Pap smear" test for detecting cervical cancer in the 1940s, pelvic exams for cancer became even more important.[20] A 1952 *Reader's Digest* image of "false modesty" shows a woman hiding her eyes, overshadowed by the shame of exposure (Figure 2).

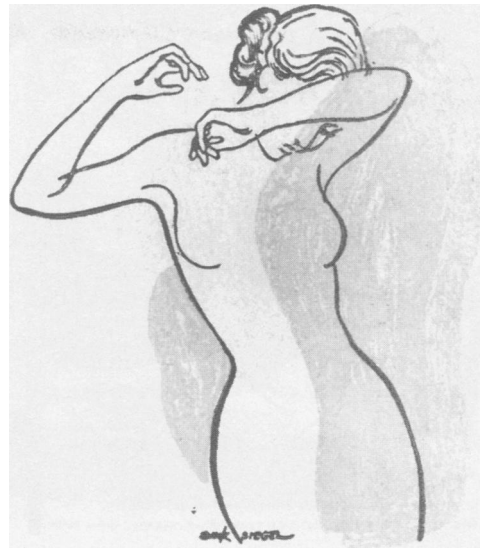

Figure 2—This depiction of "false modesty" as a female nude might attract both male and female readers. The classic lines of the figure made the image artistic and acceptable for a family magazine. Illustration from Collie Small, "Are You Risking Cancer—Because of False Modesty?" *Reader's Digest* 60 (February 1952): 11. Reprinted by permission of Dink Siegel.

Modesty was a mark of sexual purity and respectable womanhood. In labeling female modesty "false," the cancer campaign ridiculed women and their feelings and blamed them for cancer. From childhood, women had been taught to be ashamed of their genitals and their sexuality, to protect their own reputations, and to "save" themselves for their husbands. Anti-cancer campaigns told women to overcome these familial and social teachings and to do in doctors' offices what they had been expressly taught not to do anywhere else: lie down with their skirts up, their underwear off, and their legs apart, exposed to a man not their husband. It hardly seems surprising that many women would want to avoid pelvic examinations. The term "false modesty" belittled female anxieties and denied the sexualized and dangerous meanings of displaying women to male view.

If female modesty contributed to deaths due to cervical cancer, then cancer detection required a refashioning of gender norms. The first step of much public health education for women consisted of convincing them of not only the necessity, but the respectability, of having annual gynecological exams. A cancer education drive directed at an entire community, from doctors to ordinary residents alike, could reduce these anxieties. A Hillsdale, Mich, county public health project reported success in 1950: "The idea of undergoing a pelvic examination to seek cancer of the cervix—a prospect which has appalled many women in the past—no longer holds fear or shame for the women of Hillsdale. Because everyone does—it's a commonplace."[21] Making pelvic exams "normal" apparently helped remove some of the shame attached to such exposure. One newspaperman told another that "when the campaign started, my wife was terrified at the thought of her first examination. Now she goes back for repeat examinations as casually as she does her shopping."[22]

The shopping motif is an interesting one. It is clearly gendered in that shopping is a female activity, and while the comment makes the intended point that a pelvic exam is nothing to be afraid of, it implicitly places women's anxieties about examinations by male practitioners and their fear of cancer on par with the frivolity of shopping. (One has to wonder whether a woman would have ever equated shopping and pelvic exams.) The lightness of the man's remark does not do justice to the transformation that had apparently occurred: in order to protect their own lives, women found ways to overcome their feelings of fear and shame and to survive what had heretofore been a strange and shameful event.

Educating Doctors

Educating women about the need for checkups was not sufficient in itself, however; while women may have been convinced of the need for these exams, many of their doctors were not. A 1948 *Woman's Home Companion* poll found that only a minority of women had routine pelvic and breast examinations, but this could not be blamed on female modesty alone. Nearly a quarter of the respondents complained that their doctors did not take cancer seriously and refused to provide the breast and pelvic examinations requested by their patients. An Illinois woman reported the problem as follows: "I make an appointment for a general checkup at least once a year. . . . What I get is a blood pressure reading and a pat on the back." Furthermore, when she "checked with a group of friends," she learned that "we all receive similar treatment from our doctors. If we

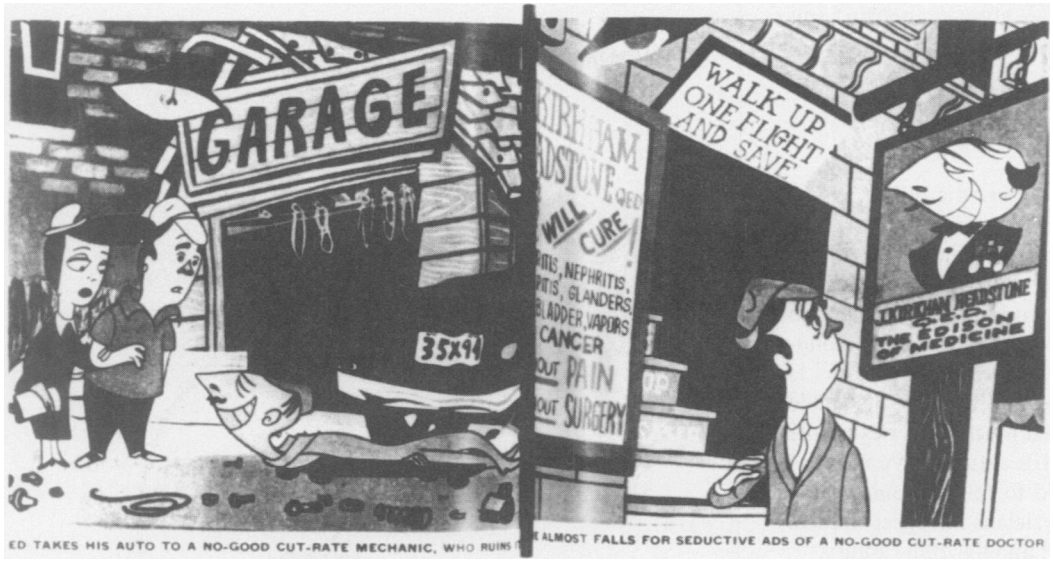

Figure 3—The 10-minute cartoon "Man Alive!" and its mixed messages were widely disseminated. The Illinois Department of Public Health suggested that the audience for this film was seventh grade to adult. Illustration from "Grim but Funny," *Life* 32 (21 April 1952) 100–101. Reprinted by permission of the American Cancer Society, Inc.

ask for a cancer examination, we get this sort of remark: 'You're not the cancer type. . . . You must have been reading the papers.' And we don't get the examination."[23] This story reveals not only that some doctors dismissed educational campaigns and patient requests; it also reveals physician habits of diagnosis. Doctors who expected to see cancer in certain "types" looked at their patients through categories rather than through physical examination and diagnosed disease by social category.

The push to get women to accept pelvic examinations for cancer detection was two-pronged: these campaigns were organized to change the behavior of both women and doctors. Cancer societies and women's periodical literature repeatedly told women to put their health into the hands of doctors and to trust their doctors' diagnoses and recommendations. Yet, at the same time, women learned that not all doctors responded immediately to suspicious signs and that too many failed to perform necessary tests to check for cancers. In response to resistance and ignorance within the medical profession, the cancer educational campaign pressured doctors to improve their own knowledge of cancer detection and treatment. "Women of a community" were urged to "get together and insist on periodic examinations." If they did so, this writer promised, "physicians [would] equip themselves to give them." The American Cancer Society provided a pamphlet, "How Your Doctor Detects Cancer." When armed with this information, no doubt women patients would educate their own doctors as to their duties. Finally, the American Cancer Society encouraged women's groups to try to get physicians to create cancer centers and to "help raise funds to support" such centers.[24] Although women were encouraged to demand that their doctors check for early signs of cancer, their energies were contained within a medical model that granted authority to physicians and expected patients to be compliant; women and their organizations were welcome to raise money for cancer centers, not to run them.

Educating Men

Public health campaigns that warned people of their need to protect themselves by identifying risk according to social categories had both benefits and drawbacks. When risk was identified by sex, only some people heard the message. On the positive side, targeted campaigns alerting women to their special jeopardy had made women more willing to accept pelvic exams. However, men seemed to have learned that they did not need to worry about cancer. The Hillsdale, Mich, campaign illustrated the problem. After the campaign's success in getting women to go in for pelvic exams, it turned out that "the men of Hillsdale County," a reporter observed, "are not so aware of cancer danger as they should be. Only about one man in six has gone to a doctor for examination. As a result the cancers found among men have tended to be in later and more dangerous stages."[25] When public health posters and campaigns announced that more women than men died of cancer, they sent an unintended message to men that they were not at risk.

Indeed, by the early 1950s the gendered understanding of cancer was recognized as a problem, and the American Cancer Society was trying to rectify it. "Many men" reportedly had "the wrong notion that cancer is a woman's disease." In fact, the cancer society explained, men and women died in about equal numbers as a result of cancer. Men more than 40 years of age were urged, like women, to go to their doctors for regular examinations and to pay attention to the "seven danger signals."[26]

Cancer educational materials used gender-defined interests to reach men and women. Articles in women's magazines often commented on clothing and shopping. One article told of a woman who used a new hat "to find [the] courage" to face cancer.[27] A 1952 American Cancer Society film produced for men used the male obsession with cars to get across the message that a man who suspects he has cancer should go immediately to a reputable doctor. This film was probably produced as a result of the growing awareness that men did not perceive themselves as at risk.

In the film, titled "Man Alive!", Ed's car and his stomach have both been "act-

ing up." Ed is seen consulting "sidewalk loafers" who give him "bad advice about his car" and "ghoulish golfers [who] scare Ed silly with talk about possible cancer." To avoid the expense of car repairs and the bad news he expects from his doctor, Ed turns to "worthless engine compounds" and "patent medicines," which, of course, do not work. He then takes his car to "a no-good cut-rate mechanic, who ruins it" (Figure 3). Later we see that, for the car, "it is too late." Ed's car is dead.

Fortunately for Ed, although he "almost falls for seductive ads of a no-good cut-rate doctor," in the end he gets smart about his own health and goes to a "good doctor." The picture of the good doctor's office is a contrast to that of the "no-good" doctor: there is a sign but no advertising or portrait of the practitioner, and the patient walks directly in the front door rather than up a flight of dark stairs. The disreputable doctor is known by his unethical advertising and by the location of his office up dark stairs, a location reminiscent of the "back alley" associated with illegal abortionists. The film's final frames take the viewer into the good doctor's office, where Ed gets an examination using "the most modern diagnostic equipment." The presence of technology and the use of the x-ray are signs of the good doctor. The doctor gives Ed a stern lecture about the foolishness of avoiding a checkup. Finally, Ed learns that he has only indigestion, not cancer. The moral, *Life* magazine explained, is that "if everyone would do the same, twice as many people could be cured of cancer."[28]

However, the cartoon projected other messages as well, not all of which concerned cancer. Teaching about cancer through a story of cars also taught men (and boys who might see this film in school) what they should be interested in, namely cars. Both the good patient and the bad, as well as the good doctor and the bad, are represented in this cartoon. The good patient does not listen to his friends, whether on the street or the golf course, but consults the doctor. (The criticism of men who listened to their buddies parallels a standard complaint that women too often went to other women for medical advice.) Furthermore, the film instructs that examination by a reputable doctor, although more expensive than patent medicines and other doctors, is worth it. The message to men is to treat themselves as well as or better than their cars. If a man relied on the less expensive, advertising doctor, like the less expensive car mechanic, the man, like his car, would end up dead. In this film, not only does American man love his car, man *is* his car.

Like so much of the cancer education material, this film was designed to conquer fear and encourage men to go to doctors early, whenever there were signs of possible cancer. The film could be interpreted differently than intended, however. The fact that Ed did not have cancer, although no doubt reassuring to those who feared examinations, undercut the urgency of going to the doctor. If it turned out that expensive examinations confirmed that there was nothing to worry about, why bother going to the doctor for an exam? Indeed, the Hillsdale, Mich, project showed that after women had gone for one checkup and found that they did not have cervical cancer, it was hard to convince them to return 6 months or a year later for the same test.[29] Cancer prevention campaigns had to teach patients (and doctors) a different attitude about seeing doctors. Instead of going to physicians only in times of illness and emergency, people had to learn to see themselves as patients when they were well and to visit doctors in order to prevent disease and detect cancer.

Gender Division of Cancer

By the early 1950s, in parallel with the gender division of labor, a gender division of cancer had developed: women got reproductive cancers of the uterus and breast; men got lung cancer. Cancer education highlighted different types of cancer, different areas of the body, and different examinations for women and men. Through the 1940s, women had been urged to get regular Pap smears; in the 1950s, cancer educational literature encouraged women to perform monthly breast self-examinations. Magazines explained to women how to examine their breasts for cancer.[30] The advice to men in the 1950s emphasized the need for annual chest x-rays to check for lung cancer. "Lung cancer among men is now the number-one cancer killer," declared the headline of a *Better Homes and Gardens* article. Although 20 000 men died of lung cancer each year, the author reported, lung cancer "can be cured" through early detection and immediate surgery. Men older than 40 years of age, according to this author, should have at least one chest x-ray (preferably two) each year.[31] What we now see as obviously related to higher rates of smoking among men was not obvious but, for some, dubious.[32]

The problem of false modesty persisted. After decades of cancer education, concern about exposing sexualized parts of the body to physicians now endangered the health of both women and men. Doctors complained of patients who refused to let them perform examinations. One woman reported quitting her doctor because he had tried to perform a vaginal examination. A social worker learned through hospital interviews that nearly half of the women interviewed with reproductive or breast cancers feared examination of specific areas of the body: "the breasts, [the] sexual organs, and . . . [the] rectum." An exasperated cancer surgeon described the result of not calling physicians as "death by stupidity."[33] We have seen the early 1950s portrait of the woman burdened with false modesty. To the frustration of physicians, men too suffered from "false modesty" (see Figure 4). One doctor told of a male patient who had to get drunk in order to endure an examination.[34]

Although both women and men were embarrassed by intimate medical examinations, by 1960 men appeared to be less able than women to conquer their fears about these exams. One doctor observed that men were "more reluctant than women to undergo physical checkups—particularly examinations of the lower intestinal tract." Over and over, he saw men find ways to avoid the rectal exam even though the rectum was a prime site for cancer and the exam took only a few minutes.[35] The fear of examination suggests an unspoken fear of assault and homosexuality among men who went to male physicians.

By 1962, when the image of the mortified man shown in Figure 4 was published, a gender difference in "submitting" to examination (the word used routinely) had developed. Women had long been educated to go in for examinations and, because of childbearing, had endured more observation and touching of their genitals by doctors. Men did not have comparable medical experiences. This gender difference still exists: women begin to be acculturated to vaginal exams as teenagers and, for reasons of birth control, prenatal care, and childbirth, will tend to receive pelvic examinations almost annually. Because of class differences in access to health care, routine examinations are not completely universal; however, reproductive health care is more available than other care to low-income women. Men are not subjected to these kinds of thorough physicals until a later age. Ironically, the emphasis on women's reproductive health, sometimes to the neglect of other health problems, has in some ways helped to make women better

able to tolerate examinations and treatment, even if embarrassing, for their own health.

Women's cancer was consistently analyzed and explained through the lens of reproduction. As Francis Carter Wood put it in 1927, more women than men died of cancer "for the simple reason that there are two organs in women in which cancer frequently occurs that raise the percentage . . . the breast and the womb." Because of "these two additional sites," Wood concluded, "it is far more important for women to understand the cancer situation, and to act upon it, than for men."[36] Wood clearly assumed that a man's body was the norm. Women would not regard their breasts and uterus as "additional." The health literature thus directed women's attention to the ways in which their bodies were defined as different.

Marriage and Motherhood

Throughout the early to mid-20th century, cancer education articles pointed to marriage and motherhood to explain the causes of cancer in women. In contrast, men's health risks were not analyzed in terms of their marital status or their fatherhood. These details were assumed to be biologically irrelevant because they were socially irrelevant. A 1935 report declared, "Cancer of the breast is the penalty women pay for failing to bear and . . . nurse children." Higher breast cancer rates among women without children suggested that "child-bearing and nursing . . . [were] natural preventive measure[s]."[37] Calling breast cancer a "penalty" suggested that perhaps women who were not mothers deserved to be punished for their failure to conform to gender norms. When the Massachusetts Department of Health reported that the incidence of cancer was "slightly" lower among women who had several children, the *Science News Letter*'s interpretation of this finding suggested that the higher rate of cancer among women with fewer children "is probably linked with biological inferiority and their relative inability to have large families." Superiority within the female sex, this article implied, was measured by the production of children.[38]

A 1955 advice article provides an example of the politics of cancer information and the promotion of marriage and motherhood. Dr Emerson Day of New York's Memorial Center and Cornell University Medical College agreed that, indeed, married women had more cancer of the cervix than unmarried women. But, he noted, "more single women than married women develop breast cancer." And just in case readers got the wrong message, Dr Day added, "So spinsterhood is no guarantee against the disease."[39] In contrast to the reporting that promoted childbearing as a way to avoid breast cancer, no physician, cancer society official, or magazine ever hinted that women might be better off avoiding sex with men and marriage by printing a headline that announced "Single women suffer less uterine cancer." Nor was there ever a hint that lesbian relationships might be a way to avoid cervical cancer. This is hardly surprising, of course, but the point is that cancer knowledge did not deviate from gender and sexual norms, no matter what possibilities might have been suggested by the research.

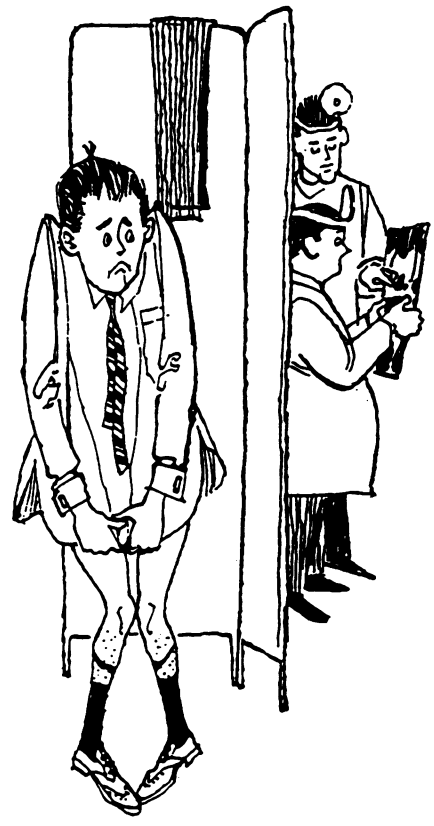

Figure 4—The use of humor seems to have been an important method of overcoming male fears of cancer and physical examination. Note, however, that unlike the female version of false modesty, the man is partially dressed. Illustration from Robert Turell, "Does False Modesty Threaten Your Life?" *Today's Health* 40 (November 1962): 84. Reprinted by permission of the American Medical Association, copyright 1962.

The pronatalism that marked the 1940s and 1950s shaped cancer discourse as well. The photo accompanying a 1955 *Ladies Home Journal* article on women and cancer shows a joyful young White mother holding her baby, the baby's small fingers holding the mother's chin. The caption to this photo declared, "Young mothers can now look forward to a safer future than ever before." Yet the article's text told of danger. "Today," the writer explained, "the heaviest cancer burden is falling on the women who have chosen wifehood and motherhood." The article encouraged married mothers to see their doctors twice a year for a Pap smear to detect cervical cancer early. Cervical cancer, the article reported, "is seldom found in women who have not borne children and led normally active sex lives." Cancer seemed to be the price of being "normal," and "normal" was equated with heterosexuality.[40] The article promised that early detection of cervical cancer could preserve a woman's life; the photo suggested that Pap smears could preserve mothers for their children.

Finally, cancer discourse sent a gendered message about who was responsible for watching out for cancer. Cancer education was directed at women because they were, as one magazine put it, the "private

health officers" for the entire family.[41] Notably, advice that men should get cancer checkups appeared in women's magazines. Anticancer campaigns built on existing organizations and the long history of female involvement in promoting health.[42] The Women's Field Army reinforced the idea that a woman was responsible for her entire community as well as herself and her family. In addition to educating women about their own cancer risk, women's organizations played a crucial role in raising money for cancer institutions, research, and the training of physicians and technicians.

Cancer campaigns taught mothers that they were expected to safeguard their children's health by keeping their eyes open for signs of cancer. As child mortality from infectious diseases declined, mothers learned of their new responsibility for noticing cancer's warning signals. In the 1940s and 1950s, cancer literature newly focused on cancer in children. "The best hope for preventing needless deaths," *Collier's* declared, "lies with mothers everywhere."[43] "A good mother or grandmother," the *Saturday Evening Post* observed, would detect signs of possible cancer and take her child or grandchild to the doctor for a checkup.[44]

The expectation that the adult women of the family (the "mother or grandmother"), rather than all adults or parents, would watch out for early signs of cancer in all members of the family fit with the gendered expectations of child rearing and the historical responsibility of women for family health. Turn-of-the-century child health campaigns in the United States and in England had been directed at women, at mothers themselves, and, through "Little Mothers" clubs, at their daughters, who both cared for younger siblings in the present and would be mothers in the future. Women were given knowledge of and responsibility for family health, especially child health, which brought with it some power to make demands on husbands, schools, and the state. Yet at the same time, if mothers failed to notice key signs or to bring a child into the doctor, they were blamed for failing to protect their children's health.[45] These Progressive Era campaigns did not, however, educate fathers or "little fathers" about proper infant feeding and health care. The assumption that mothers care for the health of children is still so strong that the gendered nature of the responsibility for health may be overlooked, but the ways in which health education and responsibilities have been socially assigned to one sex deserve recognition and analysis.

Conclusion

Gender has been a central means of comprehending and constructing cancer. As Joan Jacobs Brumberg, Sheila M. Rothman, Judith Walzer Leavitt, and Paula Treichler have shown in their histories of anorexia, tuberculosis, typhoid, and AIDS, gender has been fundamental to the definition, diagnosis, and treatment of disease.[46] Furthermore, one of the guiding assumptions of many 20th-century public health efforts, including the maternal and infant health movement, the African-American public health movement, and the anticancer campaign, was that women would play a distinct role in promoting health education and guarding the health of children and family members.[47]

The cancer educational campaign spoke differently to women and men. Since the early part of this century, women have been told that cancer is their special worry and responsibility. American women actively promoted these gendered messages and responded to them. Women worked to increase and improve cancer research, diagnosis, and treatment and took responsibility for the health of the community as well as their own families. And many women, especially within the educated middle classes, took seriously the message that they were particularly vulnerable to cancer and sought examinations to detect cancer at early stages.

The cultural construction of disease in popular health materials is not only interesting theoretically; these constructions of disease have real implications. The history of cancer education shows that health campaigns targeted by sex sometimes had less positive, unintended consequences. This history suggests that gender is one of the central identities that make people listen to health advice. It may also make people ignore such advice. When one group is identified as most in need of information and attention, others who do not identify with that group may see themselves as free of risk. Educational information targeted by sex, race, age, occupation, sexual orientation, and other identities may be essential in order to gain the attention of specific groups and try to improve their health. Yet, what may be good for one population may simultaneously hinder public health efforts with another. Cindy Patton has argued that HIV/AIDS educational materials targeted at gay men and injection drug users made women "invisible." Because women did not "see" themselves represented in HIV/AIDS education, it was difficult for them to realize their risk of infection and their need to adopt safe-sex practices.[48] The gendered nature of health education helps to explain why women in the United States today are more aware of breast cancer than heart disease as a threat to their lives.[49] Heart attacks have been understood as a male problem, however, while over the last 50 years women have received a great deal of information about breast cancer. This essay suggests the dilemmas of targeted health measures: they may be both a necessity and a hazard. Until gender has no meaning, however, gendered understandings of disease and gendered health education may be inevitable. □

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Endnotes

1. James T. Patterson, *The Dread Disease: Cancer and Modern American Culture* (Cambridge, Mass.: Harvard University Press, 1987); Stephen P. Strickland, *Politics, Science, and Dread Disease: A Short History of United States Medical Research Policy* (Cambridge, Mass.: Harvard University Press, 1972); Susan Sontag, *Illness as Metaphor* (New York: Doubleday, 1990). Barbara Clow questions Sontag's description of the attitude toward cancer as one of absolute silence and shame in "Who's Afraid of Susan Sontag? or, The Myths and Metaphors of Cancer Reconsidered" (paper presented at the 69th Annual Meeting of the American Association for the History of Medicine, Buffalo, N.Y., May 1996).
2. There is a rich history of public health and the campaigns to educate the public, reduce mortality, and eradicate diseases. For a sampling of the literature on the 20th century, see Judith Walzer Leavitt, *The Healthiest City: Milwaukee and the Politics of Health Reform* (Princeton, N.J.: Princeton University Press, 1982); Susan L. Smith, *Sick and Tired of Being Sick and Tired: Black Women's Public Health Activism in America, 1890–1950* (Philadelphia: University of Pennsylvania Press, 1995); Nancy Tomes, "The Private Side of Public Health: Sanitary Science, Domestic Hygiene, and the Germ Theory, 1870–1900," *Bulletin of the History of Medicine* 64 (Winter 1990): 509–539; Lynne Elizabeth Curry, "Modern Mothers in the Heartland: Maternal and Child Health Reform in Illinois, 1900–1930" (Ph.D. diss., University of Illinois, 1995); Allan M. Brandt, *No Magic Bullet: A Social History of Venereal Disease*

in the United States since 1880 (New York and Oxford: Oxford University Press, 1985); Suzanne Poirier, *Chicago's War on Syphilis, 1937–1940: The Times, the Trib, and the Clap Doctor* (Urbana and Chicago: University of Illinois Press, 1995); Elizabeth Etheridge, *The Butterfly Caste: A Social History of Pellagra in the South* (Westport, Conn.: Greenwood Press, 1972); John Ettling, *The Germ of Laziness: Rockefeller Philanthropy and Public Health in the New South* (Cambridge, Mass: Harvard University Press, 1981); Richard Harrison Shryock, *National Tuberculosis Association 1904–1954: A Study of the Voluntary Health Movement in the United States* (1957; reprint, New York: Arno Press, 1977).

On the media and public health propaganda specifically, see Martin S. Pernick, *The Black Stork: Eugenics and the Death of "Defective" Babies in American Medicine and Motion Pictures since 1915* (New York: Oxford University Press, 1996); Martin S. Pernick, "Thomas Edison's Tuberculosis Films: Mass Media and Health Propaganda," *Hastings Center Report* 8 (June 1978): 21–27; Terra Ziporyn, *Disease in the Popular American Press: The Case of Diphtheria, Typhoid Fever, and Syphilis, 1870–1920* (New York: Greenwood Press, 1988).

3. The American Society for the Control of Cancer, formed in 1913, was renamed the American Cancer Society in the mid-1940s; see Patterson, *The Dread Disease*, 71–74, 172–177. The current essay builds on Patterson's study. Although Patterson looked at the same sources and remarks on women's presence, he did not explicitly analyze the significance of gender in cancer discourse. My study is based on approximately 300 periodical articles identified through the *Reader's Guide to Periodical Literature*, 1890–1965; *A Guide to Negro Periodical Literature*, 1940–1946; and the *Index to Periodical Articles By and About Negroes*, 1950–1965.
4. David Plotkin, "Good News and Bad News about Breast Cancer," *Atlantic Monthly* 277 (June 1996): 53–55; William C. Black, Robert F. Nease, Jr., and Anna N. A. Tosteson, "Perceptions of Breast Cancer Risk and Screening Effectiveness in Women Younger than 50 Years of Age," *Journal of the National Cancer Institute* 87 (May 17, 1995): 720–726.
5. In this essay, I deliberately use the terms *sex* and *gender*. The term *sex* refers to the physical differentiation between bodies. *Gender* refers to the social and cultural meanings given to women and men; gender is culturally and historically produced. The two terms are not interchangeable, although they are related. For the moment, I am assuming a biological difference between the sexes, although some argue that even what appears to be the fixed biology of sex has been historically and culturally produced. See Thomas Lacqeur, *Making Sex: Body and Gender from the Greeks to Freud* (Cambridge, Mass.: Harvard University Press, 1990).

Age and, later, race were also used to categorize cancer risks and mortality rates, but they did not play a prominent role in the popular literature. For an illustration that combined sex, age, and race to show comparative risks, see Clarence Cook Little, *Cancer: A Study for Laymen*, prepared for the Women's Field Army by the American Society for the Control of Cancer (New York: Farrar and Rinehart, 1944), 30, Fig. 19, but I have found nothing similar in the popular magazines. Gender was the main means of talking about cancer and educating the public.

6. See contemporary U.S. census and vital statistics data, which are almost always organized by race and sex but rarely by income. For an insightful critique, see Nancy Krieger and Mary Bassett, "The Health of Black Folk: Disease, Class, and Ideology in Science," in *The "Racial" Economy of Science: Toward a Democratic Future*, ed. Sandra Harding (Bloomington: Indiana University Press, 1993), 161–169.
7. Samuel Hopkins Adams, "What Can We Do About Cancer?" *Ladies Home Journal*, May 1913, 21–22; Patterson, *The Dread Disease*, 71–73.
8. Francis Carter Wood, "Must Women Die of Cancer?" *Woman Citizen* 11 (April 1927): 24.
9. This poster used a male figure as the standard human figure; arrows indicated the location of cancer's "danger signals" for men and women. The poster listed six danger signals: "any sore that does not heal"; "persistent hoarseness that lasts longer than two weeks"; "any persistent lump or thickening, especially of the breast"; "persistent indigestion developing suddenly in middle life"; "any irregular bleeding or discharge from any body opening"; and "sudden changes in form or rate of growth in a mole or wart." The poster was included in Maurice B. Judd, "Art Aids the Doctor," *Hygeia* 17 (February 1939): 135.
10. "Cure" in cancer discourse meant surviving 5 years after discovery of the presence of the disease.
11. "Cancer Army," *Time*, 22 March 1937, 49–50, 52, 54; Richard Carter, *The Gentle Legions* (Garden City, N.Y.: Doubleday, 1961), 152–155; Walter S. Ross, *Crusade: The Official History of the American Cancer Society* (New York: Arbor House, 1987), 30–31, 40. Ross reports that the Women's Field Army was ended in 1951, although the American Cancer Society continued to rely upon women volunteers.
12. Smith, *Sick and Tired of Being Sick and Tired*, 54. In a personal communication, Susan Smith reports that although cancer was not a primary focus of the Black public health movement, it was included in public health efforts and the *National Negro Health News* covered cancer, especially in the 1940s. For an article in an African-American periodical, see L. Granger, "I Was Cured of Cancer," *Ebony*, April 1958; 80–84.
13. Laura Lane, "Farm Women Take Up Arms against Cancer," *Country Gentleman*, September 1954, 91. The article did not report on the size of the audiences or their responses, although I hope that further research will uncover information about the effectiveness of and audience response to these outreach projects.
14. "Cancer Army," 49; Patterson, *The Dread Disease*, 121–123.
15. Virginia Gardner, "Vanity, Modesty, and Cancer," *Hygeia* 11 (April 1933): 302.
16. Physicians were also uncomfortable with the implications of practicing obstetrics; see Virginia G. Drachman, "The Loomis Trial: Social Mores and Obstetrics in the Mid-Nineteenth Century," in *Women and Health in America: Historical Readings*, ed. Judith Walzer Leavitt (Madison: University of Wisconsin Press, 1984), 166–174. See illustrations of male physicians performing pelvic examinations without viewing the female genitalia in Judith Walzer Leavitt, *Brought to Bed: Childbearing in America, 1750–1950* (New York: Oxford University Press, 1986), 40–43. Concern about the propriety of male physicians' involvement in obstetrics and gynecology fueled feminist support for women physicians. See Regina Markell Morantz-Sanchez, *Sympathy and Science: Women Physicians in American Medicine* (New York: Oxford University Press, 1985); Mary Poovey, "Scenes of an Indelicate Character: The Medical Treatment of Victorian Women," in *Uneven Developments: The Ideological Work of Gender in Mid-Victorian England* (Chicago: University of Chicago Press, 1988), 24–50.
17. Although Gardner acknowledged that some women might find it easier to be examined by female physicians, she dismissed women's anxieties about male doctors in the same breath. "Doubtless there should be more women doctors," the author wrote, "but where there are not, women are committing an inexcusable folly if they shy from periodic examinations because of delicacy" (quotation from Gardner, "Vanity, Modesty, and Cancer," 301).
18. Ibid., 300.
19. Ibid., "prudery" on 301, "menace" on 300.
20. On Dr. George N. Papanicolaou, see Clive Howard, "Cancer of the Womb," *Woman's Home Companion*, October 1947, 32–33, 48, 50, 53; Milton L. Zisowitz, "Conquering Uterine Cancer," *American Mercury*, June 1949, 647–655.
21. Clive Howard, "How to Prevent 100,000 Cancer Deaths a Year," *Woman's Home Companion*, September 1950, 127. For campaigns encouraging screening with the Pap test in Oklahoma, Kansas, and New York in 1947 and Memphis in 1955, see Lois Mattox Miller, "The Small Towns Tackle Cancer," *Hygeia*, 25 (April 1947): 260–261, 318; Lois Mattox Miller, "Memphis Declares War on a Woman-Killer," *Reader's Digest*, October 1955, 146–148.
22. Howard, "How to Prevent 100,000 Cancer Deaths," 41.
23. Dorothy Dunbar Bromley, "What Do You Do about Cancer?" *Woman's Home Companion*, August 1948, 7–8 (quotation from p. 8).
24. Ibid., 8; Frances W. Dow, "A New Way to Fight Cancer," *Parent's Magazine*, April 1949, 90.
25. Howard, "How to Prevent 100,000 Cancer Deaths," 127.
26. "Men Need to Be Cancer Alerted," *Science News Letter* 61 (31 May 1952): 347.
27. Elizabeth R. Bills, "In My Case It Was Cancer" *Saturday Evening Post*, 25 October 1952, 45.
28. "Grim but Funny," *Life* 32 (21 April 1952): 99–102. (This film was available to both schoolchildren and adults. See Illinois Depart-

ment of Public Health, *Health Film Catalog, Including Filmstrips, Slides, Transcriptions*, 1969, 14.)

29. Howard, "How to Prevent 100,000 Cancer Deaths," 127.
30. See illustration in Robert D. Johnson, "Self Inspection against Cancer," *Today's Health* 30 (January 1952): 22–23; "Self-examination for Cancer of the Breast," *Ladies Home Journal*, August 1952, 84; J. D. Ratcliff, "You Can Fight Cancer in Your Home," *Woman's Home Companion*, May 1952, 44, 98.
31. Lawrence Galton, "Lung Cancer among Men," *Better Homes and Gardens*, October 1953, 64, 305. Through early detection and surgery, Galton promised, "the cure rate for lung cancer can be increased at least tenfold." See also "Chest X-Rays for Men," *Science News Letter* 63 (28 March 1953): 196.

    A 1956 *McCalls* article described the Reade family's physicals: "Mrs. Reade's internal examination had included the painless Papanicolaou vaginal smear test. . . . Her husband's complete examination stressed the lungs, rectum, prostate and stomach—the four most common cancer sites in men." Although Mr. Reade's exam covered each of these areas, the article and photo emphasized the chest x-ray, lung cancer, and surgical removal of the lung. Evan McLeod Wylie, "24 Hours in a Cancer Hospital," *McCalls*, 5 February 1956, 45.
32. Galton, "Lung Cancer among Men," 302, mentioned the "controversy" over smoking as a possible cause of lung cancer; Patterson, *The Dread Disease*, chap. 8.
33. Collie Small, "Are You Risking Cancer—Because of False Modesty?" *Reader's Digest*, February 1952, 11–13.
34. Ibid., 12.
35. Robert Turell, "Does False Modesty Threaten Your Life?" *Today's Health* 40 (November 1962): 84.
36. Wood, "Must Women Die of Cancer?" 24.
37. "Breast Cancer in Relation to Childbearing and Nursing," *Science–Supplement* 80 (17 September 1934): 8, 9.
38. "Cancer Less Common among Women with Large Families," *Science News Letter* 35 (14 January 1939): 23.
39. Emerson Day, "Cancer and a Woman's Sex," *Reader's Digest*, September 1955, 89.
40. Gladys Denny Shultz, "Women Need No Longer Die of Their No. 1 Cancer Foe!" *Ladies Home Journal*, April 1955, 60–61.
41. "Cancer Contest Winners," *Hygeia* 19 (January 1941): 66.
42. Molly Ladd-Taylor, *Mother-Work: Women, Child Welfare, and the State, 1890–1930* (Urbana: University of Illinois Press, 1994); Smith, *Sick and Tired of Being Sick and Tired*; Curry, "Modern Mothers in the Heartland."
43. These articles always simultaneously raised and denied maternal fears. Mothers needed to recognize the danger signs but not "be frightened or fatalistic about" cancer in children. Lawrence Galton, "Cancer, the Child Killer," *Collier's*, 15 May 1948, 66.
44. As many of these cancer education articles did, this one suggested that in most cases the doctor would "rule out the possibility of tumor." Steven M. Spencer, "Cancer Kills Children Too," *Saturday Evening Post*, April 1951, 101; see also Groff Conklin, "Is Cancer a Danger to Your Child?" *Woman's Home Companion*, March 1950, 34.
45. Curry, "Modern Mothers in the Heartland"; Ladd-Taylor, *Mother-Work*; Ellen Ross, *Love and Toil: Motherhood in Outcast London, 1870–1918* (New York: Oxford University Press, 1993); Jane Lewis, *The Politics of Motherhood: Child and Maternal Welfare in England, 1900–1939* (London: Croom Helm, 1980).
46. Joan Jacobs Brumberg, *Fasting Girls: The Emergence of Anorexia Nervosa as a Modern Disease* (Cambridge, Mass.: Harvard University Press, 1988); Sheila M. Rothman, *Living in the Shadow of Death: Tuberculosis and the Social Experience of Illness in America* (Baltimore: Johns Hopkins University Press, 1994); Judith Walzer Leavitt, *"Typhoid Mary": Captive to the Public's Health* (Boston: Beacon Press, 1996); Paula A. Treichler, "AIDS, Gender, and Biomedical Discourse: Current Contests for Meaning," in *AIDS: The Burdens of History*, ed. Elizabeth Fee and Daniel M. Fox (Berkeley: University of California Press, 1988), 190–266.
47. Ladd-Taylor, *Mother-Work*; Curry, "Modern Mothers in the Heartland"; Smith, *Sick and Tired of Being Sick and Tired.*
48. Cindy Patton, *Last Served? Gendering the HIV Pandemic* (London: Taylor & Francis, 1994), chaps. 3, 5 (quotation from pp. 104–105).
49. Jane E. Brody, "The Leading Killer of Women: Heart Disease," *New York Times*, 10 November 1993; Susan C. Sanderson, "Women's Health in the Curriculum: Coming of Age," *Academic Physician and Scientist*, June/July 1996, 4. In a personal communication, Dr. Dan Bloomfield stated that many women rapidly responded to these reports and are now paying more attention to the possibility of heart disease.