

UNCOVERING THE MAN IN MEDICINE

Lessons Learned from a Case Study of Cluster Headache

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Cluster headache is a notoriously painful and dramatic disorder. Unlike other pain disorders, which tend to affect women, cluster headache is thought to predominantly affect men. Drawing on ethnography, interviews with headache researchers, and an analysis of the medical literature, this article describes how this epidemiological “fact”—which recent research suggests may be overstated—has become the central clue used by researchers who study cluster headache, fundamentally shaping how they identify and talk about the disorder. Cluster headache presents an extreme case of medicalized masculinity, magnifying the processes of gendering and bringing into relief features of the world whose routine operation we might otherwise overlook.

Keywords: *men; masculinity; medicine; medicalization; pain*

Social scientists have demonstrated how social relations are often encoded into diagnostic categories that disguise and naturalize normative claims about race, class, and gender (Harding 1993; Lock and Gordon 1988; Martin 1987). Because these claims coincide with our cultural belief systems, normative biases are easier to see in retrospect. For example, psychiatry’s medicalization of homosexuality and the diagnosis of “hysteria” only emerged as compromised social constructions when social attitudes

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toward women, gays, and lesbians began to change. These claims are even more difficult to see when they code for a dominant, unmarked social category, such as whiteness or masculinity. Yet the white, middle-class man in medicine is also a social construction (Riska 2004), and one that often masquerades as the “normal” patient, to whom the rest of us fall short in comparison. Pragmatically, it is important to expose sociocultural constructions in medical knowledge, as they may contribute to unequal treatment in the clinic. For feminists, however, revealing the contours of dominant social constructions in medicine is a crucial political project, because biomedicine has the cultural authority to define what is biological and therefore natural. This article contributes to this project, using a case study of a little-known but theoretically useful diagnosis called cluster headache.

Cluster headache is an unusually dramatic disorder. Its signature symptom is a one-sided, severe headache—said to be the worst pain one can experience (Bahra, May, and Goadsby 2002)—which is located around the eye and accompanied by various autonomic symptoms: red, swollen, droopy, and tearing eyes; a congested or runny nose; forehead and facial sweating; and pupil dilation or contraction (IHS 2003). In addition, cluster headaches provoke restless behavior. In the midst of an attack, sufferers will pace, jump, or even bang their head against the wall to find relief. Luckily, cluster headache is rare, affecting less than 1 percent of the population (D’Alessandro et al. 1986; Ekblom et al. 2002; Kudrow 1980) or about the same proportion of people who have multiple sclerosis (Noonan, Kathman, and White 2002).

Cluster headache is also unusual because, unlike most pain conditions, it is thought to affect men up to nine times more often than women (Dodick et al. 2000). What makes cluster headache a topic of interest to feminists is the way this epidemiological predominance in men is encoded in medical descriptions of the disorder. For example, here is a typical medical description of cluster headache:

Cluster headache is probably the most dramatic of all the headache types. . . . Cluster pain is so excruciating that it brings even the strongest of men to their knees. It is no wonder that cluster headache has been termed *suicide headache*. Rather than retreating to a dark, quiet room, as do migraine sufferers, cluster patients cannot sit or lie still. Rather, they pace, rock, and drive their fists into the painful eye. Some patients may even show unusual behavior, such as hitting themselves in the head, banging their heads against the wall, or engaging in intense physical activity such as push-ups or running. (Rapoport, Sheftell, and Tepper 2003)

The gender ideology embedded within this description is explicit. The authors, all respected headache experts, use everyday notions of masculinity to convey the epidemiological "fact" that cluster headache tends to affect men. Their choice to use the image of "the strongest of men" on their knees reinforces the intensity of cluster pain and its predominance among men, while making clear that there is nothing weak or feminine about having the disorder. The fundamental masculinity of cluster headache is further suggested by comparing its aggressive symptoms to the passive retreat of migraine—a disorder that, by and large, is understood in terms of femininity (Kempner 2003).

This masculinized language extends back to the late 1960s, when physicians began describing cluster headache not just as a disorder predominant in men but as a disorder of *excess* masculinity. Since then, stereotypical cluster patients have been described as "hyper-masculine" (Sjaastad 1992, 30), "mesomorphs" with lion-like facial features (Graham 1972, 181) who are "masculinized in behavior and habit" (Saper 1984, 104). This masculine discourse even extends to female cluster headache patients, who are recast as women who lack feminine qualities or whose bodies are punishing them for transgressing traditional gender roles (Graham 1972; Manzoni 1998). This physical and psychological description of cluster headache (the cluster profile) has been remarkably resilient, even though more recent studies do not support this profile.

Taken together, the exaggerated masculinization in descriptions of cluster headache—its predominance among men, its dramatic and sometimes violent symptomatic expression, and its folkloric status as a disorder of the hypermasculine—provides a rich case study for understanding the gendering of disorders. Cluster headache serves as an "extreme" case (Sjoberg et al. 1991) of medicalized masculinity, magnifying the processes of gendering and bringing into relief features of the world whose routine operation we might otherwise overlook. In a time of increasing gender sensitivity in medicine, the masculinity embedded in the cluster headache literature is so stark that its continued presence demands a sociological and feminist explanation.

This article is organized around the following questions: How was cluster headache transformed from a condition that disproportionately affects men to a condition conceived as a disorder of masculinity? To what extent does this profile still exist? And how should we account for the persistence of masculinity in medical descriptions of cluster headache? I begin by situating these questions in the literature on the gendered construction of diagnosis and conclude by discussing how the lessons learned from cluster headache push the boundaries of how we understand masculinity in medicine. In between, I tell the story of cluster headache.

GENDERING PAIN

In the 1970s, feminist scholars made an influential distinction between sex and gender, *sex* referring to the biologically given, natural body, and *gender* to the socially constructed self (Oakley 1972; Rubin 1975). In the years following, a number of scholars challenged this binary (Fausto-Sterling 1985; Hubbard, Henifin, and Fried 1982; Laqueur 1990), arguing that biological sex is also a social construction, “mired in presumptions about its naturalness, its fundamentally biological and precultural status, its immunity to cultural, social, and historical factors, [and] its brute status as given, unchangeable, inert and passive” (Grosz 1994, x). The body, and how we understand it, reflects and reproduces culture.

Biomedicine and the production of medical knowledge is a primary force in the gendering of the body, especially because biomedicine has the social and cultural authority to define naturalness and normality. Feminists have critiqued medical knowledge for assuming that its typical patient is a white, middle-class man, whose body is viewed as simple and uncomplicated. In comparison, even healthy women’s bodies seem complicated, messy, and prone to breakdown, so much so that normal reproductive events, like birth and menopause, have been classified as medical problems (Martin 1987). In addition, medical knowledge contributes to the gendering of social relationships by viewing biology as “cause” and behavior and social status as “effect” (Lock and Gordon 1988; Lorber 1993). By privileging biology over differences in social status, medical knowledge reifies the naturalness of gender dichotomies. Medical knowledge is also produced by interested actors within institutions that have economic, social, and political interests. These interests converge to produce marketable medical products for valuable demographics. Hence, we have seen the widespread medicalization (Clarke et al. 2003; Conrad 2005) of lifestyle conditions that were once considered social in origin. Cultural norms about what it means to be a feminine woman are encoded in and practiced through a highly gendered form of medicalization. Hormone replacement therapy is marketed as a way to stay “feminine forever” (McCrea 1983); the proper lady practices appropriate feminine hygiene, even if it exposes her to potentially hazardous chemicals (Kissling 2006); and unhappiness in social relationships can be treated with psychopharmaceuticals, once known as “mother’s little helpers” (Metzl 2003).

A growing body of literature is beginning to show how male bodies are also socially constructed, teasing the gendered man out of the universal man (Lunbeck 1994). Riska’s (2004) work, for example, reveals how this implicit male patient is also a social and historical construction, by showing how the Type A personality is a medicalization of masculine personality

traits (e.g., ambition and competitive drive). Metzl (2003) shows how psychiatric advertisements for tranquilizers in the 1950-1960s replicated gender stereotypes in their portrayal of depressed men as products of emasculating wives and mothers. The contributors to Rosenfeld and Faircloth's (2006) edited book, *Medicalized Masculinities*, begin to unpack how physicians, researchers, and pharmaceutical companies understand and market masculinity. Much of this work examines how masculinity infuses discussions about erectile dysfunction (Fishman and Mamo 2001; Marshall and Katz 2002; Potts 2000) and how Viagra reconstructed norms of masculinity (Loe 2004).

When biomedical researchers classify a disorder as disproportionately affecting men or women, they often construct diagnoses and treatments in terms that convey femininity or masculinity. Thus, typical "feminine" behaviors, such as submissiveness and loss of voice, are pathologized as symptoms of depression (Blum and Stracuzzi 2004; Metzl 2003), and typical "masculine" characteristics, such as assertion and aggressiveness, are medicalized in disorders like alcoholism and attention deficit disorder (Fishman and Mamo 2001; Potts 2000). These discourses are confirmed when corresponding gender differentiation is found in the clinic.

This article demonstrates how biomedicine discursively constructs pain as a gendered phenomenon. The biology of pain does appear to have links to sex/gender biology and there have been calls for a "sex-based" approach to understanding pain (Fillingim 2000). But pain need not be so intertwined with discussion of sex or gender. Pain is abstract, invisible, and difficult to conceptualize, let alone operationalize. In a sense, pain offers a tabula rasa on which to inscribe our most fundamental cultural ideas about suffering (Scarry 1985): How much pain is normal? What are appropriate ways to express pain, and what expressions are considered in moralistic terms, such as "hysterical" or "overwrought" or "weak"? And how ought pain to be treated?

Western mores about pain and suffering are highly gendered. Masculinity is partly defined by an ability to transcend and conquer pain (Connell 1995), while femininity is the absence of such strength. These distinctions, of course, are not strictly applied. Women, by virtue of their reproductive systems, are often thought to be biologically built for pain tolerance (Bendelow 2000); it is common to joke that men could not handle the everyday pain of women's menstrual cramps or labor.

The sociological literature on gender and pain focuses almost exclusively on women's pain and, more specifically, on the ways that women's pain is so often dismissed, delegitimized, and ignored (see, for example, Hoffman and Tarzian 2001). Much less has been written about the social construction of medical knowledge on and treatment of men's pain. This article

contributes to the literature by describing the social construction of a male-dominated pain, demonstrating how gendered norms about masculinity and pain ground medical understandings of cluster headache and presenting a rejoinder to literature that presupposes that medicalization primarily applies to women's bodies.

METHOD

This article comes from a larger study examining how gender becomes embedded in headache medicine, using migraine and cluster headache as comparative cases. In this article, I discuss only the latter. Multiple methods were used to understand masculinity in the production of knowledge on cluster headache. Data were collected through an iterative process, moving between participant observation at professional headache conferences, in-depth interviews with the foremost medical experts in the headache community, and a content analysis of the medical literature on cluster headache.

From 2001 to 2005, I was a participant observer in eight professional headache conferences sponsored by the American Headache Society (AHS; the 2001, 2002, 2003, and 2005 annual meetings), the International Headache Society (IHS; the 2001, 2003, and 2005 biannual meetings), the Cluster Club (2003), and the New York Headache Foundation (2005).¹ The AHS and IHS meetings are the primary professional meetings for researchers sharing new information on cluster headache. These meetings typically last four full days. The Cluster Club and New York Headache Foundation meetings are shorter, respectively consisting of a half-day meeting of cluster headache specialists (Ekbom and Waldenlind 2004) and a one-day Continuing Medical Education program for health care providers.

These conferences serve multiple purposes, including the communication of new research findings, the education of physicians and other health care providers with an interest in headache, and a place for researchers to form networks among themselves and with the pharmaceutical industry. Attendance ranges from 75 at the Cluster Club to several thousand at the IHS meetings. Most participants are neurologists, but others are physicians who specialize in internal medicine, gynecology, and psychiatry; physician's assistants; psychologists; and nurse practitioners. Information is communicated via pre-organized panel discussions symposiums, Continuing Medical Education programs funded by the pharmaceutical industry, short 10-minute research papers, and research posters. All talks are held in one large ballroom, ensuring that a single observer could attend most talks. The

typical AHS conference (to choose a middle-sized conference) includes two competing precourses (perhaps one on hormones and headache and another on genetics and headache); two panel symposiums; three scientific sessions with six to eight short presentations; several 45-minute-long award lectures; four pharmaceutically funded satellite symposiums; and two competing postcourses on the final day. In between, participants tour more than a hundred poster summaries of other research studies. I attended panels, research sessions, and poster sessions and asked participants to comment on presentations, their work, and whether the information disseminated at the conference fit their clinical experience with headache. I also attended "special interest group" business meetings, including those organized around "women's issues," "behavioral research," and "cluster headaches." I presented posters on the history of migraine at the 2003 AHS and IHS meetings and used these papers to discuss central questions of my thesis with other participants.

My relationships with headache researchers improved over the years, with some seeking me out at meetings to discuss emerging controversies in the headache community. These conversations were opportunities to discuss the state and direction of the field and to test emerging hypotheses. Oral research presentations were audiotaped and transcribed, along with detailed field notes from informal conversations, poster sessions, and interest group meetings.

Data include 16 audiotaped, semistructured telephone interviews and 8 unstructured interviews with key medical experts in the American headache research community who, together, serve as opinion leaders among headache specialists. Interviewees were recruited from a sample of 30 opinion leaders who were identified because of their prolific publication records, service in leadership positions in their organizations, and/or prominent positions at prestigious headache centers. This sample includes eight past presidents of AHS, and an additional four who serve on the organizations' boards of directors. Only three respondents were women, a ratio that reflects the male dominance of AHS leadership. Respondents were asked specific questions about cluster headache, including questions about the relationship between cluster headache and men.

In addition, this analysis draws on a two-pronged comprehensive reading of the medical literature on cluster headache. Using Foucauldian genealogical methods (Foucault 1963; Riska 2004), I trace the origin of the cluster headache profile through medical reference books on headache, making visible the process by which this construct has been created, adopted, adapted, and rejected in these canonical texts on headache. This sample was generated from all headache books shelved on

the University of Michigan's medical library in 2005. Books ($n = 293$) were identified by using the keyword "headache" in Michigan's online library database. Of these, 91 included some mention of cluster headache, ranging from book-length treatises ($n = 5$) to those that devoted at least one chapter to cluster headache ($n = 67$) to general reference books that mention cluster headaches only in passing ($n = 19$). This sample counts multiple editions as separate books, as their content shifts between publication dates. These texts were coded for the presence or absence of the cluster profile (a full explanation of this profile appears in the analysis), crossed with the author's level of support (enthusiastic to moderate, low, reject) for various features of the cluster headache profile including its physical and psychological features and descriptions of women patients. This analysis presents a measure of authors' acceptance of the cluster profile in these headache reference books. It cannot assess authors' rationale for excluding a discussion of the cluster headache profile and therefore does not estimate the absolute number of headache experts who accept or reject this profile.

This review also includes landmark articles on cluster headache. Articles were chosen by these factors: (1) historical relevance, as determined both by written histories on cluster headache and primary historical methods; (2) citations of landmark articles by other authors in review articles, research presentations, and reference books; and (3) reference to a number of recurring issues close to gender, such as epidemiology and proposed theories of cluster headache etiology. All headache-specific literature cited here is listed under a separate bibliography.

Codes emerged from multiple, textual readings of the medical literature, field notes and interview data, using the techniques outlined in grounded theory (Strauss and Corbin 1990). The development of these codes also draws on feminist scholarship that describes a world discursively constructed by binary oppositions, for example, male/female, nature/nurture, thought/feeling, aggression/passivity, rationality/emotion, and strength/weakness (Butler 1990; Haraway 1989; Scott 1986). Here, masculinity is defined via these binaries, as a relational concept that only makes sense in contrast with femininity and located within the gender system. This definition highlights a nonessentialized view of masculinity, one that exists in discourse and is built into culture and institutions. Although the headache researchers discussed here never define what they mean by masculinity, it is clear that they are drawing on a more essentialist definition, where masculinity is considered a natural outgrowth of sex difference. This article uses multiple methods to trace how this implicit definition of masculinity became fundamental to medical understandings of cluster headache.

FINDINGS

From a Men's Disorder to a Disorder of Excess Masculinity

Bayard T. Horton and his colleagues of the Mayo Clinic are credited with popularizing the diagnosis of cluster headache in a 1939 article, under the name "erythromelalgia." In 1952, Kunkle (Kunkle, Wilhoit, and Hamrick 1952) coined the term "cluster headache" to describe the peculiar circadian and circannual rhythm of the disorder; clusters typically occur in seasonal spurts and at the same time of day.

By historical accident, Horton introduced cluster headache during the rise of the psychosomatic movement in medicine. (Coincidentally, the first issue of *Psychosomatic Medicine* was also published in 1939.) Headache and other pain disorders were of particular interest to physicians writing about the link between the mind and the body in this emerging field. In fact, Harold G. Wolff, a pioneer in psychosomatic medicine, is also considered by the headache community to be the "father of modern headache medicine." Wolff, himself a migraine sufferer, believed that migraine pain was biological and conducted several innovative experiments that correlated the physical pain of migraine with biological changes in the brain's blood vessels. Nevertheless, Wolff argued that migraine pain originated in the psyche. Certain types of personalities—those who were ambitious, successful, perfectionist, and efficient—were prone to migraine (Goodell 1967; Wolff 1948). In contrast, women's migraines were attributable to sexual frigidity and a refusal "to accept . . . the consequences of maternity" (Wolff 1948, 416). He wrote that the stress of these personalities caused psychic exhaustion, which in turn produced the physical pain of migraine. The "migraine personality" gained in popularity until the 1970s, when somatic explanations began to overtake psychobiological explanations (Kempner 2003).

Wolff never proposed a separate "cluster personality," but it was not long before Arnold P. Friedman, a student of Wolff, developed the first cluster headache profile. Friedman, a well-established authority on headache, started the first headache clinic in New York and later served as the president of the AHS (from 1978 to 1980). Drawing on the psychoanalytic and personality-based theories then popular, Friedman (1958, 656) described the typical cluster headache patient as "an adult who was ambitious, efficient, and over-conscientious, strove for perfection, and had a strong tendency toward compulsive behavior. . . . They often had positions of responsibility but were insecure and often had a lack of self-confidence in their ability. The most frequent conflicts observed were of a hostile and aggressive nature." Friedman's cluster headache personality was similar to

Wolff's description of migraine patients with one exception: Where Wolff described migraineurs as assertive and productive, Friedman's cluster patients were aggressive and hostile. The cluster patient in Friedman's personality type suffered from a disjuncture between a strong (and masculine) exterior and his insecure, weak interior, causing "hostile and aggressive" psychological conflicts.

Through the 1960s, Friedman's cluster profile was supported by one study (Steinhilber, Pearson, and Rushton 1960). The majority wrote that they had not observed any abnormal psychological disorders in their patients (Nieman and Hurwitz 1961; Schiller 1960; Symonds 1956). Skepticism about the existence of a cluster personality persisted until 1969, when John R. Graham, another of Wolff's students and soon-to-be president of the AHS (from 1976 to 1978), presented his research on the cluster personality at a symposium (Graham 1969)—research that he published in 1972.

Graham described the cluster headache patient as a person with masculine tendencies: "ambitious, hard-working, and [with] a strong sense of social mobility. They push until they break with symptoms or reach the goal and drop exhausted into a batch of headache." Cluster headache arose because these patients suffered from a conflict between their external masculinity and internal passivity: "Behind their excessively manly fronts lie great dependency needs. They are often led by the hand to the doctor's office often by the wife who takes the prescriptions, calls in the reports and makes the appointments" (Graham 1972, 182). Graham likened this behavior to a "mouse living inside a lion." This leonine exterior is written onto patients' bodies, which he described as having a rugged, masculine appearance, with a "ruddy complexion, . . . multi-furrowed, thick skin, [and] leonine faces" (p. 178). Their skin is "peau d'orange," or pitted like the peel of an orange. Their overall portraits

present us with a picture of rugged, aggressive masculinity. The bodies that go with these faces are generally those of sturdy, muscular, mesomorphs. Athletic prowess is common. They tend to be a harder-drinking and harder-smoking lot than comparable groups of migraine subjects and controls. They are even more red blooded males than any of their fellows. Over half of them have hematocrits of 46% or over and quite a number range around 50% and some as high as 54% and 56%. And theirs is a male disease. In our series of 100 cluster patients, 90 are men, where as in a 100 common migraine patients only 30 are men. They tend, also, to have other diseases that belong chiefly to males. (p. 181)

In these descriptions, Graham becomes the first physician to transform cluster headache from a condition that happens *to* men to a condition *of* men. His claim that patients share a physical manifestation of masculinity suggested that the yet-to-be-discovered underlying physiological cause of cluster headache must also explain this excess in masculine appearance and behavior. This is also the first time that we see the metaphor of masculinity playing a strong role in the creation of medical knowledge of cluster headache. When Graham describes his patients as “red blooded,” he makes a metaphorical allusion to their virility. But to support his claim, he describes their hematocrit levels as a literal biological marker of how red blooded they actually are. Hematocrit refers to the proportion of blood that consists of packed red blood cells—a proportion that is dependent on the sex of the individual. On average, hematocrit levels in adult men range between 42 and 54 percent and adult women between 38 and 46 percent. Thus, Graham’s report that some have hematocrit levels as high as 54 to 56 percent suggests an even *more* masculine man.

Graham wrote that his female patients shared the same masculine appearance and, in a 1972 article, included four pictures of women with cluster headache, where he described their masculine features (see Figure 1). The first, he says, has the classic “peau d’orange” skin. The second is “a very strong, powerful woman with a big frame and shoulders and arms and muscles”; the third looks “very much like the first woman”; while he describes the fourth woman as “a lady who comes from out West who’s breaking broncos and running a ranch,” adding, “I think you can see that her face presents the picture of a determined, rather masculine, square-faced powerful person.” Graham preserves the feminine psyche behind the masculine physique: “In our experience, beneath their rather manly exterior these [women] patients have very sensitive female psyches and personality patterns” (p. 184). But Graham never specifies what is masculine about these women’s appearances, other than their pitted skin and broad frames. Yet two of the women wear lipstick and other markers of femininity. Three appear older and wrinkled, which may be evidence of the characteristic leonine face. This ambiguity suggests that these descriptions were meant to be self-evident to the reader.

In sum, Graham extended previous observations that cluster headache is predominant among men by arguing that the disorder involves a psychological tension between a hypermasculine exterior and a passive interior and that this hypermasculinity was written onto the body. In subsequent years, John Graham’s cluster headache profile enjoyed great influence among the next generation of cluster headache researchers.



Figure 1: Graham's patients with "masculine" features.

SOURCE: Graham, John R. 1972. Cluster headache. *Headache* 11 (4): 175-85. Reprinted with permission from Blackwell Publishing.

Evidence for and against the Cluster Profile

In the years following, Lee Kudrow, a neurologist known to have cluster headaches himself, produced a series of influential studies on Graham's

cluster headache profile. Kudrow (1974, 1980) supported Graham's description of a leonine cluster headache physique, drawing from data collected from 20 cluster headache patients and controls recruited from his headache clinic. He reported that cluster patients tend to be taller, with a higher incidence of hazel eye color than control groups. (Kudrow shares these physical features.) He also concluded (from a sample of 16 patients) that "Type A personality" features are common. More so than Graham, Kudrow pushed the causal relationship between these factors, proposing that the uptight personality of the cluster patient led to heavy smoking and drinking, which then produced their characteristic leonine appearance.

This research suffers from methodological flaws that were and continue to be overlooked in the headache literature. For example, Kudrow systematically excluded participants who would counter particular findings, for example, Black patients from assessments of eye color and women from the analysis of height and hemoglobin. Kudrow drew on a similar logic to explain outliers. For example, "only one man from the cluster group was shorter than 68 [inches]. He is a 46 year old Filipino, 65 [inches] tall" (Kudrow 1974, 198). Kudrow left out further explanation, but the implication was that the patient's Filipino ethnicity (none others were mentioned) accounted for his low stature.

Kudrow did not, however, support Graham's psychodynamic assessment of the cluster patient as that of a "mouse inside a lion." Although he reported that cluster headache patients have Type A personalities, he also argued that "it is neither unusual nor infrequently encountered that men, cluster or otherwise, take a subordinate position to their wives in respect to household mechanics and decisions which include doctors' appointments and the filling of prescriptions. It is not unlikely that wives of non-cluster males would have the same opinion of their husbands' 'weaknesses' as wives of cluster males" (Kudrow 1974, 43). Kudrow makes the point that Graham pathologized very normal, masculine characteristics shared by the men in his waiting room. If otherwise confident men shared their intimate fears and anxieties within the confines of a physician's office, it may not have been pathological as much as a normal expression of emotion caused by a painful, disruptive condition.

In later work, Kudrow and Sutkus (1979) tested the existence of a cluster headache personality, using the Minnesota Multiphasic Personality Inventory, and found that both migraine and cluster headache patients have normal personalities. Most subsequent studies using the Minnesota Multiphasic Personality Inventory and other personality tests have found little to no difference between cluster patients and controls (Andrasik, Blanchard, and Arena 1982; Blanchard and Andrasik 1985; Cuyppers, Alternkirch, and Bunge 1981; Pfaffenrath et al. 1991). A few studies have

found elevated levels of “psychological disability” (Harrison 1975) in cluster headache but have not found differences between cluster and migraine patients (Merskey et al. 1985; Robinson et al. 1991). This work suggests that if migraine and cluster headache patients do have psychological problems, these problems are caused by pain rather than the other way around (Bertolotti et al. 2003; Harrison 1978; Robinson et al. 1991).

Little research has attempted to replicate Kudrow’s findings in support of a cluster physique. Joel Saper (1984), AHS president from 1990 to 1992, reported leonine facial features among the cluster patients in his clinic but used no controls. More recently, a group called the Italian Cooperative Study Group on the Epidemiology of Cluster Headache (2000) found no evidence of a cluster profile, with one exception: The cluster group had a slightly wider “mid-face height” than controls. Nevertheless, two experts in the field were not able to identify cluster patients from case controls by physical appearance alone. This study raises questions about the cluster physique but has received little attention (and according to the Science Citation Index, no citations) in the medical literature.

There is also an increasing recognition in the medical literature that cluster headache may not be as male dominated as once thought. Early studies on cluster headache reported a male dominance of as much as 5-6:1 (Ekbom et al. 2002; Friedman 1958; Kudrow 1980; Lovshin 1961). More recent studies, however, have located more women with cluster headache, shifting the estimated gender ratio to 2-3:1 (Bahra, May, and Goadsby 2002; Manzoni 1997, 1998). Some scholars argue that the shift is due to increased recognition of the diagnosis in women (Bahra, May, and Goadsby 2002), and a separate study found that women with cluster headache have been misdiagnosed with migraine, as they tend to have more migraine-like autonomic symptoms with their cluster headache (nausea and light and sound sensitivity, rather than the usual cluster symptoms) (Rozen et al. 2001). Indeed, as research and the diagnostic criteria of cluster headache evolve, physicians may find a diminished or disappearing male predominance. While the masculinity embedded in cluster headache medicine is derived from problematic cultural assumptions no matter what the epidemiology, these new findings remind us that our understanding of cluster headache as a male-dominated disorder remains contingent.

The Persistence of the Cluster Profile

Even though empirical data do not support Graham’s cluster headache profile, this profile persists in medicine. A content analysis of 91 reference

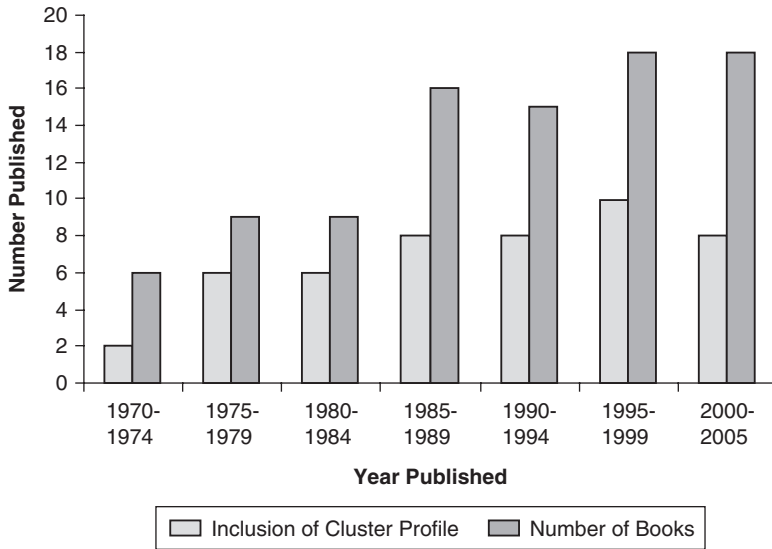


Figure 2: Persistence of Cluster Headache in Reference Books

books on headache, selected because they were published after Graham's first description of the cluster profile (1969) and contained a nontrivial reference to cluster headache, demonstrates the resilience of the cluster profile (see Figure 2).

More than half (53 percent) of these books include a description of at least some of the features of the cluster profile. A close analysis of these descriptions reveals some robust trends in the treatment of cluster headache. First, the number of books that include reference information on cluster headache increased during the 1980s, although this growth has slowed in recent years. When the cluster profile was at its most popular, (between 1975 and 1985) it was included in 67 percent of these reference books. By 2000-2005, this rate dropped to 44 percent. At the same time, the absolute number of books that include the cluster headache profile has also increased, albeit more slowly.

Authors were selective about which aspects of the profile they included and which they supported (see Figure 3). Across all years, support for the cluster physique (82 percent) far exceeded support for the cluster psyche (28 percent), which reflects the greater attention given to empirical studies of the cluster psyche and the relative delay in attempts to collect

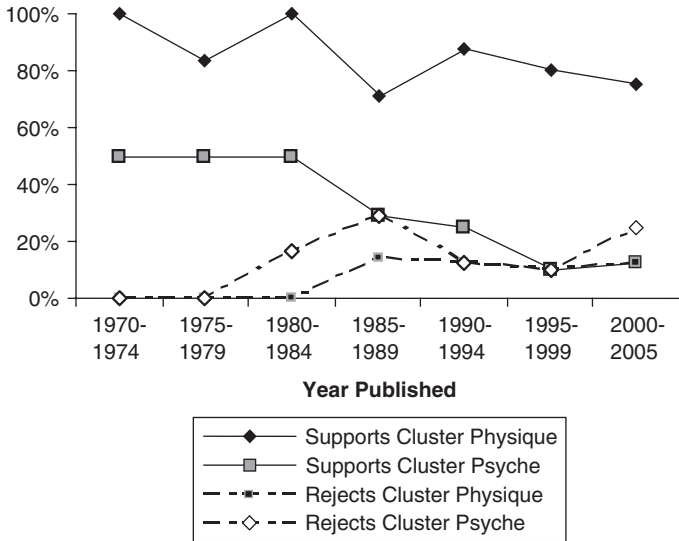


Figure 3: Support for the Cluster Profile

systematic data on the cluster physique. Support for the cluster physique remained steady over the years. Only a few authors included a description of the cluster profile in order to reject it (usually as a myth, or as an obsolete idea). Authors were more likely to reject the cluster psyche (25 percent) than the cluster physique (13 percent). Overall, the cluster headache profile was more likely to appear in books written for a general medical (58 percent) or lay audience (46 percent) than in books written for an audience already expert in headache treatment (37 percent).

My fieldwork substantiated that the cluster headache profile enjoys strong, although not unanimous, support from headache experts in the field. It is not unusual for these experts to present the cluster profile in professional research conferences, describing cluster headache patients as, for example, “somewhat dependent personalities, dependent on their wives—usually the wives tend to be the decision makers in the family. They tend to be rather large people, with wide faces, and peau d’orange skin” (field notes from New York Headache Foundation, 16 April 2005). Even skeptical descriptions have the effect of perpetuating the cluster profile. For example, at a 2001 presentation of the Neurology Ambassador’s Program sponsored by AHS and the American Academy of Neurology, David Dodick, a prominent cluster headache researcher, told a ballroom of more than 1,000 attendees,



Figure 4: A Stereotypically Leonine-Faced Cluster Patient

SOURCE: Reprinted with permission from the American Headache Society.

There have been a number of associated features of cluster headache . . . habits, phenotypic features—that many have said are more common in patients with cluster headache than in the general population. The typical leonine faces, these heavy, coarse facial features, which we will not that infrequently see . . . and whether that's due to cluster headache, to [its] intrinsic nature . . . or whether that's due to the heavy tobacco use . . ." (field notes from AHS/IHS 2001, 29 June 2001)

Dodick is careful not to endorse the leonine stereotype, preferring to use hedging phrases (see Prince, Frader, and Bosk 1982), such as "many have said" as opposed to a more accepting "studies have shown" and suggesting that tobacco causes the leonine features. Indeed, Dodick et al. (2000) had discounted this profile in an article on cluster headache published a year earlier. Nevertheless, his PowerPoint presentation committed to the cluster profile rather concretely, each slide including the image of a stereotypically leonine-faced cluster patient (see Figure 4).

No public debate exists about the cluster profile in the headache community. Consequently, some neurologists found it acceptable to inform me about leonine facies and rugged psyches, while other neurologists discounted such theories as passé. One researcher told me that he collects images of cluster patients because he thinks it is “cool that they look so much like lions. Even the women look the same!” (field notes). At the same time, other headache researchers told me that the cluster profile is a myth: “I don’t know that I really can say that I’ve seen that [leonine face]. I mean, I look for it and every once in a while I see one and say, ‘Oh, yeah, that guy is like that.’ You know, sandy hair, hazel eyes, leonine creases, but I don’t know that I really find that at all helpful in any way” (interview).

These frequent encounters with the cluster profile demonstrate how engrained these social, physical, and psychological images of cluster headache and masculinity are. However, cluster headache is coded as masculine even in the absence of the cluster profile. For example, the cluster headache profile is not included in the opening description of cluster headache in which Rapoport, Sheftell, and Tepper (2003) describe cluster headache as a pain so severe that it can topple even “the strongest of men.” Thus, even as the cluster profile loses its hold on the headache community, its residual masculinity does not. The metaphorical connection between cluster headache and masculinity has grown so entrenched in the headache literature that these two ideas have melded into one unified concept. Consequently, when I asked neurologists whether they thought it odd that cluster headache descriptions were so masculine, they often responded, “Cluster headache *is* masculine.” But masculinity and femininity are culturally grounded, historically situated ideas. Without a clear discourse about what gender is and what it is not, medical researchers run the risk of engaging in gender essentialism.

DISCUSSION

Virtually from its inception in the medical literature, physicians have understood cluster headache to be a disorder predominant in men. In this article, I show how this basic epidemiological association evolved into the framing of cluster headache as a disorder of excess masculinity. In addition, I demonstrate that the medical literature continues to describe men and women with cluster headache as hypermasculine, despite growing evidence to the contrary. This stereotypical portrayal of the cluster patient—as a rugged, athletic man—is drawn from idealized Western norms regarding hegemonic masculinity, not some innate or universal feature of men (Connell 1995).

The overt existence of masculinity in the cluster headache literature raises a number of questions about the relationship between the representation of

disease, the production of medical knowledge, and the clinical treatment of cluster headache, not least of which is the impact that masculinized descriptions of cluster headache have in the clinical encounter. While little is known about how physicians apply (or misapply) the cluster headache diagnosis, this emphasis on masculinity creates the suspicion that cluster headache is either overdiagnosed in men or underdiagnosed in women. Certainly, this suspicion is supported by studies that find increasing numbers of women with cluster headache (Bahra, May, and Goadsby 2002; Manzoni 1999; Rozen et al. 2001) and ought to be investigated.

The persistence of masculine stereotypes in cluster headache also reveals something quite disturbing about medicine's readiness to accept male stereotypes as biologically driven facts. How should we account for it? I propose that the persistence of masculinity is allowed because a masculinized discourse inspires no natural critics. Both patients and physicians admire the cluster personality. Indeed, the masculine characteristics associated with cluster headache—strength, stoicism, athleticism, rugged looks and behavior—are valued at the same time that they are pathologized. The cluster profile suggests strength and vigor, not the psychological weakness associated with pain conditions (Jackson 2000). Cluster's masculine rhetoric confers status on both patients and physicians—patients because they are viewed as strong individuals experiencing serious and important pain and physician-specialists because a masculinized disorder can only heighten the status of their subject. That the masculinity of cluster headache raises the disorders' status stands in direct contrast to women's disorders, which are so often ignored, delegitimized, and dismissed.

Even those opposed to hegemonic masculinity are not likely to critique its medicalization. These scholars have long argued that masculinity is dangerous to both sexes, by encouraging unnecessary risk taking, exposing men to more occupational hazards, and burdening men with stresses caused by their traditional breadwinning role (Courtney 2000; Harrison 1978; Messner 1997; Sabo and Gordon 1995), and thus are unlikely to be troubled by any attempts by medicine to pathologize masculinity. The social construction of masculinity as a risky, oppressive attribute is typically forwarded as a progressive strand of gender theorizing, one that takes a stand against patriarchal power. However, the discursive construction of men as victims also resonates with a wide audience who may feel threatened by shifting gender role expectations. Thus, the medicalization of masculinity has supporters from across the political spectrum: from those who privilege traditional masculinity to those who abhor it.

The persistence of this masculine discourse must be understood as the natural consequence of everyday thinking in medicine and what Fleck ([1935] 1979, 38) called "the self contained" nature of scientific thought. As he

described it, “the interaction between what is already known, what remains to be learned, and those who are to apprehend it, go to ensure harmony within the system.” In other words, cultural stereotypes may be more resilient than the emergence of new biological knowledge. The undermining of cultural stereotypes requires a social movement, as well as biological knowledge. Feminist scholars have been broadly successful in transforming the cultural stereotypes of women in medicine, inspiring what Steven Epstein (2004) terms “a new common sense” about how research on women and medicine ought to be conducted and interpreted. Once-acceptable research methods and interpretations now appear absurd and unethical. By sensitizing social scientists to subtle forms of gender inequality embedded within medical research, feminists have provided researchers with a different framework for interpreting their data, allowing for the emergence of new biological understandings of sex and gender. Yet as this case study shows, the awareness about men’s health and its social construction has lagged far behind. If we as feminists are serious about our efforts to undermine traditional gender binaries, then we must use our theoretical knowledge about the gendering of illness and apply it to our understanding of men’s health. Identifying the gendered man in medicine un masks the universal patient for what he really is: part of a broader sociocultural gender system that promotes gender essentialism.

In sum, while it is not clear that there can ever be biological “facts” unmediated by culture, feminists can and should play a role in identifying gender stereotypes and how they work. In the case of cluster headache, we might suggest that physicians look for gender differences in the presentation of the disorder; that cross-cultural studies be done to determine the extent to which patients with cluster headache express pain with aggression; or that a gender difference in epidemiology does not imply that this variation is caused by biological sex differences. Feminist thought has helped shape the creation of new scientific knowledge on women and we should apply these lessons to uncovering the man in medicine.

NOTE

1. AHS and IHS cosponsored their 2001 meetings in New York.

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