CHAPTER ONE

Medicalization

Context, Characteristics, and Changes

When I began teaching medical sociology in the 1970s, the terrain of health and illness looked quite different from what we find in the early twenty-first century. In my classes, there was no mention of now-common maladies such as attention-deficit/hyperactivity disorder (ADHD), anorexia, chronic fatigue syndrome (CFS), post-traumatic stress disorder (PTSD), panic disorder, fetal alcohol syndrome, premenstrual syndrome (PMS), and sudden infant death syndrome (SIDS), to name some of the most prevalent. Neither obesity nor alcoholism was widely viewed in the medical profession as a disease. There was no mention of diseases like AIDS or contested illnesses like Gulf War syndrome or multiple chemical sensitivity disorder. While Ritalin was used with a relatively small number of children and tranquilizers were commonly prescribed for certain problems, human growth hormone (hGH), Viagra, and antidepressants like selective serotonin reuptake inhibitors (SSRIs) were not yet produced.

In the past thirty years or so, medical professionals have identified several problems that have become commonly known illnesses or disorders. In this book I address illnesses or "syndromes" that relate to behavior, a psychic state, or a bodily condition that now has a medical diagnosis and medical treatment. Clearly, the number of life problems that are defined as medical has increased enormously. Does this mean that there is a new epidemic of medical problems or that medicine is better able to identify and treat already existing problems? Or does it mean that a whole range of life's problems have now received medical diagnoses and are subject to medical treatment, despite dubious evidence of their medical nature?

I am not interested in adjudicating whether any particular problem is *really* a medical problem. That is far beyond the scope of my expertise and the boundaries

of this book. I am interested in the social underpinnings of this expansion of medical jurisdiction and the social implications of this development. We can examine the medicalization of human problems and bracket the question of whether they are "real" medical problems. What constitutes a real medical problem may be largely in the eyes of the beholder or in the realm of those who have the authority to define a problem as medical. In this sense it is the viability of the designation rather than the validity of the diagnosis that is grist for the sociological mill.

The impact of medicine and medical concepts has expanded enormously in the past fifty years. To take just two common indicators, the percentage of our gross national product spent on health care has increased from 4.5 percent in 1950 to 16 percent in 2006, and the number of physicians has grown from 148 per 100,000 in 1970 to 281 per 100,000 in 2003 (Kaiser Family Foundation, 2005: Exhibit 5-7). The number of physicians per population nearly doubled in that period, greatly extending medical capacity. In this same period the jurisdiction of medicine has grown to include new problems that previously were not deemed to fall within the medical sphere.

"Medicalization" describes a process by which nonmedical problems become defined and treated as medical problems, usually in terms of illness and disorders. Some analysts have suggested that the growth of medical jurisdiction is "one of the most potent transformations of the last half of the twentieth century in the West" (Clarke et al., 2003: 161). For nearly four decades, sociologists, anthropologists, historians, bioethicists, physicians, and others have written about medicalization (Ballard and Elston, 2005). These analysts have focused on the specific instances of medicalization, examining the origins, range, and impact of medicalization on society, medicine, patients, and culture (Conrad, 1992; Bartholomew, 2000; Lock, 2001). While some have simply examined the development of medicalization, most have taken a somewhat critical or skeptical view of this social transformation.

In this chapter I examine some of the issues concerning medicalization and social control. Rather than summarizing the literature, I emphasize conceptual and substantive issues regarding medicalization. In doing so I make no attempt to provide a comprehensive review. Elsewhere I have reviewed some of the writings on medicalization more completely (Conrad, 1992, 2000).

CHARACTERISTICS OF MEDICALIZATION

Sociologists have studied medicalization since the late 1960s. The first studies focused on the medicalization of deviance (Pitts, 1968; Conrad, 1975), but soon the concept was seen to be applicable to a wide range of human problems that had entered medical jurisdiction (Freidson, 1970; Zola, 1972; Illich, 1976). To estimate the amount

TABLE 1.1
Searches on Medicalization, August 25, 2005

Google	71,700
Google Scholar	4,130 results
Social Sciences Citation Index	530 articles
Medline	445 articles
Social Science Abstracts	179 articles
Newspaper Abstracts	21 articles

of work that has been done on medicalization, I searched several databases with the keyword "medicalization." While the results of this search (see table 1.1) are only rough indices, they give a general sense of the amount of attention and writing given to this topic. In sociology alone there are dozens of case examples of medicalization; the corresponding body of literature has loosely been called the "medicalization thesis" (Ballard and Elston, 2005) or even "medicalization theory" (Williams and Calnan, 1996).

Medicalization also has gained attention beyond the social sciences. Numerous articles may be identified in a Medline search (of the medical literature), but of particular interest are the *British Medical Journal* (2002) special issue devoted to medicalization and an issue of *PLoS Medicine* (2006) largely devoted to "disease mongering." In 2003 the President's Council on Bioethics dedicated an entire session to examining medicalization (Kass et al., 2003). Less attention has been given to medicalization in the news, although the number of popular news references to medicalization has increased in the past couple of years. In 2005, for instance, the *Seattle Times* published a five-part investigative series entitled "Suddenly Sick" that focused on the promotion of illness categories and medicalization (Kelleher and Wilson, 2005). It seems evident that interest in and research on medicalization is growing as medicalization itself is increasing.

The key to medicalization is definition. That is, a problem is defined in medical terms, described using medical language, understood through the adoption of a medical framework, or "treated" with a medical intervention. While much writing, including my own, has been critical of medicalization, it is important to remember that medicalization describes a process. Thus, we can examine the medicalization of epilepsy, a disorder most people would agree is "really" medical, as well as we can examine the medicalization of alcoholism, ADHD, menopause, or erectile dysfunction. While "medicalize" literally means "to make medical," and the analytical emphasis has been on overmedicalization and its consequences, assumptions of overmedicalization are not a given in the perspective. The main point in considering medicalization is that an entity that is regarded as an illness or disease is not ipso facto

a medical problem; rather, it needs to become defined as one. While the medical profession often has first call on most maladies that can be related to the body and to a large degree the psyche (Zola, 1972), some active agents are necessary for most problems to become medicalized (Conrad, 1992; Conrad and Schneider, 1992).

Many of the earliest studies assumed that physicians were the key to understanding medicalization. Illich (1976) used the catchy but misleading phrase "medical imperialism." It soon became clear, however, that medicalization was more complicated than the annexation of new problems by doctors and the medical profession. In cases like alcoholism, medicalization was primarily accomplished by a social movement (Alcoholics Anonymous), and physicians were actually late adopters of the view of alcoholism as a disease (Conrad and Schneider, 1992). And even to this day, the medical profession or individual doctors may be only marginally involved with the management of alcoholism, and actual medical treatments are not requisite for medicalization (Conrad, 1992; Appleton, 1995).

Although medicalization occurs primarily with deviance and "normal life events," it cuts a wide swath through our society and encompasses broad areas of human life. Among other categories, the medicalization of deviance includes alcoholism, mental disorders, opiate addictions, eating disorders, sexual and gender difference, sexual dysfunction, learning disabilities, and child and sexual abuse. It also has spawned numerous new categories, from ADHD to PMS to PTSD to CFS. Behaviors that were once defined as immoral, sinful, or criminal have been given medical meaning, moving them from badness to sickness. Certain common life processes have been medicalized as well, including anxiety and mood, menstruation, birth control, infertility, childbirth, menopause, aging, and death.

The growth of medicalized categories suggests an increase in medicalization (see chapter 6), but this growth is not simply a result of medical colonization or moral entrepreneurship. Arthur Barsky and Jonathan Boros point out that the public's tolerance of mild symptoms has decreased, spurring a "progressive medicalization of physical distress in which uncomfortable body states and isolated symptoms are reclassified as diseases" (1995: 1931). Social movements, patient organizations, and individual patients have also been important advocates for medicalization (Broom and Woodward, 1996). In recent years corporate entities like the pharmaceutical industry and potential patients as consumers have begun to play more significant roles in medicalization.

Medicalization need not be total; thus, we can say there are degrees of medicalization. Some cases of a condition may not be medicalized, competing definitions may exist, or remnants of a previous definition may cloud the picture. Some conditions such as death, childbirth, and severe mental illness are almost fully medicalized. Others, such as opiate addiction and menopause, are partly medicalized. Still

others, such as sexual addiction and spouse abuse, are minimally medicalized. While we don't know specifically which factors affect the degrees of medicalization, it is likely that support of the medical profession, discovery of new etiologies, availability and profitability of treatments, coverage by medical insurance, and the presence of individuals or groups who promote or challenge medical definitions may all be significant in particular cases. There are also constraints on medicalization, including competing definitions, costs of medical care, absence of support in the medical profession, limits on insurance coverage, and the like. Medical categories can shift on the continuum toward or away from more complete medicalization.

Medical categories can also expand or contract. One dimension of the degree of medicalization is the elasticity of a medical category. "While some categories are narrow and circumspect, others can expand and incorporate a number of other problems" (Conrad, 1992: 221). For example, Alzheimer disease (AD) was once an obscure disorder, but with the removal of "age" as a criterion (P. Fox, 1989) there was no longer a distinction between AD and senile dementia. This change in definition to include cases of senile dementia in the population of adults over 60 years old sharply increased the number of cases of AD. As a result, AD has become one of the top five causes of death in the United States (cf. Bond, 1992). Medicalization by diagnostic expansion will be examined in chapter 3.

Medicalization is bidirectional, in the sense that there can be both medicalization and demedicalization, but the trend in the past century has been toward the expansion of medical jurisdiction. For demedicalization to occur, the problem must no longer be defined in medical terms, and medical treatments can no longer be deemed appropriate interventions. A classic example is masturbation, which in the nineteenth century was considered a disease and worthy of medical intervention (Engelhardt, 1974) but by the mid-twentieth century was no longer seen as requiring medical treatment. In a somewhat different vein, the disability movement has advocated, with partial success, for a demedicalization of disability and a reframing of it in terms of access and civil rights (Oliver, 1996). The most notable example is homosexuality, which was officially demedicalized in the 1970s; in chapter 5 I examine the possibilities of its remedicalization. Childbirth, by contrast, has been radically transformed in recent years with "natural childbirth," birthing rooms, nurse midwives, and a host of other changes, but it has not been demedicalized. Childbirth is still defined as a medical event, and medical professionals still attend it. Birthing at home with lay midwives approaches demedicalization, but it remains rare. In general, there are few contemporary cases of demedicalization to examine.

Critics have been concerned that medicalization transforms aspects of everyday life into pathologies, narrowing the range of what is considered acceptable. Med-

icalization also focuses the source of the problem in the individual rather than in the social environment; it calls for individual medical interventions rather than more collective or social solutions. Furthermore, by expanding medical jurisdiction, medicalization increases the amount of medical social control over human behavior. Early critics warned that medical social control would likely replace other forms of social control (Pitts, 1968; Zola, 1972), and while this has not occurred, it can be argued that medical social control has continued to expand. Although many definitions of medical social control have been offered, I still contend that "the greatest social control power comes from having the authority to define certain behaviors, persons and things" (Conrad and Schneider, 1992: 8). Thus, in general, the key issue remains definitional—the power to have a particular set of (medical) definitions realized in both spirit and practice. More recently critics have emphasized how medicalization has increased the profitability and markets of pharmaceutical and biotechnological firms (Moynihan and Cassels, 2005); these trends are discussed in later chapters. A fuller discussion of the social implications of the medicalization of society is found in chapter 8.

THE RISE OF MEDICALIZATION

Analysts have long pointed to social factors that have encouraged or abetted medicalization: the diminution of religion; an abiding faith in science, rationality, and progress; the increased prestige and power of the medical profession; the American penchant for individual and technological solutions to problems; and a general humanitarian trend in Western societies. These factors, rather than being explanatory, set the context in which medicalization occurs.

Most early sociological studies took a social constructionist tack in investigating the rise of medicalization. The focus was on the creation (or construction) of new medical categories with the subsequent expansion of medical jurisdiction. Concepts such as moral entrepreneurs, professional dominance, and claims-making were central to the analytical discourse. Studies of the medicalization of hyperactivity, child abuse, menopause, post-traumatic stress disorder, and alcoholism, among others, broadened our understanding of the range of medicalization and its attendant social processes (see Conrad, 1992). Michel Foucault (e.g., 1965), one of the great social analysts of the latter twentieth century, did not typically use the term "medicalization" but tended "to present a consonant vision that shows the impact of medical discourses on peoples lives" (Lupton, 1997: 94). But most studies of medicalization tend to be social constructionist rather than Foucauldian in orientation.

If one conducted a meta-analysis of the studies from the 1970s and 1980s, several social factors would predominate. At the risk of oversimplification, I suggest that

three factors underlie most of those analyses. First, there was the power and authority of the medical profession, whether in terms of professional dominance, physician entrepreneurs, or, in its extremes, medical colonization. Here the cultural or professional influence of medical authority is critical. One way or another, the medical profession and the expansion of medical jurisdiction were prime movers for medicalization. This powerful medical authority was evident in the medicalization of hyperactivity, menopause, child abuse, and childbirth, among others. Second, medicalization sometimes occurred through the activities of social movements and interest groups. In these cases, organized efforts were made to champion a medical definition of a problem or to promote the veracity of a medical diagnosis. The classic example is alcoholism, with both Alcoholics Anonymous and the "alcoholism movement" central to medicalization of the condition (with physicians reluctant, resistant, or irresolute). Social movements were also critical in the medicalization of PTSD (W. Scott, 1990) and Alzheimer disease (P. Fox, 1989). Some efforts were less successful, as in the case of multiple chemical sensitivity disorder (Kroll-Smith and Floyd, 1997) and sexual addiction (J. Irvine, 1995). In general, organized grassroots efforts promoted medicalization. Third, directed organizational or inter- or intraprofessional activities promulgated medicalization, where professions competed for authority in defining and treating problems, as was the case with obstetricians and the demise of midwives (Wertz and Wertz, 1989) or the rise of behavioral pediatrics in the wake of medical control of childhood diseases (Pawluch, 1983; Halpern, 1990).

Far from medical imperialism, medicalization is a form of collective action. While physicians and the medical profession have historically been central to medicalization, doctors are not simply colonizing new problems or labeling feckless patients. Patients and other laypeople can be active collaborators in the medicalization of their problems or downright eager for medicalization (e.g., Becker and Nachtigall, 1992), although sympathetic professionals are usually needed for successful claims-making (Brown, 1995). Studies demonstrate the importance of the mobilization of people who are diagnosed in collectively promoting and shaping their diagnoses (e.g., Riessman, 1983). This kind of diagnostic advocacy is often accomplished in some association or connection with an extant social movement: PMS with the women's movement (Riessman, 1983; Figert, 1995); PTSD with the Vietnam veterans movement (W. Scott, 1990); and AIDS treatment with the gay and lesbian movement (Epstein, 1996). In each case the explicit politicization and mobilization of the social movement propelled the new category forward. Self-help and patient advocacy groups are legion, and some have promoted the acceptance of their own illness categories (Rossol, 2001; Barker, 2002).

To be sure, other contributing factors were implicated in the analyses. Pharmaceutical innovations and the marketing of Ritalin and hormone replacement therapy

(HRT) played a role in the medicalization of hyperactivity and menopause. Third-party payers (i.e., the health insurers that would pay for treatment) were factors in the medicalization of "gender dysphoria," obesity, and the detoxification and medical treatment for alcoholism. However, it is significant that in virtually all studies where they were considered, the corporate players in medicalization were deemed secondary to professionals, patient movements, or other claims-makers. By and large, the pharmaceutical and insurance industries were not central to the analyses.

Medicalization studies by sociologists and feminist scholars have shown how women's problems have been disproportionately medicalized. This is manifested in studies of reproduction and birth control, childbirth, infertility, premenstrual syndrome, fetal alcohol syndrome, eating disorders, sexuality, menopause, cosmetic surgery, anxiety, and depression. Catherine Kohler Riessman (1983) and Elianne Riska (2003) incisively examined the particular gendered aspects of medicalization. While the medicalization of women's bodies and difficulties continues (Lock, 2004), as discussed in chapter 2, men, especially aging male bodies, are now also being increasingly medicalized. While medicalization is not yet gender equal, it seems to be moving in that direction (e.g., Rosenfeld and Faircloth, 2006).

CONTROVERSIES AND CRITIQUES

Studies of medicalization have not been without controversy.[1] These controversies are important to moving the study of medicalization forward. But readers not interested in what may seem to be internal academic debates can skip this section and move to the next one. For those who stay the course there is the promise of a greater understanding of the contours of the medicalization process.

The earliest critiques argued that the medicalization case has been overstated and that significant constraints limit rampant medicalization (R. Fox, 1977; Strong, 1979). Some of these critiques conflated deprofessionalization with demedicalization (R. Fox, 1977). Others failed to recognize that most studies of medicalization adopt a historical, social-constructionist perspective. This perspective focuses on the emergence of medical categories and how problems entered the medical domain, bracketing whether a phenomenon is "really" a medical problem (Bury, 1986; see Conrad, 1992: 212). From a sociological perspective, case studies of medicalization have created a new understanding of the social process involved in the cultural production of medical categories or knowledge; however, these investigations do not necessarily contain a mandate as to how the categories and knowledge are to be evaluated.

In the 1990s several writers suggested ways of "rethinking" or "reconsidering" medicalization. For example, some noted how changes in society and medicine

may place new constraints on medicalization. Simon Williams and Michael Calnan (1996) contended that most studies of medicalization viewed individuals or the lay public as largely passive or uncritical of medicine's expansion. They suggested that a better-informed public would create a "challenge of the articulate consumer." Barsky and Boros (1995) noted that despite a growing medicalization of bodily distress (e.g., somatization), managed care creates great incentives to reduce utilization, therefore placing new constraints on medicalization. While it remains questionable whether most studies of medicalization see the public as passive ("medical dupes," as Vicente Navarro [1976] put it many years ago), it seems clear that culture and medicine may limit medicalization. But as I endeavor to demonstrate in this book, perhaps especially in chapter 7, both articulate consumers and managed care incentives may promote as well as constrain medicalization. It is important to recognize that problems can still be medicalized, even in the face of skeptical members of the public or a medical system that resists treating them. For example, the fact that insurance companies won't pay for treatment of certain medical diagnoses limits medicalization but doesn't necessarily undermine it, so long as medical categories are accepted and applied to problems. It may, however, affect the degree of medicalization. Much of what is called self-care involves the use of medical approaches by lay people in the absence of professional medical treatment.

Most analysts of medicalization have written in a critical mode, either emphasizing the problems of overmedicalization or its consequences. Using the case of chronic fatigue syndrome, Dorothy H. Broom and Roslyn V. Woodward (1996) maintained that some writers have emphasized the downsides of medicalization and that medicalization can be both helpful and unhelpful to patients. They suggested, in the case of CFS, that medical explanations can provide coherence to patients' symptoms, validation and legitimation of their troubles, and support for self-management of their problems. Broom and Woodward distinguished medicalization from medical dominance (which they see as problematic for patients), and they called for a collaborative approach between the physician and the patient. They suggested that "constructive medicalization" is capable of improving the individual's well-being. In a sense, they echoed Catherine Kohler Riessman's (1983) point that medicalization can be a "two-edged sword" and my own depiction of the brighter and darker sides of medicalization (Conrad, 1975)—but they gave more credence to the benefits. It seems likely that certain benefits of medicalization will be more apparent with controversial illnesses like CFS, although as Talcott Parsons (1951) pointed out in his classic formulation of the sick role, medical diagnosis can legitimate a range of human troubles. Broom and Woodward (1996) departed from Parsons by suggesting that legitimation can occur with collaboration rather than through professional dom-

inance. That is, physicians concurred with a patient's appeal for a medical diagnosis, rather than simply labeling a patients' condition as an illness.

Holistic health approaches are typically deemed alternative medicine and often are taken as a step toward demedicalization. After all, holistic approaches move away from the traditional medical model and frequently bypass the medical profession. June Lowenberg and Fred Davis (1994), using a broad conceptualization of medicalization, found that adaptation of holistic health does not by itself constitute evidence for either demedicalization or medicalization. Some aspects support medicalization (e.g., broadening the pathological sphere, maintaining a reshaped medical model), while others support demedicalization (e.g., reduction of technology and of status difference between providers and clients). Holistic health is frequently a form of deprofessionalization without demedicalization. Lowenberg and Davis found no unilateral movement in the direction of medicalization either way and rightly cautioned against simple generalizations. In recent years there has been a repositioning of complementary and alternative medicine (CAM) toward conventional medicine under the banner of "integrative medicine." This shift toward professionalization can been seen with the development of the National Center for Complementary and Alternative Medicine at the National Institutes of Health (www.nccam.nih.gov) and suggests a shift of alternative medicine in the direction of medicalization.

Simon Williams (2002, 2005) proposed that sleep provides another chapter in what he calls the medicalization-healthicization debate. By this he means that a variety of sleep disorders appear to have been subject both to medicalization and to healthicization (a rather awful word I coined a number of years ago [1992]) in terms of deeming the quantity and quality of sleep necessary for good health. Others (Hislop and Arber, 2003) claim, based on a small study of women, that sleep has been somewhat demedicalized as women use more "personalized strategies," perhaps akin to holistic health, in managing their sleep problems. But similar to Lowenberg and Davis's notion, personal or holistic solutions don't necessarily indicate demedicalization. I tend to align with Williams, at least in terms of the increasing medicalization of sleep, insomnia, and narcolepsy. These states have long been at least partly in the province of medicine, but now a whole array of sleep disorders (e.g., sleep apnea, shift work sleep disorder, sleep paralysis) have been identified. Recently there have even been advertisements in medical journals for the medication Provigal (modafinil) for "excessive sleepiness," for people who sometimes can't keep their eyes open during the day (cf. Wolpe, 2002; Kroll-Smith, 2003). My observation is that if this is a "disorder," it has a reasonably high prevalence among college students attending early or late classes!

Elsewhere, Williams contended that the more recent Foucauldian and postmodern critique has supplemented the standard socially constructionist-based medicalization conceptions. Williams contends, "Thus a new more thoroughgoing 'medicalization critique' has, in effect, emerged, in which the former acknowledgement or acceptance of an underlying 'natural' or 'biophysical' has itself been critically questioned or stripped away, if not abandoned altogether" (2001: 147).

Following Lupton (1997) and to a lesser degree Armstrong (1995), Williams acknowledges that both approaches focus on medicine as a dominant institution that has expanded its gaze and jurisdiction substantially in the past half-century or more. The Foucauldian view emphasizes more how the discourses of medicine and health become central to the subjectivities of people's lives, manifested as "the wholesale incorporation of the body and disease . . . in the discursive matter via the productive effects of power/knowledge, viewed as socially constructed entities" (Williams, 2001: 148). Without getting into a debate about the differences between a Foucauldian perspective and that presented in most medicalization studies, let me at least note some complementary lines of analysis. Medicalization studies, as I and others engage in them, focus especially on the creation, promotion, and application of medical categories (and treatments or solutions) to human problems and events; while we are certainly interested in the social control aspects of medicalization, we see them as something that goes beyond, but may include, discourse and subjectivity. Numerous studies have emphasized how medicalization has transformed the normal into the pathological and how medical ideologies, interventions, and therapies have reset and controlled the borders of acceptable behavior, bodies, and states of being. The medical gaze, discourse, and surveillance are fundamental elements of this process, even if these writers use a different vocabulary. It is clear that the postmodern critique points to the limits of modernist categorization, but it is the very processes of medical categorization that create medicalization. It is not necessary to adopt postmodern premises to be critical of the categorization of wide swatches of life into medical diagnoses or to adopt some relativist critique of medical viewpoints and cultural power. Foucault wrote about medicalization in one of his earlier works, *Birth of the Clinic:* "The two dreams (i.e., nationalized medical profession and disappearance of disease) are isomorphic; the first expressing in a very positive way the strict, militant, dogmatic medicalization of society, by way of a quasi-religious conversion and the establishment of a therapeutic clergy; the second expressing the same medicalization, but in a triumphant, negative way, that is to say, the volitization of disease in a corrected, organized, and ceaselessly supervised environment, in which medicine itself would finally disappear, together with its object and *raison d'être*" (1966: 32).

The medicalization thesis, as it is now constituted, focuses to some degree on both of these dimensions: it examines how medicine and the emerging engines of medicalization develop and apply medical categories, and to a lesser degree it focuses on how the populace has internalized medical and therapeutic perspectives as a taken-for-granted subjectivity (cf. Furedi, 2006). Indeed, most medicalization analysts contend that increasing parts of life have become medicalized and that medical or quasi-medical remedies are often explicitly sought for an expanding range of human difficulties. To put it crudely, medicalization of all sorts of life problems is now a common part of our professional, consumer, and market culture.

Adele Clarke and colleagues (2003), in an ambitious paper, endeavor to reconceptualize medicalization as "biomedicalization." By biomedicalization they mean "the increasingly complex, multisited, multidirectional processes of medicalization that today are being reconstituted through the emergent social forms and practices of a highly and increasingly technoscientific biomedicine" (Clarke et al., 2003: 162). These authors claim that this broader conceptualization of biomedicalization better captures the transformation of the organization and practices of Western biomedicine (see also Clarke et al., 2006). Their argument has many virtues, including alerting readers to changes affecting medicalization and the mounting structural and knowledge complexities of biomedicine. As should be apparent in this book, I agree with much of what Clarke and colleagues see as happening in medicine, but I believe it is better captured by acknowledging the shifting engines of medicalization (Conrad, 2005) and the increasingly market-based forms of medicalization (Conrad and Leiter, 2004). Biomedicalization is a much broader concept than medicalization and emphasizes a more extensive set of changes than is usually meant by medicalization, thus in my view compromising the focus on medicalization itself. Yet it seems clear that significant changes in medicine have had a significant impact on medicalization.

CHANGES IN MEDICINE

By the 1980s some profound changes in the organization of medicine were having important consequences for health matters. I can touch on them only briefly here. Medical authority eroded (Starr, 1982), health policy shifted from concerns of access to cost control, and managed care became central. As Donald Light (1993) pointed out, countervailing powers among buyers, providers, and payers changed the balance of influence among professions and other social institutions. Managed care, attempts at cost controls, and corporatized medicine changed the organization of medical care. The "golden age of doctoring" (McKinlay and Marceau, 2002) ended,

and an increasingly buyer-driven system was emerging. Physicians certainly maintained some aspects of their dominance and sovereignty, but other players were becoming important as well. Large numbers of patients began to act more like consumers, both in choosing health insurance policies and in seeking out medical services (Inlander, 1998). Managed care organizations, the pharmaceutical industry, and some kinds of physicians (e.g., cosmetic surgeons) increasingly viewed patients as consumers or potential markets.

In addition to these organizational changes, new or developed arenas of medical knowledge were becoming dominant. The long-influential pharmaceutical companies comprise America's most profitable industry, and revolutionary new drugs expanded their influence (Angell, 2003; *Public Citizen*, 2003). By the 1990s the Human Genome project, the $3 billion venture to map the entire human genome, had been launched, with a draft completed in 2000. Genetics has become a cutting edge of medical knowledge and has moved to the center of medical and public discourse about illness and health (Conrad, 1999). The biotechnology industry has had starts and stops, but it promises a genomic, pharmaceutical, and technological future that may revolutionize health care (see Fukuyama, 2002).

Some of these changes have already been manifested in medicine, perhaps most clearly in psychiatry, where advances in knowledge have shifted the focus in three decades from psychotherapy and family interaction to psychopharmacology, neuroscience, and genomics. This shift is reinforced when third-party payers will pay for drug treatments but severely limit individual and group therapies. The choice available to many doctors and patient-consumers is not whether to have talking or pharmaceutical therapy, but rather which brand of drug should be prescribed.

Thus, by the 1990s enormous changes in the organization of health care, medical knowledge, and marketing had created a different world of medicine. How have these changes affected medicalization?

Adele Clarke and colleagues (2003) argue that medicalization is intensifying and being transformed. They suggest that around 1985, "dramatic changes in both the organization and practices of contemporary biomedicine, implemented largely through the integration of technoscientific innovations" (p. 161), coalesced in that expanded phenomena they call biomedicalization. Clarke and colleagues paint with a broad brush and in my view lose some of the focus on medicalization (see Conrad, 2005). But I agree there have been major changes in medicalization in the past two decades, and it is the purpose of this book to explore some of these shifts in medicalization and assess their consequences.

Many of the key studies of medicalization were completed over a decade or even two decades ago. This book examines some changes in medicalization that have

occurred in the context of such important changes in medicine as the widespread corporatization of health care, the rise of managed care, the increasing importance of the biotechnological industry (especially the pharmaceutical and genomics industries), and the growing influence of consumers and consumer organizations. Some of these changes we see exemplified in expanding medical markets.

ON MEDICAL MARKETS

Sociologists have rarely looked at the growth of health care, much less the expansion of medicalization, in terms of markets. But when medical products, services, or treatments are promoted to consumers to improve their health, appearance, or well-being, we see the development of medical markets (see Conrad and Leiter, 2004). This should not be surprising, given our increasingly corporatized health system and the growing consumer culture for health-related products and services.

The use of advertising, the development of specific medical markets, and the standardization of medical services into product lines have contributed to an increased commodification of medical goods and services. Advertising of health care has become more commonplace (Dyer, 1997), and new medical markets have emerged, particularly for specialty services. Imershein and Estes (1996) argue that medical services are increasingly organized into product lines (with attached payment schemes), consistent with a market-based approach to exchange. Cosmetic surgery is the most commodified of medical specialties; it offers treatments such as liposuction and breast augmentation that are often not covered by insurance (Sullivan, 2001). Cosmetic surgeons advertise to stimulate demand for their services, for which patients pay either out of their own pockets or by borrowing from finance companies that partner with cosmetic surgeons, much as if they were purchasing a car.

In the last decade, a loosened regulatory environment has given pharmaceutical and biotechnology companies more freedom in advertising their wares, both to physicians and consumers. The Food and Drug Administration Modernization Act of 1997 (FDAMA) made several changes that have facilitated medicalization. Most relevant to our analysis, the act loosened the restrictions placed on the kind of information that pharmaceutical companies could share with physicians regarding "off-label" uses of their drugs. Subsequently, the amount of information that must be included in direct-to-consumer (DTC) advertisements has decreased. When the Food and Drug Administration (FDA) approves a drug, it can only be advertised for the specific disease and age group (e.g., adults) for which it has been tested. However, physicians may use any medications for any disorders or patients for whom they deem them appropriate; when it is not an FDA-approved indication, it is called an off-label use. FDAMA al-

lowed pharmaceutical companies and their sales representatives to give physicians information about off-label uses so long as they provided adequate scientific documentation or were engaged in clinical trials for the new uses. Thus, the new regulations allowed the pharmaceutical companies to promote medications for off-label uses.

DTC advertising has increased since the 1980s, but the FDA requirement to list all potential risks and side effects limited such promotion to advertising in popular magazines, and even there with a great deal of small print describing effects. The risk requirement made it virtually impossible to do DTC advertising in broadcast venues. The 1997 regulation eased up on the requirement to include complete risk information. Advertisers were allowed to replace a long written list of risks with some manner in which the consumer could access the information (e.g., a website, a toll-free number, a print magazine ad). This change made DTC advertising on television possible, to the point that by 2004, $4.5 billion was spent per year advertising medications and focusing on the ills they are meant to treat (Conrad and Leiter, 2005; Hensley, 2005).

The constant development of new technologies, treatments, and drugs sparks consumer interest in obtaining access to these new medical goods and services, and advertising can further increase consumer demand. The pharmaceutical industry is becoming more directly involved in medicalization by using DTC advertising to create markets for its products; in doing so, it is medicalizing more aspects of life. The case of Paxil and social anxiety disorder provides a powerful illustration about how marketing directly to consumers has become part of the medicalization process.

The FDA approved Paxil (paroxetine hydrochloride) for the treatment of depression in 1996. Paxil followed Prozac and several other selective serotonin reuptake inhibitors (SSRIs) into an already saturated market for the treatment of depression. The manufacturer of Paxil (now called GlaxoSmithKline) responded to the saturated "depression market" by requesting FDA approval for additional applications of Paxil. The manufacturer chose to specialize instead in the "anxiety market," including panic disorder and obsessive compulsive disorder at first, and then social anxiety disorder (SAD) and generalized anxiety disorder (GAD). Paxil's application to SAD and GAD has contributed to the medicalization of emotions such as worry and shyness. While drug marketing is not the sole factor in the medicalization of shyness (S. Scott, 2006), it is a key example of how pharmaceutical marketing can reframe and medicalize common human characteristics and experiences.

SAD and GAD were fairly obscure diagnoses when they were added to the third edition of the American Psychiatric Association's *Diagnostic and Statistical Manual* (DSM-III) in 1980. According to the DSM-IV, SAD (or "social phobia") is a persistent and extreme "fear of social and performance situations in which embarrassment may occur" (APA, 1994: 411), and GAD involves chronic, excessive anxiety and worry

(lasting at least six months), involving multiple symptoms (pp. 435–36). Both conditions are defined as being associated with significant distress and impairment in functioning. Horwitz (2002) notes how small changes in the wording of criteria for SAD resulted in a tremendous growth in its estimated prevalence (and potential market).

Marketing diseases and then selling drugs to treat those diseases is now common in the "post-Prozac" era. Since the FDA approved the use of Paxil for SAD in 1999 and for GAD in 2001, GlaxoSmithKline has spent millions of dollars on well-choreographed disease awareness campaigns to raise the public visibility of SAD and GAD. The pharmaceutical company's savvy approach to publicizing SAD and GAD, which relied upon a mixture of "expert" and patient voices, simultaneously gave the conditions diagnostic validity and created the perception that they could happen to anyone (Koerner, 2002). Soon after the FDA approved the use of Paxil for SAD, Cohn and Wolfe (a public relations firm that was working for what was then SmithKline) began putting up posters at bus stops with the slogan, "Imagine Being Allergic to People." Later in 1999 a series of ads featured "Paxil's efficacy in helping SAD sufferers brave dinner parties and public speaking" (Koerner, 2002: 61). Barry Brand, Paxil's product director, said, "Every marketer's dream is to find an unidentified or unknown market and develop it. That's what we were able to do with social anxiety disorder" (Vedantam, 2001).

Through media campaigns, GlaxoSmithKline redefined SAD and GAD, paradoxically, as both common (reducing the stigma associated with having a "mental illness") and abnormal (subject to medical intervention, in the form of Paxil). Prevalence estimates of both SAD and GAD range widely. For example, estimates of the prevalence of SAD range from 3 percent to 13 percent of the U.S. population (APA, 1994: 414), and the National Institute of Mental Health estimates that 3.7 percent of the U.S. population has SAD (Vedantam, 2001). Higher prevalence rates are associated with less stringent application of the DSM-specified criteria for these conditions.[2] Horwitz argues that "because community studies consider *all* symptoms, whether internal or not, expectable or not, deviant or not, as signs of disorder, they inevitably overestimate the prevalence of mental disorder in the community" (2002: 105). Likewise, the disease awareness campaign focused on individuals' feelings in social situations such as public speaking that were likely to evoke fear in many people, and it offered consumers symptom-based "self-tests" to assess the likelihood that they had SAD and GAD. This kind of clinical ambiguity is fertile ground for creating an expansive medical market.

Some question the validity of SAD because of its loosely defined boundaries and the aggressive marketing of it as a disease: "The impression often conveyed by commercials for the drugs is clear: almost anyone could benefit from them" (Goode,

2002: 21). Paxil's web page (www.paxil.com) stresses the elimination of symptoms (e.g., improved sleep) and improved performance (e.g., "improved ability to concentrate and make decisions") as benefits. Murray Stein, a psychiatry professor at the University of California at San Diego, has called the use of prescription medicines such as Paxil, which are costly and may have significant side effects, "cosmetic psychopharmacology" (Vedantam, 2001: 1).

Efforts to define SAD and GAD as conditions and market Paxil as a treatment for them have been extremely successful. Paxil is one of the three most widely recognized prescription drugs, after Viagra and Claritin (Marino, 2002), and in 2001 it was ranked ninth in terms of prescriptions (IMS Health, 2001), with U.S. sales of approximately $2.1 billion and global sales of $2.7 billion. Paxil sales declined somewhat after the patent expired in 2003 and cheaper generic versions became available. (It is, of course, not possible to distinguish how many of these prescriptions were for SAD or GAD and how many for other problems including depression, obsessive compulsive disorder, and post-traumatic stress disorder.)

But there has been a recent backlash against the drug. In 2002 a federal judge ordered a temporary halt to Paxil ads over the claim that Paxil is not habit forming (White, 2002). Apparently patients and health care providers have submitted thousands of reports to the FDA describing withdrawal symptoms (Peterson, 2002). Multiple lawsuits have been filed, asserting that physicians and consumers were misled by advertisements regarding the severity of withdrawal (Barry, 2002). In recent years there has been considerable public concern that Paxil may actually increase the risk of suicide among adolescents (Mahler, 2004), and along with several other SSRIs, it has been banned in the United Kingdom for use with children and adolescents. Like similarly marketed consumer goods such as trendy music and clothing, it is possible that Paxil's popularity may be waning. However, along the way, the GlaxoSmithKline campaign for Paxil has increased the medicalization of anxiety by implying directly and indirectly that shyness and worry may be medical problems and that Paxil is the way to treat them.

The case of Paxil demonstrates how pharmaceutical companies are now marketing diseases, not just drugs. This change is in part a result of the 1997 changes in FDA regulations that allowed for "educational" broadcast advertising that focuses on the disease or disorder, rather than on a specific drug, and in part as a result of the pharmaceutical industry's attempt to develop markets for its products. While physicians are still significant for medicalization—as reflected in the typical refrain, "Ask your doctor if [name of drug] is right for you"—we will see in subsequent cases that physicians' role in medicalization is decreasing as that of the pharmaceutical promoters is increasing.