How to Treat a Menopausal Woman:  
A History, 1900 to 2000  

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Introduction  

This seemingly disparate list illustrates the varied personal, medical, and social responses to the question: “What is the best way to help women through the sometimes difficult transition of menopause?” The range of answers indicates that menopause is more than the loss of fertility, more than the loss of estrogen. Instead, menopause is a social, cultural, and physiologic transition, and anyone attempting to successfully shepherd women through this period must consider all these factors.  

This paper examines how women’s menopausal difficulties were addressed over the course of the 20th century in the United States. Although changing medical therapeutics occupy the central position of this paper, it also addresses the social solutions promoted by menopausal women and their physicians. Even while navigating the various new therapeutic options at their disposal, doctors never lost sight of the complexities of menopausal women’s individual lives, and their larger social roles. Many physicians believed that in order for women to successfully travel through menopause, society needed to examine the plight of middle-aged women.  

What is menopause?  
Technically, menopause refers to a woman’s last menstrual period. A woman can be said to have reached menopause when she has gone 1 year without menstruating. The climacteric, or climacterium, was used to refer to the wide variety of physiologic changes occurring in the years immediately surrounding menopause. (Perimenopause is a relatively new term to designate the time prior to menopause.) Although physicians understood the distinction between the terms throughout the 20th century, they were often used interchangeably in the medical and popular literature.  

What menopausal difficulties?  
Before exploring the treatments for menopause, it is important to understand what women experienced at menopause that warranted treatment. The “symptoms” of menopause changed significantly over time, and differed by culture [1,2]. In 18th-century England, for example, physicians commonly referred to “hysterical vapors, plethora, bleeding piles, and fluor albus [leukorrhea]” as the most common symptoms of menopause [3]. By the middle of the 19th century, the list had grown extensively. One British expert identified more than 100 “symptoms” of menopause, including diabetes, epilepsy, and insanity [4]. By 1900, physicians had pared the list considerably, but the process of determining exactly what qualifies as a symptom or consequence of menopause continues.  

Between 1900 and 2000, menstrual irregularities became the most widely recognized signs associated with menopause. Women generally experienced longer intervals between their menstrual periods, perhaps noticing decreased or increased flow. Occasionally, this increased flow could be quite alarming, leading women to seek medical help. Throughout the 20th century, physicians also identified vasomotor symptoms. The hot flash or hot flush, a sensation of heat concentrated in the head and neck, but which can overtake the entire body, attracted the most discussion. Sweating, sometimes negligible, sometimes copious, was associated with these flashes. Other symptoms connected to the vasomotor system and identified as menopausal included vertigo, heart palpitations, and high blood pressure. Headaches, constipation, heartburn, numbness, insomnia, nausea, vaginitis, and general
pruritus rounded out the list of commonly reported complaints. (Some of these symptoms are now understood as vasomotor disturbances or linked to vasomotor disturbances, but the association has not always been clear.)

In the past 50 years, osteoporosis and arteriosclerosis were increasingly mentioned in association with menopause. While they have rarely been described as symptoms of menopause, they are frequently discussed as consequences of declining estrogen levels. As a result, they have consistently been listed as justifications for medical intervention.

In addition to the physical symptoms of menopause, physicians linked menopause with a variety of mental and emotional symptoms such as nervousness, irritability, anxiety, depression, and insanity. Physicians have long debated the genesis of the emotional and mental symptoms of menopause; some doctors maintained that fluctuating hormones directly caused emotional difficulties, while other doctors attributed them to the social changes coincident to middle age. Although the distinction was theoretically important to some physicians, in reality, women who sought relief at menopause cared less about which symptoms were attributable to what mechanism, and more about what could be done to help them feel better.

**Women helping themselves**
Most women during the last century did not seek medical intervention at menopause, citing lack of money, lack of knowledge, and lack of need as a few of the various reasons. Just because women stayed away from physicians, however, does not mean that they merely gritted their teeth and waited for the symptoms to pass. Women have always turned to a variety of remedies not controlled by the medical profession.

Perhaps the most historic therapy for menopausal difficulties was liquor. Whether to help them sleep, take the edge off nervous anxiety, or to steel themselves for uncomfortable intercourse, women frequently turned to alcohol during the menopausal years [5]. But other products were marketed directly for women for “female complaints.” Over the course of the 20th century, menopausal women turned to various preparations, including Lydia Pinkham’s vegetable compound, Famous Specific Orange Blossom, Dr. Pierce’s Special Prescription, and Doan’s Pills. In the past 10 to 15 years, over-the-counter products for menopause proliferated. A woman visiting her local pharmacy or health-food store could choose from a variety of herbal remedies (chaste tree berry, black cohosh root), soy products, and progesterone creams, all promising relief from the various symptoms of menopause.

**Medical Solutions to Menopausal Problems: 1900–1937**
Although over-the-counter remedies were always readily available, some women turned to their physicians for help. At the beginning of the 20th century, physicians had very little to offer their menopausal patients beyond a sympathetic ear and some lifestyle advice. In general, physicians agreed that menopausal women should acquire and maintain healthy habits, get lots of rest, and exercise daily in the fresh air. They urged women to eat a moderate diet, shun alcohol, and avoid tight clothing. Some doctors also recommended a change of scenery to keep women’s minds from the details of domestic life.

At approximately the same time, a new therapeutic solution to menopause began to emerge—organotherapy. Also known as ovarian therapy, this was the precursor to modern hormone replacement therapies (HRTs). The emergence of organotherapy as a treatment for menopause arose from the fascination with “internal secretions,” the mysterious and elusive substances assumed to exist in the endocrine glands of both men and women. Although the thyroid hormone was isolated in 1891, the existence of such “internal secretions” in ovaries and testes remained speculative until the 1920s. Despite the tentative nature of their understanding at the time, some scientists eagerly promoted the therapeutic use of various extracts. French-born physiologist Charles-Edouard Brown-Séquard, for instance, sparked the field by injecting himself in 1889 with extracts from guinea pig and dog testes. He reported renewed vigor as a consequence [6,7].

The first use of ovarian therapy for gynecologic disturbances occurred in Berlin in 1898, when fresh cow ovaries were fed to a young woman who had her ovaries removed and was suffering from severe vasomotor symptoms. By 1910, researchers in the United States began using ovarian preparations to “combat the insufficiency or absence of the ovarian function at the time of menopause” [8].

Between 1910 and 1929, organotherapy was crude at best. At the beginning of the century, fresh animal ovaries were ground up and fed to menopausal patients. Gradually, this method fell out of favor, and physicians increasingly relied on the desiccated ovaries of farm animals such as ewes, cows, and mares. According to one source, the most effective ovaries were harvested “during the time of the animal’s full sexual maturity” [8]. The most advanced method relied on “ovarian extracts,” suspensions created by combining minced ovaries with alcohol.

Despite the promise of organotherapy, most physicians remained skeptical about its worth. Some physicians objected to organotherapy because the methods of administration were so crude. Indeed, it was unclear whether early ovarian extracts even contained the “active principle” endocrinologists claimed resided within the ovary [9]. Other physicians objected on practical grounds, insisting that ovarian therapy had not been proven effective in relieving menopausal symptoms [10,11]. In general, while most physicians agreed that ovarian extracts may eventually prove their worth, until the late 1920s, most physicians believed that the results were too variable to recommend.

Despite these objections, some physicians, both gynecologists and general practitioners, recommended ovarian therapy during this period, sometimes enthusiastically. Even
organotherapy proponents conceded, however, that most women did not need pharmaceutical intervention [12,13]. The position of the eminent Johns Hopkins gynecologist Emil Novak is instructive. In a 1922 medical journal, Novak reviewed the efficacy of ovarian therapy for gynecologic difficulties. While he concluded that ovarian therapy had not been proven effective for disorders such as dysmenorrhea, sterility, or morning sickness, he believed that for the "vasomotor symptoms" of menopause, hot flashes in particular, ovarian extracts could be helpful. Despite his enthusiasm, however, he insisted that most women "need no medical treatment whatsoever" [14].

After 1929 and the isolation of estrogen, ovarian therapy (now legitimately termed hormonal therapy) became more refined and presumably more effective. Consequently, physicians began to shed their earlier skepticism about its value for menopausal patients. For a very few women with severe and debilitating symptoms, estrogen therapy emerged as valuable therapeutic option. Nevertheless, its cost and relative scarcity discouraged its widespread use.

Medical Solutions to Menopausal Problems: 1938–1962

The therapeutic options for menopausal women changed significantly after 1938. In that year, a British biochemist, Sir Charles Dodds, developed a synthetic hormone, diethylstilbestrol (DES). With the development of DES, the cost of hormones dropped precipitously, placing hormonal relief of menopausal symptoms "within the reach of any woman who can pay from 3 to 8 cents a day" [15]. In 1943, James Goodall developed an estrogen extract from the urine of pregnant mares. This product, known as conjugated estrogen, had all the benefits of DES with none of its potential side effects [16].

Despite the increased availability of hormone treatments after 1938, most physicians were slow to embrace them. Instead, they still recommended reassurance as the treatment of first choice. Doctors had many reasons for promoting reassurance as the best therapeutic option. Many physicians believed, for example, that women acquired, whether from gossip around the bridge table or from conversations with a maiden aunt, a great deal of misinformation about what happened at menopause. Consequently, they argued that merely educating women about the changes in their bodies, reassuring them that menopause did not bring calamity, would go a long way to calm the jittery nerves and creeping anxiety associated with these years. Furthermore, many physicians understood that a woman’s nervousness at menopause might have nothing to do with hormonal changes. Rather, doctors acknowledged that menopause coincided with many social and familial transitions that might explain a woman’s irritability. Children moved out, parents moved in, businesses failed, marriages fractured. Why treat women with hormones, these physicians asked, when their problems were caused by external rather than internal fluctuations?

Nevertheless, physicians understood that some women needed more than a heart-to-heart talk and a lesson in physiology. For these women, many physicians recommended the short-term use of mild sedatives, typically 15 mg of phenobarbital, three times daily. Aware of the addictive potential of barbiturates, most physicians recommended sedation only as a short-term treatment to temporarily ease the anxiety and nervousness many women experienced. In theory, sedatives helped women adjust to their new social circumstances or cope with their family crises.

Only if reassurance or sedation failed did most physicians recommend hormone treatments for menopausal patients. Most of the medical literature reserved hormonal therapy for women with severe, unrelenting symptoms. Physicians typically claimed that only 5% to 10% of women seeking medical attention at menopause met the criteria for hormone therapy [17,18]. Most physicians agreed with Emil Novak, who claimed that, in general, "it seems better to let nature take its course except in those cases and at those times when symptoms become very troublesome" [19].

When physicians prescribed hormones between 1938 and 1962, most believed that the treatment should be discontinued as soon as possible, arguing that replacement hormones merely prolonged menopause by postponing the body’s adjustment to diminished estrogen. According to one physician, "hormone therapy is only a means of combating nature’s efforts to effect endocrinologic readjustment that must come sooner or later" [20]. As a result, most physicians advised that women be given increasingly lower doses, with the goal of weaning off them entirely.

Fear of cancer prompted the cautious approach of some physicians. By 1940, more than a dozen scientists claimed that both synthetic and natural estrogens were capable of causing cancer in female animals [21–22,23]. Others voiced fear of the carcinogenic effects of estrogenic compounds on the breasts and uteri [24]. The fear was great enough for Edgar Allen, one of the pioneers of endocrinology, to condemn the "indiscriminate" use of estrogen therapy in menopausal women [25,26]. The cancer scare became even more menacing in 1947, when Saul Gusberg linked estrogen to cancer of the endometrium, leading him to conclude that physicians overprescribed estrogens to postmenopausal women. "The relatively low cost of stilbestrol [synthetic estrogen] and the ease of administration have made its general use promiscuous," he warned [26].

Physicians differed sharply on the significance of the cancer threat. A very few found the evidence of a link between estrogen and cancer so persuasive that they viewed the increased availability of estrogen as a potential danger to women [18]. On the other end of the spectrum, some physicians dismissed the cancer threat entirely [27]. The majority stood somewhere in between, believing that "although there is no proof that estrogenic substances are carcinogenic in themselves, there is evidence that carcinoma occurs more frequently" in women with high estrogen levels [28]. Consequently, most physicians advocated a conservative approach.
When physicians prescribed estrogen therapy, most viewed it as a short-term solution to a temporary problem. In the mid-1950s, however, a few physicians began to promote indefinite use. The probable origin of this therapy was the work of Fuller Albright and his colleagues at Harvard Medical School and Massachusetts General Hospital. In a 1941 *Journal of the American Medical Association* article, Albright claimed that the "postmenopausal state" was the most significant factor in osteoporosis, and that estrogen therapy helped bones retain calcium [29••]. Following the implications of their mentor’s work, Albright’s students, Philip Henneman and Stanley Wallach, believed that long-term use of estrogens was important to halt the progression of postmenopausal osteoporosis [30]. Making bolder claims than their teacher, Henneman and Wallach also suggested that estrogen therapy benefited women’s “emotional stability, sleep patterns and sense of energy,” thus providing an “important dividend of estrogen therapy.” This dividend alone provided “sufficient reason for the general use of prolonged estrogen replacement of the postmenopausal woman” [31].

Other researchers made similar claims about the ability of long-term estrogen therapy to reduce coronary atherosclerosis in postmenopausal women. As early as 1953, researchers claimed that women’s increased heart disease after menopause was due to decreased estrogen, and by 1954, researchers claimed that estrogen therapy decreased the incidence of heart disease. This encouraged the long-term prescription of hormones to prevent heart disease [32••,33–35].

Medical Solutions to Menopausal Problems: 1963–1975
The therapeutic landscape for menopause changed in 1963, not because of new pharmaceutical developments, but because of a campaign led by a Brooklyn gynecologist, Robert A. Wilson. In a 1963 article published in the *Journal of the American Geriatrics Society*, Wilson and his wife, Thelma, argued that untreated menopause robbed women of their femininity and doomed them to live the remainder of their lives as mere remnants of their previous selves. Detailing the dire consequences of “Nature’s defeminization,” the Wilsons claimed that estrogen depletion, the cause of menopausal and postmenopausal affictions, led to hypertension, high cholesterol, osteoporosis, and arthritis. In addition, the Wilsons insisted that menopause frequently led to serious emotional disturbances; even women who escaped debilitating depression frequently acquired a “vapid cow-like feeling called a negative state.” The authors knowingly maintained that these women see the world “through a gray veil, and they live as docile harmless creatures missing most of life’s values.” Indeed, the Wilsons believed that these women “exist rather than live” [36••].

Robert Wilson took his message of decay to a broader audience in 1966 with his book, *Feminine Forever*. This book reiterated the grim language of the Wilsons’ earlier article, and issued a further warning. In prose designed to alarm, Wilson described menopause as a “deficiency disease” much like diabetes. But unlike diabetes, he claimed, menopause did not merely rob women of their health; it also stole their youth, femininity, and sexuality [37•].

The Wilsons did not, however, abandon menopausal women to their dreary fate. Rather, they promised a pharmaceutical escape route: estrogen replacement therapy (ERT). Comparing ERT with insulin, the Wilsons insisted that replacement therapy could both cure and prevent estrogen deficiency disease. By allowing women to remain “fully sexed,” long-term hormone therapy prevented the “supreme tragedy” of women’s lives [37•].

The popular media swiftly publicized Wilsons’ claims. By 1964, *Time* and *Newsweek* had published articles extolling the promise of hormone therapy to “cure” menopause, and women’s magazines followed in 1965 [38–40]. The publicity intensified after the publication of *Feminine Forever*. The book itself sold more than 100,000 copies in the first 7 months after its release [41]. Perhaps most important, it generated an interest in menopause reflected in a flood of popular articles and books.

Although Wilson did not represent medical orthodoxy, his efforts to increase the use of hormone therapy succeeded. Drug companies followed the free publicity gained by Wilson’s efforts with their own advertising campaigns aimed at informing physicians of the wide-ranging benefits of hormone therapy. (Indeed, Wilson’s research foundation, devoted to the elimination of “estrogen deficiency disease,” was funded in part by donations from several drug companies.) Furthermore, some women, encouraged by the promise of relief from hot flashes or compelled by the image of a more youthful appearance, demanded hormones from their physicians. In time, most physicians acquiesced to pressure from both sides and from the desire to help their menopausal patients. Some doctors eventually saw HRT as a godsend for menopausal women, providing both long- and short-term benefits with no apparent drawbacks. Other physicians prescribed hormones more reluctantly, giving in to their patients’ demands while still believing that most women needed only an encouraging talk and a stiff upper lip to see them through the rough times. Regardless of the lingering doubts of some physicians, estrogen sales more than quadrupled between 1962 and 1975 [42].

Medical Solutions to Menopausal Problems: 1975–Present
In 1975, at the height of estrogen’s popularity, two articles in the *New England Journal of Medicine* dealt the therapy a significant blow. Researchers at Kaiser-Permanente Medical Center in Los Angeles (Ziel and Finkle) [43••] and at Washington University in St. Louis (Smith et al.) [44••] independently discovered a link between postmenopausal estrogen therapy...
and endometrial cancer. The Ziel/Finkle study demonstrated an endometrial cancer rate 14 times higher in women who had used conjugated estrogens for 7 years or longer than among women who had never used them [43••]. Although researchers had proposed a link between estrogen and cancer since the 1940s, these landmark studies supplied the best evidence at the time that ERT posed a cancer risk in humans, and sparked further research.

Physicians did not abandon HRT altogether after 1975. Instead, they proceeded cautiously. Physicians wrote more than 28 million prescriptions for replacement hormones in 1975; in 1980, they wrote only 15 million [45]. Furthermore, they lowered the dosage and shortened the duration of treatment [46].

The use of replacement hormones at menopause rebounded after 1980, with the number of prescriptions in 1989 far outnumbering the 1975 peaks. Several factors helped explain this phenomenon. First, the aging baby-boomer cohort swelled the ranks of women facing menopause. Second, these women continued to want relief from menopausal symptoms. Third, physicians routinely added progestin to the estrogen treatment, a regimen that was felt to eliminate the cancer risk. While this combination was prescribed for years, it became the standard hormonal therapy for women with intact uteri only after 1975. Fourth, drug companies began stressing the risk of osteoporosis after menopause, and promoted HRT as a preventative therapy. Fifth, new research stressed the possible benefits of estrogen on preventing heart disease. (This last claim is still contested.) These various developments ensured hormonal treatments for menopausal women a prominent and enduring place in modern therapeutics. Indeed, in 1998, 34% of women older than 50 years of age took some form of prescription hormonal therapy (up from 23% in 1993) [47].

Social Solutions to Menopausal Problems

Despite the many remedies for menopause that centered on the needs of a woman’s body, physicians, menopausal women, and various social commentators always understood that some of the difficulties women experienced at menopause could be attributed to their nebulous social roles. How could a woman prove her value to society after she could no longer bear children? What activities were appropriate for women older than 50 years of age? To fully remedy the difficulties of menopause, society had to address the situation of the middle-aged woman.

Physicians and other social commentators during the first third of the 20th century believed that many women became depressed and anxious at menopause because they feared that their life’s work was behind them, and that they no longer offered a valuable service. To offset this concern, physicians assured women that they still had much to offer. To stave off depression and self-pity, many physicians and other health writers at the time urged menopausal and postmenopausal women to turn their considerable talent to “community housekeeping.” These authors urged women to take up social causes, particularly those that looked after the “welfare of others” [48].

Pouncing on what seemed to be the general agreement that menopausal women needed useful work to avoid menopausal debility, Clelia Duel Mosher pressed the point further in 1918. Mosher, a physician at Stanford University, argued that community housekeeping still left women’s talents “shamefully wasted.” She insisted that only votes for women would protect “the community from the menace of the unoccupied middle-aged women,” while also saving money otherwise “wasted in doctors’ bills, sanatorium treatment, or dangerous fads” [49].

In the 1950s and 1960s, physicians continued to urge menopausal women to throw themselves into community service as an alternative to dwelling on their sleepless nights or their graying hair. But some health writers proposed a more “subversive” therapy, paid employment. “Careers for women,” replaced the call for suffrage as a cure for the menopausal blues. According to these writers, professional women might experience menopausal disturbances, but their busy lives would not let them indulge every twinge or inconvenience [50–52].

In the 1960s and 1970s, the widespread use of estrogen therapy, the increasing involvement of women in politics, and the growth of women in the work force still left women wanting more assistance dealing with the physical and social changes of menopause. They wanted the opportunity to talk with other women about how to fashion a new life after a divorce, how to soothe a querulous mother-in-law, and how to cope with the discomfort of vaginal dryness. They wanted the chance to revisit dreams deferred by childbearing and homemaking. They wanted physicians who treated them with respect. For some women, these needs translated into support for the Women’s Liberation Movement. Indeed, some feminists proposed women’s liberation as the only sure remedy for the problems women faced at menopause [53–55].

Conclusions

The story of menopause in the 20th century was dominated by the development of hormonal therapies. Although, as this paper illustrates, hormones provide a framework for examining the history of menopausal treatment, they do not tell the whole story. Throughout the 20th century, menopausal women faced various challenges, from coping with hot flashes and night sweats to dealing with the discomfort of vaginal dryness, and from wondering how to fill the day after the children left home to imagining how to stretch a budget to accommodate a recently widowed father. Over-the-counter remedies and hormonal treatments focused on stabilizing unsteady nerves and eliminating vasomotor symptoms. Menopausal women (and sometimes their doctors) knew, however, that a complete solution to their problems could not focus
exclusively on their bodies. Indeed, many women knew that societal change was needed. A society that embraced middle-aged women’s nonreproductive contributions could ameliorate aspects of menopausal distress not reachable by a purely hormonal treatment.

References and Recommended Reading
Papers of particular interest, published recently, have been highlighted as:
• Of importance
•• Of major importance


One of the first articles to suggest that estrogen may be a carcinogen.
Perhaps the first article to link estrogen to cancer in women.
The best early article connecting menopause with osteoporosis.
An early article on the connection between menopause and atherosclerosis.
One of two articles published in 1975 designed to provide strong evidence that estrogen replacement therapy increased the risk of endometrial cancer.
The other of the two articles published in 1975 to provide strong evidence that estrogen replacement therapy increased the risk of endometrial cancer.


