

# The Medicalisation of Male Menopause in America

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**Summary.** The topic of male menopause occupied space on the medical radar screen from the late 1930s through the mid-1950s, then virtually disappeared for the next four decades, until the late 1990s. By contrast, articles on this subject appeared in American popular magazines and newspapers at a consistent, if low-level, rate throughout the same period. This essay describes how the male menopause became medicalised, not by the driving forces of academic researchers and influential clinicians, but instead by a model perpetuated by lay people and medical popularisers. A medicalised conceptualisation of the body and the life-cycle had become widespread by the second half of the twentieth century, as Americans grew accustomed to regarding their lives through the lens of medicine. People came to expect medicine to provide a cure for any ailment; in the wake of the development of the so-called wonder drugs, no affliction seemed beyond medical and pharmaceutical intervention. A medicalised model had also been effectively produced for understanding and treating the menopause in women; a parallel, if not identical, stage in the life-course of men seemed reasonable. This framework, rather than persuasive evidence from the research laboratory or clinic, helped to medicalise male menopause and provided the basis for its eventual pharmaceuticalisation at the end of the twentieth century.

**Keywords:** male menopause; andropause; climacteric; testosterone; hormone replacement therapy; mid-life crisis; ageing; impotence

From the staid pages of the *New York Times* to the prickly prose of *Vanity Fair*, from TV's 20/20 to Sonya Live, from scholarly tomes like the *Journal of the American Medical Association* to titillating tales of 'Love Hormones' in *Longevity*, male menopause is a topic whose time, apparently, has come.<sup>1</sup>

Thus declared the health columnist for the *Boston Globe* in 1993, who noted that 'the topic has been grabbing headlines and airtime, with a vengeance, for the last year or so'. The upsurge in both medical and popular attention to so-called male menopause further intensified in the next decade, as pharmaceutical manufacturers came out with a testosterone skin patch in 1995 and a testosterone gel in 2000 to treat the condition that had been re-named 'andropause'. Testosterone replacement therapy was the subject of television news broadcasts and magazine feature articles and too many internet websites to count.

The idea of a male menopause, however, was anything but new; it had been discussed in both medical and popular literature since the 1930s. There was by no means a

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<sup>1</sup>Foreman 1993, p. 31.

consensus on the meaning of male menopause, or the male 'climacteric', as it was called at the time, only the suggestion that men might undergo some sort of physiological change at mid-life. This passage might or might not be smoothed by injections of testosterone, which had recently been isolated, synthesised, and brought to market. Although some doctors and their patients swore by testosterone as a miracle drug, the use of hormone treatments for older men never really caught on at mid-century, perhaps because testosterone was largely ineffective in treating one of the main complaints associated with male menopause: impotence. Several decades later, after Viagra came on to the market as a successful therapy for impotence (re-named 'erectile dysfunction') in the late 1990s, male menopause was re-interpreted as a persistent condition of hormone deficiency associated with ageing, whose symptoms, which no longer included the now easily treated erectile dysfunction, could and should be remedied with testosterone replacement. Even though the validity of this diagnosis was a matter of great controversy, replacement therapy took off this time round; between 1992 and 2004, the number of testosterone prescriptions filled in the United States per year increased 20-fold, from 122,000 to 2.4 million.<sup>2</sup>

These two episodes in medical concern with the physical and psychological problems of the middle-aged male were separated by a large gap in time. The topic of male menopause, or climacteric, or change of life, occupied space on the medical radar screen for the better part of two decades, from the late 1930s through the middle of the 1950s, then virtually disappeared for the next 40 or so years, until the late 1990s.<sup>3</sup> By contrast, articles on these and related subjects appeared in American popular magazines and newspapers at a consistent, if low-level, rate throughout the same period. How did the mainstream media handle male menopause when the topic was largely ignored in the medical press? How did this difference in interest between popular and professional sources influence the reception of medical ideas about male menopause, repackaged as andropause, at the end of the 1990s?

I suggest that journalists and physicians writing for a popular audience devised and disseminated a pathologised model of middle-age in men. From the 1940s to the 1980s, even in the absence of corroborating evidence from the world of medicine, male menopause became medicalised. The American reading public was receptive to a medicalised view of male menopause for two reasons. First, Americans had become conditioned to expect medicine to come up with a cure for any ailment; in the wake of the development of miracle drugs such as penicillin, cortisone, tranquilisers and oral contraceptives, no affliction seemed beyond medical and pharmaceutical intervention. Second, this sort of model had been effectively produced for understanding and treating the

<sup>2</sup>The figure for 1992 is taken from Foreman 1993, p. 31; the figure for 2004 comes from Anon. 2006, n. p.

<sup>3</sup>Historians who have written on male menopause tend to ignore this gap. John Hoberman elides the decades between the 1940s and the 1990s. He expresses interest in the revived fascination with hormonal treatments for men at the end of the twentieth century, but does not trace the trajectory of male menopause and testosterone over the course of the previous 30 years. Chandak Sengoopta ends his fascinating study of sex hormones in 1950, so the mystery of what happened in the second half of the twentieth century escapes his analysis, although he does mention briefly, in a footnote, the renewal of interest in the male climacteric, or andropause, in the medical literature starting in the 1990s. See Hoberman 2005, pp. 104–24 and 141–8, and Sengoopta 2006, pp. 177–86 and 316.

menopause in women; a parallel, if not identical, stage in the life-course of men did not seem unreasonable. For men as for women, what had previously been construed as a social issue—the travails of mid-life—was refashioned as a medical problem. Although most doctors had largely abandoned this model, for men, by 1960, it persisted in popular consciousness for several decades. Thus, when academic physicians revisited male menopause towards the end of the century and re-conceived it as testosterone deficiency, they found a receptive audience for the notion that mid-life men needed medical treatment for this condition.

The concept of medicalisation has been richly developed by historians and sociologists over the past 35 years, since it was first articulated by Irving Zola in 1972.<sup>4</sup> According to this theory, the medical profession has expanded its sphere of control to include 'deviant' conditions, such as madness, alcoholism and addiction, and 'normal' life-course events, such as childbirth, menopause and ageing. More recently, the model of medicalisation has been broadened to include lay people as agents, in addition to medical experts. As A. J. Barsky and J. F. Borus suggest, there has been 'a progressive medicalization of physical distress in which uncomfortable bodily states and isolated symptoms are reclassified as diseases for which medical treatment is sought' by prospective patients. This trend, they argue, is paralleled by 'sociocultural currents [that] reduce the public's tolerance of mild symptoms and benign infirmities and lower the threshold for seeking medical attention for such complaints'.<sup>5</sup> In other words, they describe an increasing demand from consumers for medical products and services that complicates the older notion of medicalisation as a uni-directional pursuit of power and control by the medical profession.<sup>6</sup>

This article further develops the newer view of medicalisation by demonstrating how individuals outside the medical elite circulated ideas that male menopause ought to be treated as a medical condition. Male menopause became medicalised in the United States, not by the driving forces of academic researchers and influential clinicians, but by a model perpetuated by lay people and medical popularisers. A medicalised conceptualisation of the body and the life-cycle had become widespread by the second half of the twentieth century, as Americans grew accustomed to regarding their lives through the lens of medicine. This framework, rather than persuasive evidence from the research laboratory or clinic, helped to medicalise male menopause and provided the basis for its eventual pharmaceuticalisation at the end of the century.

I make a distinction between medical elites and medical popularisers, because these two sub-sets within the medical profession spoke to very different audiences. By medical elites, I mean those doctors who conducted clinical research, often in academic settings, and published their findings in medical journals to be read by their professional colleagues. Medical popularisers, by contrast, made their appeals directly to the public, by writing articles in mass circulation magazines, alongside those penned by science writers and other journalists. They did not have to present scientific data subject to rigorous peer review as did the academic physicians; a few, well-told anecdotes were all they needed as

<sup>4</sup>Zola 1972, pp. 484–504. See also Conrad and Schneider 1980.

<sup>5</sup>Barsky and Borus 1995, p. 1931.

<sup>6</sup>Conrad and Leiter 2004, p. 159. The relationship between medicalisation and the changing medical market-place in the late twentieth century is fascinating, but beyond the scope of this study.

evidence. Although individuals in both groups were medically trained, their approaches to the problems of mid-life men were, in the years between the late 1950s and the late 1990s, remarkably different.

### The Early Years: From Organotherapy to the Synthesis of Testosterone

Modern interest in the male change of life grew within two separate, although not unrelated, fields of medical practice and inquiry: gynaecology and endocrinology. These lineages shaped the two divergent representations of male menopause as, alternatively, a mid-life transition or the beginning of decline into decrepitude. This distinction, which has lasted to the present day, is significant because conceptualisation as a temporary passage or as a permanent condition has led to very different therapeutic prescriptions.

As gynaecologists were concerned with women's reproductive organs, their interest in the change of life comes as no surprise. In 1816, the French doctor Charles de Gardanne coined the term 'ménospasie', revised to 'ménopause' in 1821, to describe a woman's transition out of her reproductive years. The term gained acceptance in France, but did not catch on among English-speakers until the late nineteenth century.<sup>7</sup> The first book about menopause by a British physician was published in 1857; the first American-authored volume on the subject did not appear until 40 years later.<sup>8</sup> As physicians on both sides of the Atlantic brought menopausal women into their purview, they also began to notice that men experienced their own set of physical and psychological problems in middle-age.

For these doctors, middle-age presented a tumultuous transition from the prime of life to the golden years. Once these straits were successfully navigated, the older individual could anticipate smooth sailing. For others, mid-life signalled the beginning of the end. They lamented the bodily breakdown associated with ageing and sought a way to forestall or reverse those changes. Ponce de Leon's search for the fountain of youth in the early sixteenth century is perhaps the most famous of many rejuvenation efforts dating from the time of the Greeks and continuing to today.<sup>9</sup>

In the late nineteenth century, some physicians turned to the embryonic science of endocrinology in the hope of finding the elixir of life. Although the term 'hormone' was not coined until 1905, scientists had begun to investigate the chemical messengers known as 'internal secretions' decades earlier. That the testes secreted some substance that influenced the development of male secondary sexual characteristics had been known since 1849. In 1889, the French scientist and physician Charles-Edouard Brown-Séquard reported that he had successfully rejuvenated his 72 year-old body with injections of extracts of the crushed testicles of dogs and guinea pigs. His experiments were reproduced by physicians in both France and America, who tested the effects of testicular extracts on feeble old men. Brown-Séquard's publication of these collected

<sup>7</sup>Rosenbaum and Peumery 1990, pp. 10–12.

<sup>8</sup>Houck 1998, pp. 6, 27–8. Houck found Andrew Fay Currier's book *The Menopause: A Consideration of the Phenomena Which Occur to Women on the Close of the Child Bearing Period*, New York: Appleton, 1897, to be the first American work with menopause as its sole topic. She and other historians have identified the first British work as Edward John Tilt, *The Change of Life in Health and Disease: A Practical Treatise on the Nervous and Other Affectations Incidental to Women at the Decline of Life*, London, 1857.

<sup>9</sup>Houck 1998, pp. 31–8.

results in a French medical journal electrified the international medical community. Doctors around the world hurried to apply Brown-Séquard's technique to their patients, and scientists worked to identify and exploit other glandular extracts.<sup>10</sup>

Among the various organs that were ground up in the 1890s in hope of producing a disease-curing extract, the testes received the most attention. Crushed testicles were used to treat not just age-related debility, but also epilepsy, cancer, cholera, tuberculosis, leprosy and asthma.<sup>11</sup> By the end of the decade, it was clear that this method of extraction was largely unsuccessful; only thyroid extract was capable of treating myxoedema, or hypothyroidism, and adrenal extract was shown to have useful vasopressor, or blood vessel constricting, effects. So the practice known as 'organotherapy' fell into disrepute.

Hopes for rejuvenation, however, did not disappear. In the 1920s, thousands of men in Europe and the United States underwent operations in which the sex glands of monkeys or goats were grafted on to their own testicles. The theory behind this practice was that the young animal testes would augment the diminishing supply of the male sex hormone produced by the man's ageing body. The rationale for testicular transplantation superimposed a modern interpretation on the older Victorian notion of the conservation of (seminal) energy. Rejuvenators still believed the testes to be the source of a man's virility and manliness, but they did not locate the active principle in the seminal fluid. Instead, they applied the twentieth-century concept of the hormone. The testes produced not only semen, which the individual could control, but also the male hormone, which he could not. A man could not be blamed for the failure of his sex glands to produce enough hormone; modern medicine could help him to replace that which his body could no longer produce. A consequence of this new reasoning meant that men did not have to conserve their semen by avoiding ejaculation; in the 1920s, sexual expression was, if not explicitly encouraged, then at least tacitly understood to be an indication of masculine vigour, consistent with the more relaxed attitudes towards sex evident during that decade.<sup>12</sup>

Enthusiasm for testicular transplantation eventually faded, as the power of suggestion wore off and scepticism grew among scientists and the public alike. One of the most enterprising of the American transplant doctors, John R. Brinkley, who ran a private gland-grafting hospital in the tiny hamlet of Milford, Kansas, advertised over the airwaves of his personally owned and operated radio station, and charged \$750 for each operation. He had his medical licence revoked in 1930.<sup>13</sup> Perhaps the most famous, and initially well respected of the gland doctors, the Russian-born Frenchman Serge Voronoff, discontinued the transplants in the 1930s, after scientists proved that the grafts would have been quickly rejected by the host's body before any rejuvenation could have taken place.<sup>14</sup>

Concurrent with the heyday of rejuvenation therapy were the early, exciting years of the new science of endocrinology. Laboratory research into the physiology of the endocrine glands and their secretions yielded some impressive results in the 1910s and 1920s. In 1914, thyroxine was first isolated from the thyroid gland, but only tiny amounts of the

<sup>10</sup>Borrell 1976, pp. 309–10.

<sup>11</sup>Borrell 1976, p. 316.

<sup>12</sup>Rechter 1997, p. 203.

<sup>13</sup>Clugston 1930, p. E6; Anon. 1942*b*, p. 24. See also Hamilton 1986, p. 96.

<sup>14</sup>Friedman 2001, p. 271.

hormone could be produced—it took three tons of pig thyroids to make one ounce of pure thyroxine—by the initial biochemical methods of purification.<sup>15</sup> The most dramatic breakthrough was the discovery of insulin by Frederick Grant Banting and Charles Herbert Best at the University of Toronto in 1921. The isolation of insulin from the pancreas provided a life-saving therapy for diabetics.

Other researchers focused their efforts on isolating the hormones produced by the ovaries in females and the testes in males. Indeed, the number of key findings in the years between 1926 and 1940 led one contemporary researcher to recall that period as the ‘heroic age’ of reproductive endocrinology.<sup>16</sup> The American scientists Edgar Allen and Edward Doisy collaborated in the initial discovery of oestrogen, isolating the first pure crystalline sample in 1929. Within a few months, two other scientists, Adolf Butenandt in Germany and Ernst Laqueur in the Netherlands, independently reported the isolation of oestrogen. By the mid-1930s, pharmaceutical companies in several countries had capitalised on the discovery and were manufacturing oral and injectable oestrogen preparations, which were used mainly to treat patients with menopausal symptoms. In 1938, two synthetic oestrogens were produced: ethinyl estradiol, by scientists at Schering in Germany, and diethylstilbestrol (DES), by Edward Charles Dodds in London. In 1941, the Canadian firm of Ayerst, McKenna and Harrison developed Premarin, a concentrated blend of conjugated oestrogens extracted from horse urine.

The second female sex hormone, progesterone, was isolated by George Corner and Willard Allan in the United States and Butenandt in Germany in 1934. Although physicians were eager to experiment with the newly discovered hormone to prevent miscarriage and to treat infertility, it was extremely difficult to extract from natural sources. One ton of animal organs yielded just one gram of pure progesterone. The resulting product was inordinately expensive; that single gram of progesterone could cost 1,000 dollars. Progesterone could not be widely applied in medicine until synthetic forms were developed by Carl Djerassi for Syntex in 1951 and Frank Colton for Searle in 1952.

Testosterone, the male hormone, followed oestrogen’s path to market. It was first isolated in 1935 by three separate investigative teams, led by Laqueur for Organon, Butenandt for Schering, and Leopold Ruzicka and A. Wettstein in Switzerland for Ciba. Within a couple of years, physicians were testing synthetic testosterone injections on both hypogonadic men and ageing men.<sup>17</sup> The possibility of a pharmaceutical treatment opened a new chapter in the story of male menopause, one in which the distinction between its characterisations—as temporary transition or as continuous decline—grew increasingly blurred and the path toward medicalisation became more clearly marked.

### The Male Climacteric in the Medical Literature

Publications reporting the use of testosterone as replacement therapy began to show up in medical journals in the late 1930s. One of the first of these—an article in the *Clinical*

<sup>15</sup>Medvei 1993, pp. 232–3.

<sup>16</sup>Parkes 1966, pp. xx–xxxii. On p. xx, Parkes attributes the comment about the heroic age of reproductive endocrinology to Guy Marrian. For an interesting discussion of how the discovery of sex hormones both reflected and naturalised cultural notions of gender, see Fausto-Sterling 2000, pp. 148–94.

<sup>17</sup>Hoberman and Yesalis 1995, p. 78.

*Journal* by a British physician—opened with the comment that ‘the clinical recognition of a male climacteric is not new’ and noted references dating to the seventeenth century. Since the author was able to find only three English-language articles in recent years on the male climacteric, despite all the interest in endocrinology in the medical and scientific communities, he surmised that his contemporaries regarded it with ‘cautious skepticism’.<sup>18</sup> It is probably not coincidental, however, that interest in the male climacteric bloomed once synthetic testosterone became available to doctors.

From 1939 to 1944, the concept of the male climacteric took hold in the Anglo-American medical literature, along with enthusiastic optimism about the potential benefits of testosterone therapy. August A. Werner, an internist at St Louis University School of Medicine, shifted his research focus from menopausal women to climacteric men, publishing the first of several articles on the latter in 1939. He observed that ‘a greater number of men than women pass through the climacteric without evident disturbance’, but that many men did experience a ‘decline of potency at about 50’ whose symptoms warranted hormone therapy.<sup>19</sup> Although his first observation characterised the climacteric as a transitory phase, the second suggested a more lasting condition that would require long-term treatment.

The gloomy forecast of a man’s ‘inevitable descent’ after the age of 40 was mitigated by the availability of hormone therapy, ‘a new weapon of incalculable possibilities’, according to a Florida physician, who also implied that therapy would be administered for many years.<sup>20</sup> But another physician-author, a urologist, depicted the climacteric as less than permanent. ‘One cannot help but be impressed’, he wrote, ‘by the decided apathy of middle aged men, whereas older men appear more alert, ambitious, and physically fit.’<sup>21</sup> His patients responded well to short-term treatments with hormones, which led him to conclude that the climacteric was merely ‘a transitional phase in male adult life’.<sup>22</sup>

Many in the medical profession remained unconvinced that the male climacteric even existed, as either a transition or a more permanent stage. Editorials in the *Journal of the American Medical Association* serve as a useful barometer of medical opinion; the issue published on 7 February 1942 on ‘Climacteric in Aging Men’ was highly sceptical.<sup>23</sup> Yet just two and a half years later, another editorial on the same topic told a completely different story: ‘The facts that are here cited serve to indicate with increasing probability that the male climacteric is just as truly a syndrome based on endocrine disturbances as is the menopause syndrome in women.’<sup>24</sup> The see-sawing of medical attitudes on male menopause carried on for the next ten years, into the mid-1950s.

A central issue in the debate over the existence of the male climacteric was whether the symptoms were caused by endocrine deficiency—decreased testosterone production—or arose from psycho-neurosis. Indeed, symptoms such as nervousness, decreased sexual potency

<sup>18</sup>Donald 1938, p. 323. See also Sengoopta 2006, pp. 178–81, for a discussion of the scattered references to the male climacteric in the 1910s and 1920s.

<sup>19</sup>Werner 1939, p. 1441.

<sup>20</sup>Lamar 1940, pp. 401, 404.

<sup>21</sup>Douglas 1941, p. 404.

<sup>22</sup>Douglas 1941, p. 410.

<sup>23</sup>Anon. 1942a, pp. 458–60.

<sup>24</sup>Anon. 1944, p. 300.

and libido, irritability, fatigue, depression and decreased concentration—reported by more than three-quarters of the middle-aged male patients in one study—characterised both syndromes.<sup>25</sup> Proponents of the notion of the male climacteric lobbied for objective tests to determine endocrine deficiency. Since not all doctors had access to laboratories in which to assay urinary hormone excretions, a clinical test was suggested: testosterone injections for several weeks, followed by placebo injections. If the patient experienced relief from his symptoms while on testosterone, but relapsed on the placebo, then his condition could be diagnosed as endocrine in origin. Outlined in a paper in the *Journal of the American Medical Association* in October 1944, this use of hormone therapy was incorporated into product-advertising for the Oreton brand of testosterone by its manufacturer, the Schering Corporation.<sup>26</sup>

Another point of contention was whether this constellation of symptoms in middle-aged men was a physiological state or a pathological condition. Those who argued the latter position used it to differentiate between male climacteric and female menopause: ‘whereas in the female the menopause is an invariable and physiologic accompaniment of the aging process, in the male the climacteric is an infrequent and pathologic accompaniment of the aging process’.<sup>27</sup> Not so, countered a Kentucky MD in a letter to the editor of the *Journal of Clinical Endocrinology*: ‘it is more of a status or condition than a pathological syndrome’.<sup>28</sup>

Whether the male climacteric was seen as analogous to or different from the female menopause, interest in using testosterone to treat the climacteric paralleled the enthusiasm for oestrogen in treating the menopause. By the mid-1940s, some in the profession felt obliged to communicate their concerns about the over-zealous and injudicious application of both sex hormones. Within months of each other, articles appeared in medical journals with the titles, ‘Oestrogenic Therapy: Its Uses and Abuses’ and ‘Uses and Abuses of the Male Sex Hormone’.<sup>29</sup> In spite of these warnings, physicians continued to advocate the use of testosterone injections in their middle-aged male patients. One author called for treatment lasting from six months to six years, depending on the length of duration of the climacteric symptoms; others looked to testosterone for help in maintaining longevity: ‘The prolongation of the span of efficient living and the retardation of the process of aging properly belongs in the hands of the endocrinologist’.<sup>30</sup> By the early 1950s, some physicians argued that ‘the administration of testosterone . . . should remain permanently irrespective of the absence of symptoms’.<sup>31</sup> They were convinced that the male climacteric signalled the beginning of a permanent state of endocrine deficiency—much like insulin deficiency in diabetes—that required continuous replacement therapy.

Those who believed in a male menopause used strong language to make their case. Werner announced in 1946 that the male climacteric was ‘now an established fact’.

<sup>25</sup>Werner 1946, p. 192.

<sup>26</sup>Heller and Myers 1944, pp. 472–77; Oreton advertisement in *American Journal of Obstetrics and Gynecology*, 53, May 1947, p. 19.

<sup>27</sup>Heller and Myers 1944, p. 477.

<sup>28</sup>Andrews 1946, p. 516.

<sup>29</sup>Haultain 1947, pp. 405–7; Thompson 1946, pp. 185–8.

<sup>30</sup>Werner 1946, p. 193; Cinberg 1946, p. 730.

<sup>31</sup>Goldzieher and Goldzieher 1953, p. 284.

The following year, two psychiatrists declared it 'an already accepted fact'.<sup>32</sup> Pharmaceutical manufacturers capitalised on medical support for the diagnosis of climacteric and its treatment with testosterone in advertisements in medical journals. Roche-Organon titled its advertisement for Neo-Hombreol, 'In the Doldrums', illustrated it with a picture of a despondent-looking man sitting in a sailboat with a slack sail on a motionless lake, and quoted from a medical article in the accompanying text: 'As a middle-aged man passes into the climacteric, he may be disturbed by such symptoms as "intense subjective nervousness, definite emotional instability characterised by irritability, sudden changes in mood, decreased memory and ability for mental concentration, decreased interest in the usual activities, a desire to be left alone . . .".'<sup>33</sup> By 1953, the male climacteric had earned its own chapter in a textbook, *Endocrine Treatment in General Practice*, in which testosterone was recommended as the therapy of choice.<sup>34</sup>

Dissenters continued to express their concerns in the pages of medical journals. An internist from the University of Chicago called for the abandonment of the term 'male climacteric' because first, it implied a decrease in androgen production which was probably unusual and certainly difficult to quantify, and second, most of the symptomatic men also had a psychiatric condition.<sup>35</sup> A Connecticut psychiatrist professed that 'the term "male menopause" is a misnomer and an appellation which lends itself to various forms of misunderstanding and misinterpretation'. He conceded that the climacteric did exist, but attributed it to 'a combination of stress and a pre-disposed personality make-up'.<sup>36</sup> The problem was not endocrine and thus the solution could not be testosterone. The anti-climacteric position was argued forcefully in an article in *Geriatrics*: 'the middle-aged man often suffers a change of life but the symptoms usually arise from extraneous factors rather than a lack of androgens'. These authors concluded that 'the concept of a male climacteric is misleading and dangerous, fostering an indiscriminate administration of androgens to men over 50'.<sup>37</sup> In 1954, ten years after the editorial declaring the male climacteric 'truly a syndrome based on endocrine disturbances', the *Journal of the American Medical Association* reversed itself once again with an editorial that demoted male menopause to 'a rare condition' and rejected 'the promiscuous use of male hormone' to treat symptoms that were more likely to be psychogenic than endocrine in origin as 'unwarranted and [possibly] harmful'.<sup>38</sup> In the early 1920s, a writer in *Scientific Monthly* had commented that endocrinology was replacing psychoanalysis as 'all the rage'.<sup>39</sup> Thirty years later, in the case of male climacteric symptomology, the pendulum had shifted away from the testes and back to the mind.

And then, almost as suddenly as it had started, the controversy over the male climacteric died down. After heated debate in the mid-1950s—articles with titles such as 'The Male Climacteric: Is It An Entity?', 'Is There a True Male Climacteric?', and 'Is There a Male

<sup>32</sup>Werner 1946, p. 188; Prados and Ruddick 1947, p. 410.

<sup>33</sup>Neo-Hombreol advertisement in *American Journal of Obstetrics and Gynecology*, 46, August 1943, p. 7.

<sup>34</sup>Goldzieher and Goldzieher 1953, ch. 17, pp. 280–4.

<sup>35</sup>Landau 1954, p. 286.

<sup>36</sup>Braceland 1954, p. 2.

<sup>37</sup>Hess, Roth and Kaminsky 1955, pp. 171, 170.

<sup>38</sup>Anon. 1954, p. 1427.

<sup>39</sup>E. E. Slosson, quoted in Rechter 1997, p. 5.

Climacteric?’ appeared in the space of less than a year—the topic virtually disappeared from the medical literature. From 1956 to 1969, there were just ten articles, all in overseas journals. This lack of attention continued until the end of the century. A search of PubMed, the National Library of Medicine’s index of articles in biomedical journals, for the keywords male climacteric, male climacterium, male menopause, and andropause found 21 articles in the 1970s (9 of which were not in English), 22 in the 1980s (7 foreign-language), and 51 in the 1990s. Only after 2000 was interest fully renewed; from January 2000 to August 2006, 228 articles were published in the medical literature. The majority were identified by the keyword ‘andropause’. This revival of attention will be taken up later in this essay, but the point to consider now is the paucity of coverage in the 40 years after 1955. The silence indicated that the male climacteric no longer fell within the purview of medicine; certainly, testosterone fell out of favour as a therapy for mid-life and older men.

Historians Sheila M. Rothman and David J. Rothman contend that testosterone did not achieve the success of oestrogen as a hormone replacement therapy for five reasons. Men have no obvious marker like menopause. They do not seek medical attention as regularly as women do. In addition, men see general practitioners, not specialists. Testosterone was an expensive therapy; in the 1940s, a month’s supply would cost almost \$900 in today’s dollars. Finally, testosterone was not particularly effective in treating impotence.<sup>40</sup> The close reading of the medical literature above suggests another explanation: that by the end of the 1950s, the symptoms reported by middle-aged men were understood by physicians to represent an emotional response to stress and other social factors, not as the consequence of testosterone deficiency. Since the analogy with the female menopause—clearly brought on by the decrease in production of oestrogen—no longer held, the pharmaceutical use of testosterone declined. We might even go so far as to say that male menopause had become, from the perspective of physicians, de-medicalised. However, the notion of a relationship between testosterone deficiency and a male climacteric continued to engage the public. As Anne Fausto-Sterling has noted, ‘A scientific fact, once established, may sometimes be disproved in one field, remain a “fact” in others, and have a further life in the popular mind.’<sup>41</sup>

### Male Menopause in the Popular Press

Coverage of male menopause in popular magazines took a different route from that taken in medical journals in the second half of the twentieth century. Initially, however, the two literatures corresponded, with the lay press taking its cues from the professional literature. In 1935, *Time* reported news of the discovery of testosterone and its imminent synthesis. Although the article made no specific mention of a change of life for men, it clearly expected its readers to know about the rejuvenation efforts of the previous decade. Monkey glands may have been ineffective, but synthetic testosterone promised to ‘revitalise old men’.<sup>42</sup>

<sup>40</sup>Rothman and Rothman 2003, pp. 161–2.

<sup>41</sup>Fausto-Sterling 2000, p. 169.

<sup>42</sup>Anon. 1935, p. 43.

In 1944, after five years of debate in the medical literature, the idea of the male climacteric was introduced to the American public by none other than Paul de Kruif. He was perhaps the country's most famous popular science writer: he had co-authored the 1925 novel *Arrowsmith* with Sinclair Lewis, and his 1926 book *The Microbe Hunters* was translated into 18 languages and made into two Hollywood movies. In an original article for *Reader's Digest*—unusual in itself, because most articles in this weekly periodical were condensed from pieces previously published in other magazines—de Kruif described the scientific development of and medical experimentation with synthetic testosterone.<sup>43</sup> The human subjects of these studies were men 'burnt out between the ages of 50 and 75 ... ready for life's scrap heap ... men in whom evidence of hormone hunger has been established'. Their revitalisation, according to de Kruif, was nothing short of miraculous.

In his characterisation of this condition and its treatment, de Kruif adhered to contemporary medical opinion, albeit in a sensationalist language designed to capture the interest of lay readers and to sell magazines. He combined the two views of the male climacteric as a temporary passage and a more permanent decline: 'In mid-life many men become dismayed by an insidious sapping of their vitality when they should be at the top of their working stride. Some come back to vigour from this crisis (somewhat resembling the change of life in women); others, plagued by mysterious ills, crumble into premature old age.'<sup>44</sup> As this quote demonstrates, he drew the analogy between menopause in women and climacteric in men. And he medicalised the condition by emphasising that only a doctor was qualified to make the diagnosis of male hormone deficiency and to prescribe synthetic testosterone. De Kruif also expressed his confidence and trust in scientists: 'as in the development of insulin and vitamin B<sub>1</sub>, increased production and the ingenuity of chemists will in time lower the hormone's cost until it is within reach of every man who needs it'.<sup>45</sup> This faith in medical science, and commerce, would be expressed in much of the popular literature on male menopause and testosterone for the next several decades.

An article a few months later in *Hygeia*—the public outreach periodical of the American Medical Association—echoed de Kruif's vivid portrait of climacteric men, drawing the parallel between their woes and those of women at menopause: 'men may and do suffer as much discomfort as women as a result of a changing balance between the glands of the body which usually takes place anywhere between the ages of 40 and 65'.<sup>46</sup> The author, a medical doctor, took pains to legitimise the condition and to promote its medical treatment. He, too, sang the praises of the scientific development and industrial production of synthetic testosterone: 'science has been able to

<sup>43</sup>De Kruif 1944, pp. 21–4. In 1945, de Kruif collected the results of his research on testosterone into a book called, simply, *The Male Hormone*, New York: Harcourt Brace. Described in a *Time* review as 'a mixture of laboratory slang, movie-travelogue lyricism and man-to-man locker-room candor', the book exalted the efforts of endocrinologists in the same way that *The Microbe Hunters* heroised microbiologists. It also disseminated the idea of the male change of life and popularised the option of testosterone replacement therapy. For the *Time* review, see Anon. 1945, pp. 69–70.

<sup>44</sup>De Kruif 1944, p. 21.

<sup>45</sup>De Kruif 1944, p. 24.

<sup>46</sup>McGavack 1944, p. 903.

produce on a commercial scale an active principle of this gland which relieves most of the distressing symptoms of the male change of life'.<sup>47</sup>

From the mid-1940s through the mid-1950s, writers in popular magazines presented lay-friendly versions of the medical debate over the male climacteric. Some attributed the symptoms to endocrine deficiency, while others argued for emotional and psychological causes; in either case, the advice given was to consult a physician. All agreed that the change of life in men required medical attention, whether the remedy came in the form of hormone injections or psychotherapy. But when the debate over the male climacteric died down among medical leaders writing in their professional journals, the conversation was continued by medical popularisers. These doctors chose to bypass the traditional channels of communication with their peers, who would then translate the information to their patients; instead they appealed directly to potential patients—and their wives—in the pages of the mainstream media. Journalists read these articles closely and wrote their own pieces on the topic as well.

Starting in the 1960s, these authors abandoned the esoteric word 'climacteric' and the dated phrase 'change of life' in favour of the more modern and scientific-sounding, if less accurate term, 'male menopause'.<sup>48</sup> This expression, with its unambiguous reference to the universally recognised event in women's lives, helped to reify this indefinite set of symptoms into a medical condition. The naming of male menopause seemed to legitimate it, in spite of the lack of acknowledgement from most medical authorities. And the availability of a drug therapy—synthetic testosterone—whether it worked or not, served to reinforce the notion that this was indeed a medical matter to be treated pharmaceutically.

One authority who did recognise the male menopause was William H. Masters, author of the best-selling *Human Sexual Response*. In a 1967 interview with *Look*, he stated that 'the physical basis of sex hormone replacement for the male is the same as for the female, only occurring a decade or so later'.<sup>49</sup> Although Masters had published some work on hormone replacement for both men and women in medical journals in the early 1950s—in these articles, he referred to older people as neither male nor female but of the 'neuter gender' or the 'third sex'—he had abandoned this field of research after 1955 to pursue his interest in the physiology of sex.<sup>50</sup> Thus, he spoke in the late 1960s not as a contemporary authority on endocrinology and ageing, but rather as a medical populariser willing to share his opinions directly with the press.

Male menopause continued to be newsworthy through the 1970s. The *New York Times* ran an article in 1971 describing the physical, psychological and social woes of middle-aged men. 'Kicking the whole thing off may well be a change in the amount of hormones secreted by the endocrine glands', the author reported. She observed that there were numerous contributory factors to the mid-life crisis and that to brood

<sup>47</sup> McGavack 1944, p. 934.

<sup>48</sup> The term 'male menopause' made its first appearance in print in 1950, in an article on factors contributing to impotence in ageing men. See Anon. 1950, p. 48. The first article to be entitled 'The Male Menopause' came out in 1960. See Shryock 1960, pp. 58–61.

<sup>49</sup> West 1967, p. 78.

<sup>50</sup> See Watkins 2007, ch. 2, pp. 32–52.

over the distresses of one's life during this period was somewhat of a luxury for men. 'While the blue-collar worker may be experiencing similar changes, medical experts agree that he is less likely to have the time or the opportunity to dwell on them than his more affluent, middle-class counterpart.'<sup>51</sup> Two years later, the *Times* devoted six pages of the Sunday magazine section to the question, 'Is there a male menopause?'. The article began by acknowledging that 'the medical profession does not agree, and never has agreed, as to whether anything that may properly be called a male menopause actually exists, but certainly the idea has wide currency'.<sup>52</sup> This lack of medical consensus, the author implied, should not prevent lay observers (such as herself) from examining the hormonal, psychological and sociocultural factors contributing to the syndrome known colloquially as male menopause, however inappropriate the term might be. The symptoms she listed certainly gave the impression that this syndrome was indeed a very real medical condition. These symptoms included 'nervousness, decrease or loss of sexual potential, depressions, decreased memory and concentration, decreased or absent libido, fatigue, sleep disturbances, irritability, loss of interest and self-confidence, indecisiveness, numbness and tingling, fear of impending danger, excitability'. Symptoms less often experienced were 'headaches, vertigo, tachycardia, constipation, crying, hot flashes, chilly sensations, itching, sweating, cold hands and feet'.<sup>53</sup>

Women's magazines took male menopause quite seriously. A psychiatrist writing in *Ladies' Home Journal* assured his readers that 'the male menopause is a very real thing'.<sup>54</sup> Articles in these periodicals offered wives advice on how to deal with their middle-aged husbands. Under the heading, 'My Problem and How I Solved It', *Good Housekeeping* ran a first-person account of one woman's struggle to help her Dr Jekyll-turned-Mr Hyde husband get back to his pre-crisis self.<sup>55</sup> Her first step: a visit to her family doctor to seek his advice. While love and patience were part of the solution, psychiatric counselling and hormone replacement were also recommended. In this way, the prescriptive advice given by magazine writers about male menopause was similar to that given to women about their own menopause. Indeed, the parallel was often made explicit. As Masters pointed out in the *Look* interview, 'If menopause is defined as cessation of flow (this is the word's root meaning in Greek), then the male has no such thing. However, if the menopause is defined as a climacteric—a more meaningful term—then the male *does* have one.'<sup>56</sup> For Masters and other advice-givers, the solution for both women and men was the replenishment of the declining supply of sex hormones, oestrogen for women and testosterone for men.

A feature article in *Ladies' Home Journal* entitled 'Hormones for Husbands' asked, 'Is there really a "male menopause"—and can it be treated by medical science?'. The answer came in the affirmative. This article appeared in 1975, when enthusiasm for oestrogen replacement therapy for women was at a peak. After Robert Wilson, a New York

<sup>51</sup>Cook 1971, p. 28.

<sup>52</sup>Lear 1973, p. 10.

<sup>53</sup>*Ibid.*

<sup>54</sup>Rubin 1971, p.52.

<sup>55</sup>Anon. 1974, pp. 70–80.

<sup>56</sup>West 1967, p. 78.

gynaecologist, published *Feminine Forever*, a book extolling the benefits of oestrogen for menopausal and post-menopausal women, in 1966, annual prescriptions for the drug increased from 16 million that year to 28 million in 1975.<sup>57</sup> Just as Wilson preached the gospel of 'estrogen from puberty to grave' for women, other practitioners, according to this article, were making similar pronouncements for men. 'How long does a man need to take these treatments? "For as long as he lives"', said one doctor, who compared the testosterone deficiency of ageing to thyroid deficiency; both conditions, he argued, required lifelong therapy.<sup>58</sup> A few months later, in an article called 'How to Cope With Male Menopause', *Science Digest* repeated the same quote from the same doctor. This author pooh-poohed those who claimed that the male menopause was purely psychological. 'The myth that a man does not experience a biological "change of life" is being worn away a little more each day', she wrote.<sup>59</sup>

The 30 million readers of *People Weekly* were introduced to the male menopause in August 1980 in an interview with the author of a book titled *The Gray Itch: The Male Metapause Syndrome*.<sup>60</sup> Although he had substituted the neologism metapause for menopause, his description of the syndrome—its physiological changes, emotional stresses and social consequences—was nothing new. The popularisation of this syndrome—by any of its names, 'change of life', 'male menopause', or 'metapause', which never caught on—got a further boost in the early 1980s when William A. Nolen, author of the well-received 1970 memoir *The Making of a Surgeon* and a medical advice column in the women's monthly *McCall's*, wrote about his personal experience with menopause at the age of 50. First in the pages of *McCall's* and then in a book titled *Crisis Time*, Nolen used his own mid-life story as a starting-point to educate men and women about what he believed to be a very real condition. 'Even now', he wrote in a 1980 article entitled 'What You Should Know About "Male Menopause"', 'it isn't mentioned in most medical textbooks, and there are many doctors . . . who deny the condition exists. I can assure them that it does exist, and that the man in that situation needs all the help he can get'.<sup>61</sup> In another column the next year, he reported that after the 1980 article, 'I also received at least five times as much mail in response to this article as I had from any other. My comments had obviously struck a nerve.'<sup>62</sup>

Men began to respond to the public circulation of the idea of male menopause by going to their doctors. *Newsweek's* 5,000 word article, 'A User's Guide to Hormones', expressed high hopes in 1987 for testosterone replacement therapy for ageing men.<sup>63</sup> It drew on the contemporary optimism about oestrogen replacement therapy for women—not only to alleviate menopausal symptoms such as hot flashes, but also to prevent the age-related disease of osteoporosis—to summon similar enthusiasm for the male counterpart. Between 1988 and 1992, testosterone prescriptions jumped by 67 per cent. During the same period, annual oestrogen prescriptions also grew by

<sup>57</sup>Watkins 2007, pp. 83–4.

<sup>58</sup>Arnstein 1975, p. 64.

<sup>59</sup>Zaludek 1976, p. 79.

<sup>60</sup>Anon. 1980, pp. 43–7; Hallberg 1978.

<sup>61</sup>Nolen 1980, p. 153. *Crisis Time* was published in 1984.

<sup>62</sup>Nolen 1981, p. 20.

<sup>63</sup>Clark and Gelman 1987, pp. 50–6.

60 per cent. Although the absolute numbers for testosterone were but a tiny fraction of those for oestrogen—about a third of 1 per cent—the volume would continue to rise dramatically, for both hormone therapies, over the next few years.<sup>64</sup>

Newspaper and magazine editors began to devote more and more space to the subjects of menopause and hormone replacement therapy, as the first crop of baby boomers reached middle-age. By the early 1990s, articles with titles such as 'The Baby Boom Meets Menopause' and 'Menopause and the Working Boomer' recognised that 'an entire generation is approaching a big change'.<sup>65</sup> Many of these articles included speculation about the possibility of a male menopause, and the articles that took male menopause as their subject almost always included a comparison to women. Media constructions of the ageing of men were shaped by those of the ageing of women; indeed, the two historical processes can be understood as a sort of dialectic shaping and reshaping gendered assumptions about the health and social roles of older people. Thus, the precedent of treating female menopause and post-menopause with oestrogen was an important factor in raising popular awareness of a similar condition in men, to be treated with a similar hormone product.

A second key to understanding the popular reception of testosterone replacement therapy for ageing men, at least as articulated in the media, lies in the context of the post-war fascination with so-called wonder drugs. Starting in the 1950s, Americans came to anticipate miraculous cures from the nation's scientific laboratories. At first, these cures tackled diseases: antibiotics, polio vaccine, antihistamines, and cortisone topped the list of impressive medical success stories, as understood by the public. Then science and medicine seemed to come up with solutions to social problems: for example, minor tranquilisers calmed the anxious, and oral contraceptives addressed family planning needs. Although each of these drug therapies engendered unanticipated negative consequences, collectively they created an impression in the public mind of the immense potential of modern medicine. Perhaps the miseries of middle-age, too, could be resolved by the application of medical science. In the second half of the twentieth century, explanations for male menopause alternated between the functional and the organic; both looked to medicine for solutions. When functionalist accounts were in vogue, psychotherapy was seen as the best way to help men navigate through the change. Organic causes, on the other hand, begged for pharmaceutical remedies. By the 1990s, the pendulum had swung back to the organic, and hopes were raised once again that testosterone would solve the health and social problems of older men.

### Convergence

As noted by the author of the *Boston Globe* article quoted at the beginning of this essay, 1993 was a watershed year in the history of male menopause. For the first time, male menopause was indexed as its own category in the *Reader's Guide to Periodical Literature*. Previously, references to the topic were located under the heading of 'climacteric'

<sup>64</sup>Testosterone prescriptions rose from 73,000 in 1988 to 122,000 in 1992. See Foreman 1993, p. 31.

Oestrogen prescriptions rose from 20 million in 1986 to 31.7 million in 1992. See Wysowski, Golden and Burke 1995, pp. 6–10.

<sup>65</sup>Rice 1994, pp. 203–12; King 1992, pp. 46–50.

or 'men: health and hygiene'. By 1993, enough articles were being published on the topic to merit a separate listing.

Also that year, Gail Sheehy—author of the wildly popular 1977 book *Passages: Predictable Crises of Adult Life* and the equally successful 1992 book *The Silent Passage: Menopause*—turned her attention to middle-aged men. She wrote a feature article for the April 1993 issue of *Vanity Fair* called, 'The Unspeakable Passage: Is There a Male Menopause?'. The article was condensed four months later in the pages of *Reader's Digest*, where it reached some 50 million people.<sup>66</sup> According to Sheehy, the answer to the question was 'yes'. Moreover, the male menopause she depicted was both organic and functional—'the decline is hormonal and psychological'—and receptive to pharmaceutical treatment: 'cutting edge testosterone therapy . . . promises "perpetual virility"'.<sup>67</sup>

Sheehy listed the same set of symptoms that had been described by other magazine writers for decades—lethargy, depression, irritability, mood swings, decreased potency and decreased libido—but she broke from her predecessors by identifying impotence as the most important marker of male menopause, or 'viropause' as she called it, a term she claimed to have borrowed from the British. The bulk of her article focused on impotence and how the inability to get or maintain an erection was causing anguish among millions of middle-aged American men, and their wives. Based on her interviews with 60 of these men and some medical experts, she reported 'a consensus that male sexual changes in middle age commonly produce a virility crisis'. Sheehy contributed to the perception of male menopause as a persistent age-related condition, as opposed to a transitory passage, with her interpretation of the onset of impotence in men's 50s as a harbinger of the long-term debility that would last for the rest of their lives. Although she acknowledged that 'doctors don't really know for certain' what causes this crisis, she went on to cite endocrinologists' opinion that 'the phenomenon correlates with a decline in testosterone levels' and to quote a geriatrician who affirmed that 'about a third of men over 50 have a testosterone deficiency'.<sup>68</sup>

It was this testosterone deficiency that would be taken up by physicians in their reconceptualisation of male menopause as 'andropause' in the years to come. Impotence, of course, was re-named erectile dysfunction and once Viagra came on to the market in 1998, the condition was less often associated with low testosterone and the ambiguous diagnosis of male menopause. Rather, as sociologist Jennifer Fishman has noted, the 'organisation' of impotence limited the scope of the disorder to the penile organ itself.<sup>69</sup> This development helped to spur the revival of testosterone as a therapy for male menopause. Recall that one of the reasons testosterone had dropped out of medical favour in the late 1950s was its ineffectiveness in treating impotence.<sup>70</sup> Once this condition was dropped from the list of complaints, it removed that barrier to prescribing testosterone for climacteric men. And any barrier that might have been presented by

<sup>66</sup>Sheehy 1993a, pp. 164–7, 218–27; Sheehy 1993b, pp. 114–18.

<sup>67</sup>Sheehy 1993a, p. 164.

<sup>68</sup>Sheehy 1993a, pp. 167, 218–19.

<sup>69</sup>Fishman in Tone and Watkins (eds) 2007. See also Loe 2004.

<sup>70</sup>Rothman and Rothman 2003, pp. 161–2.

the hassle of frequent injections was also removed when the Food and Drug Administration (FDA) approved a testosterone patch in 1995 and a testosterone gel in 2000.

These technological developments in hormone delivery systems, combined with the subtraction of the impotence problem, played a role in the medical profession's renewed interest in male menopause, or andropause, as it had been re-named. In the late 1990s, more articles began to appear in medical journals on male menopause. The titles of these articles echoed those of the 1950s: 'The Male Menopause: Fact or Fancy?', 'The Andropause: Fact or Fiction?', 'The Male Menopause: Does It Exist?'.<sup>71</sup> Although it would be hard to identify a consensus in this literature, one point of concurrence was that there was some sort of age-associated decrease in testosterone. If this notion—which some like to call ADAM: 'androgen deficiency in ageing men'—was to gain widespread medical currency, it would describe a long-term disorder. As the debate raged anew in the medical press over whether this hormone deficiency constituted a medical condition and whether this condition merited replacement therapy, one thing was clear: male menopause—née male climacteric, now known as andropause—had re-entered the medical lexicon.

When academic medicine re-discovered male menopause, it found a receptive audience in the American public. Readers of popular periodicals had long been exposed to the notion that mid-life misery could, indeed should, be considered a medical issue. Lay writers in the second half of the twentieth century had at their disposal both the model of female menopause and the vocabulary of scientific promise to medicalise middle-age in men, even when the medical elite discounted or ignored the idea of any such condition. By giving a name to the set of symptoms, popular writers substantiated older men's experiences. It did not matter if medical treatment was available; a diagnosis alone could be sufficient legitimisation. When the drug industry did produce pharmaceutical products for so-called androgen deficiency which physicians were willing to prescribe, American men leapt at the chance to recapture their physical vigour.<sup>72</sup> The history of male menopause raises interesting questions—beyond the scope of this study—about the role of changing conceptions of masculinity in the construction of medical and cultural ideas about male ageing. Certainly, America in the late twentieth century was increasingly a culture obsessed with youth as the standard for both health and beauty, and in this climate, both men and women sought ways to look and feel young. At the start of the twenty-first century, the technological imperative for physicians to bring andropause into their purview found fertile ground in the pre-existing lay enthusiasm for medical attention to problems of health, appearance and social relations. In the case of male menopause, the medical world trailed popular culture on the path to medicalisation.

<sup>71</sup>Keogh 1990, pp. 833–8; Burns-Cox and Gingell 1997, pp. 553–6; Gould, Petty and Jacobs 2000, pp. 858–61.

<sup>72</sup>For an interesting discussion of the classification of health problems as diseases, see Oudshoorn 1997, p. 143.

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