

**A BRIEF HISTORY OF THE ORIGINS
OF
BIOPSYCHIATRIC TREATMENTS**

by

Ty C. Colbert Ph.D.

**An explanation of how and why psychiatry
developed the biological model for
economic and political reasons.**

A Brief History of the Origins of Biopsychiatric Treatments

Biologically orientated psychiatry (biopsychiatry) exists within one huge contradiction. On one hand, psychiatrists supporting this position firmly believe that such disorders as schizophrenia, mania, depression, OCD, ADHD, and more are biological diseases (Comings, 1996; Koplewicz, 1996). In other words, proponents of biopsychiatry believe that a chemical imbalance, defective gene, virus, etc., is responsible for the symptoms used to diagnose someone as mentally ill.

Yet with all the modern technology at their disposal, biopsychiatrists and geneticists freely admit that they do not know what causes mental illness. For example, in a psychopathology textbook used for second-year medical students, the authors stated, “Psychiatry is the *only* medical specialty that ...treats disorders without clearly known causes” (Maxmen & Ward, 1995, p. 57). Peter Breggin (1997), author of *Brain Disabling Treatments in Psychiatry*, declares that “There are no known biochemical imbalances in the brain of typical psychiatric patients” (p. 5). In a consensus conference sponsored by the National Institutes of Health (NIH) in November of 1998, the panel of experts concluded, “There are no data to indicate that ADHD is due to a brain malfunction” (p. 2). In their report, they went on to state that the same could be said for “most psychiatric disorders, including disabling diseases such as schizophrenia” (p. 2). In an article approved for continuing education by the American Psychiatric Association, the author stated, “We don’t know how psychotropic medications really work” (Khan, 1999). Nancy Andreasen (2000), a leading researcher in biopsychiatry, stated, “Schizophrenia differs from the classical dementias in that there is no visible neuropathological marker such as plaques, tangles, or Lewy bodies” (p. 110).

More recently, a PBS television show hosted by Charlie Rose presented a discussion of the causes of mental illness that included top experts such as Jeffrey A. Liberman, M.D., of Columbia University, and Kay Redfield Jamison, Ph.D., a recognized expert on bipolar disorder. Even though all of the participating experts firmly believed in a biological model, they also agreed that no such cause had yet been found (Rose, 2010). Thomas Insel, the director of the NIMH, made the following comment concerning the chemical imbalance model of mental illness. He declared that “Earlier notions of mental disorders as chemical imbalances or

social constructs are beginning to look antiquated” (Insel, 2011). Also during the same time, psychiatrist Ronald Pies stated, “The legend of the ‘chemical imbalance’ should be consigned to the dust-bin of ill-informed and malicious caricatures” (Pies, 2014).

Finally, to obtain an update on the biological model for schizophrenia as an example, check the National Institute of Mental Health website (NIMH, 2015). You will notice that one theory after another is suggested but that no pathophysiological or cause and effect conclusions have been established.

If nothing has been found, why and how has the field of biopsychiatry come to convince itself, as well as the general public, that mental illness is biological in origin? A short historical look at psychiatry will help to answer both the “why” and the “how,” giving additional credence to the fact that a biological basis for mental illness does *not* exist. To accomplish this goal, I will explore the following five important periods in the history of psychiatry from the 17th century on:

Period One: The development of institutions for the care of the insane (1600–1800)

Period Two: The moral management programs (early to middle 1800s)

Period Three: The takeover by psychiatry of the moral management programs (middle 1800s)

Period Four: Kraepelin and the establishment of modern psychiatry (1880–1910)

Period Five: The beginning of biological treatment (1920s to present)

Let’s now start with the first important period.

Period One: The Development of Institutions for the Care of the Insane

Prior to institutional residency, the “insane” were generally cared for by family members or by members of the small rural communities in which they lived. During the 16th and 17th centuries in Europe, economic and cultural changes were brought about not only by civil, dynastic, and class wars, but also by decimating plagues. Because of the volatile and uncertain nature of existence, a premium was placed on peace and order. By the middle of the 17th century, maintaining public order meant locking away all who might disturb it. The insane, together with beggars, the indigent, prostitutes, the unemployed, and the dependent aged, were institutionalized indefinitely.

In 1656, a royal edict created an institution in Paris called the “General Hospital” to deal with people who were perceived as a burden to society. This administrative system was soon responsible for several institutions, including one

facility for insane men called “Bicêtre” and another for insane women called “Salpêtrière.”

The essential purpose of the General Hospital was to remove indigents from the streets and turn them into sober and industrious citizens. Only people able to provide for themselves were returned to society. This meant that the insane, because they were supposedly unteachable, unreachable, and incapable, were never released.

The main societal judgment of the insane was that they were less than human and lacked normal human sensibilities. It was assumed that they were impervious to heat or cold, so clothing was not necessary; and that, like animals, they should be beaten into submission. As a result, the cells of the “mad” were usually dark, cold, and rat-infested. It was not uncommon for both men and women to be left lying naked in their own excrement on beds of rotten straw.

In England, and later the United States, attempts were made to house vagrants and deviants in almshouses, houses of correction, charity hospitals, and/or workhouses. It was during this period, the 18th century that private madhouses first appeared. Private madhouses were developed to separate the able-bodied vagrants from the disabled mad. At that time, the label “mad” was applied to anyone whose behavior was considered incomprehensible and who violated social norms (Boyle, 1990). The original madhouses developed out of the family and parish practice of boarding-out the nonviolent to others.

Originally there were virtually no restrictions on entry into the madhouse trade. Laymen, women, clergymen, and physicians ran these establishments for profit. This free trade in caring for the insane and disabled eventually led to the controversy over who should be given the status of “expert” in this area.

Because there was no formal treatment for the insane, great disparity existed in the conditions within the madhouses. Conditions were much worse for pauper lunatics. Noncompliant inmates were restrained by a number of cruel devices. In 1808, England’s House of Commons passed an act authorizing public financing for the construction of asylums for pauper lunatics. But the few that were built did not provide appreciably better living conditions than those offered by the private madhouses.

Period Two: The Moral Management Programs

In the late 1700s, conditions of the asylums had reached their most deplorable state. Reformers such as Philippe Pinel (1745–1826) in France and William Tuke (1732–1822) in England developed the first therapeutic programs achieving considerable success with this population. Their approach was eventually known as the *moral management model*.

Pinel believed that the mentally ill were simply ordinary human beings who had been deprived of their reason by severe personal problems. He believed that to treat them like animals was not only inhumane but also obstructive to recovery. By unchaining the “mad,” allowing them out of their dungeon-like living quarters and onto the asylum grounds, and by talking with them and listening to their problems, he succeeded far beyond his own hopes (Calhoun, 1977).

Tuke was convinced that a quiet, supportive, religious setting was the most therapeutic environment for the mentally ill. He moved a group of asylum inmates to a peaceful rural estate which he called the York Retreat. Here they talked out their problems, worked, prayed, gardened, rested, and took walks through the countryside. His program was considered the most humane of that period (Calhoun, 1977).

Moral management had its roots in the Renaissance, in the spirit of rebirth and humanitarian care that began in the 14th century, extended to the 17th century, and marked the transition from the medieval to the modern world. Bockoven (1956) stated that “humanitarianism favored the view that lunatics had undergone stresses which robbed them of their reason” (p. 172). At that time, stresses of a psychological nature were referred to as “moral causes,” a term that had nothing to do with morality as presently understood. Bockoven wrote, “The term ‘moral’... carries within it emotional connotations of the words zeal, hope, spirit and confidence. It also has to do with custom, conduct, way of life and inner meaning” (p. 173).

Moral treatment focused on the patient, not just as a physical presence but as a moral being capable of change. To help facilitate this approach, a comfortable environment was provided for patients, and discussions concerning their troubles and emotional concerns were encouraged. In addition, their time was managed, filled with purposeful activities. The following is one of the clearest examples of individual psychotherapy practiced by a moral management advocate, Dr. John Butler, at the Boston State Hospital from 1839 to 1842.

It was his common practice to dig deep into the family and personal history of his patients; to establish, if possible, a connection between their mental disorder and some previous accident or error in their lives. And this he did, not only that he might the more intelligently treat the patient, but that he might be able to give the patient and friends, in case of recovery, such advice and warnings that subsequent attacks might be prevented, or at least guarded against. (Page & Butler, 1901, p. 490)

The success of moral management was based on basic psychological treatment principles. Karon and VandenBos (1981), in their book *Psychotherapy of Schizophrenia: The Treatment of Choice*, outlined the principles involved in the

model: (1) eliminate cruelty, (2) don't do anything that would injure a patient, (3) keep accurate case histories, and (4) do whatever is necessary to understand the patient as an individual human being.

It was actually the application of the third principle that facilitated the fourth. The maintenance of accurate records enabled the therapist to learn what worked best with patients. Read Bockoven's (1956) description of the treatment that was taking place in the early 1800s and contrast it to today's grossly inadequate approach:

... the proper administration of the moral treatment required that the physician learn through inquiry and conversation what occupies the minds of his patients. It required further that he investigate the mental make-up of patient's relatives. The greatest requirement of all was that the physician spare no effort in gaining the confidence and good will of his patients and strive to discover their experiences and supply their needs. The recommendation was made that the physician acquire a large fund of knowledge in order to converse with patients on matters interesting to them and thus gain an understanding of their inner life. The physician was strongly reminded that even the most insane patients are sensitive to manifestations of interest and good will. He was warned however, to limit the number of patients in his care to those he can know personally. (p. 175)

Contemporary records show that during the first half of the 19th century, when moral therapy was the only treatment provided by mental hospitals in Europe and America, at least 70% of those hospitalized for a year or less recovered and were released, and another 5%–8% improved (Calhoun, 1977; Karon & VandenBos, 1981). Bockoven (1956), in his report on the moral management program at Worcester State Hospital in Massachusetts, provided the following success data:

During the entire 20 years there were 2,267 such admissions, of whom 1,618 were discharged as recovered or improved, or 71% (66% recovered, 5% improved). During this same period the total of all admissions (including those whose illness had lasted longer than one year prior to admission) was 4,119, of whom 2,439 or 59% were discharged recovered or improved (45% recovered, 14% improved). (p. 174)

He concluded: "Such statistical data cannot be ignored" (p. 174). By the end of the 19th century, when scientific psychiatry was supposedly making great strides, discharge rates had dropped to 20%–30%. Even though several critics argue with the actual success rate, the effectiveness of the moral management method was indeed substantial.

It must be noted that some moral management programs were not entirely free of the abusive conditions that they were attempting to replace. Even though Pinel is credited with freeing patients from their chains, he continued the use of restraints, as did some moral management programs in the United States. But some English moral management physicians renounced the use of physical restraints as inimical to moral treatment (Gamwell & Tomes, 1995).

Truthfully, the moral management program played a relatively small part in the overall care of the insane. When the moral management program was instituted with caring and dedicated superintendents, the program flourished. Unfortunately, most of the hospitals that began to later incorporate the moral management program did so superficially. Most of the inmates still lived in extremely inhumane conditions.

The moral management model was eventually replaced with a biological model in the latter part of the 19th century. Several factors eventually led to the fall of moral management, including the failure to train a second generation of practitioners, the overcrowding of the moral management facilities, and the fact that moral treatment did not appear as economical as other approaches. It was during this time period that psychiatry began to take control of the asylums.

Period Three: The Takeover by Psychiatry

Psychiatry had its beginnings at the height of the success of the nonmedical moral management program. Recall that in the 18th century, madhouses were built simply to warehouse the insane. There was no restriction on entry into the madhouse trade. Such homes were administered for profit by private individuals, clergymen, and physicians. It was this free trade in lunacy that eventually resulted in a power play regarding who should be in charge of the insane.

As a growing awareness spread regarding inhumane conditions within the madhouses, the English government responsibly instituted a countrywide system of centrally controlled asylums that were regularly and thoroughly inspected by government agents.

At first, only minimal attention was paid to the mad because they were still viewed by most as less than human. But with the advent of the moral management model, a valid therapeutic alternative was available.

Until the middle of the 18th century, medical doctors showed little interest in securing public recognition as “experts” in insanity. But as the number of private madhouses increased significantly, offering a potential new source of status and profit, physicians changed their attitude (Scull, 1979). In the United States, medical men were having a difficult time making a living, and superintendent positions offered young physicians a steady income far greater than they could expect in the public marketplace (Fancher, 1995). In addition, England’s 1774

Vagrancy Act delegated the inspection of the asylums to the Royal College of Physicians and mandated that confinement of the insane could be approved only by licensed medical doctors. The result, according to William Bynum (1964), a historian specializing in this era, was a growing public recognition of medical jurisdiction over insanity. It was at this time that physicians began to describe insanity as “a medical disease.”

Initially, the moral managers refuted the medical profession’s claim that lunacy was a medical disease. According to Boyle (1990), moral management explicitly denied medicine’s effectiveness regarding the mentally ill and attempted to remove medical powers of inspection granted under the 1774 Act. A struggle ensued as physicians feared that the reformers would put newly built institutions into the hands of lay people, thereby reducing doctors to a subordinate role. Bynum (1964) stated, “Their income, prestige and medical theories were all threatened” (p. 325).

In fact, physicians knew they had no convincing evidence that insanity was a disease or that it could be cured by medical means. Cooter (1981), another historian, wrote, “The moral therapy threatened the status and very existence of physicians within asylums: if cures could be effected by nonmedical means, then the administrators of physic [mind] were reduced to mere custodians of the insane” (p. 76).

Since the government’s support for the construction of additional asylums was based on the effectiveness of moral management, not on medical intervention, physicians struggled hard to gain control. Porter (1998) stated their main concern: “How were doctors to demonstrate that madness was a medical condition for which they possessed special skills?” (p. 498). Scull (1979), a historian on the lunacy trade, declared that physicians eventually got a foot in the door by suggesting that a combination of medical treatment and moral management would work best.

By the middle of the 19th century, the medical profession had assumed control of most public asylums in England and the United States. This was further accomplished by assigning physicians oriented to medical treatment to vacant superintendent posts instead of those skilled in moral management techniques.

Concurrently, physicians were constructing their own theories of insanity. They were able to generate social acceptability of those theories through purported support of the moral managers and their methods. By forming professional organizations, physicians developed the political power and influence to argue that they were best suited to ensure that asylum superintendents were conscientious, reliable, and properly motivated. Since each asylum was required to employ a physician to address bodily ailments, they argued, why not also use the same person as the superintendent?

Even though physicians now administered most of the asylums, these doctors were uneasily aware that the existence of the asylums had originally been justified by successful nonmedical solutions to insanity. The medical profession therefore sought a number of ways to cement and enhance its status by justifying medical solutions.

One of the first steps, according to Zilboorg (1941), was to form professional organizations that published specialized literature not easily comprehensible to the lay public. In 1841, the Association of Medical Officers of Asylums and Hospitals for the Insane was formed in Britain. Its journal was originally called *The Asylum Journal*, but the name was eventually changed to the more professional-sounding *The Asylum Journal of Mental Science*. Over time, fewer and fewer articles on moral management appeared in the professional literature, while those on pathology and medical treatment approaches increased. In 1844, the newly formed Association for Medical Superintendents of American Institutions for the Insane (AMSAAI) published the *American Journal of Insanity*. According to Fancher (1995), “The AMSAAI undertook a vigorous, effective—and, we may fairly say, fraudulent—campaign to promote medical control over asylums and to ensure that their own views of care would be promulgated among the public and followed in other asylums” (p. 59). He claimed that AMSAAI superintendents published annual reports replete with “consciously manipulated statistics” (p. 60), boasting grossly inflated cure rates that were then distributed to libraries, policy makers, and journalists.

During the second half of the 19th century, doctors increasingly acted as if inmates were biologically sick. Microscopes became a standard part of asylum equipment. Drugs were increasingly used to sedate the inmates; and post-mortem studies were regularly performed in an effort to locate brain lesions. None were ever found.

“Mad” doctors had to convince the public and the government that mad behavior was a medical matter, so many medical interventions were duplicated in the asylums at the expense, of course, of nonmedical moral management techniques. Together with thermometers and stethoscopes, cold baths and showers, isolation, electric shocks, rotating chairs, and purging procedures soon replaced the highly successful treatments instituted by the moral managers. Porter (1998) wrote that

... every superintendent had his favorite cocktail of cures, blending the physical and the moral, while in reality most patients spent their time in idleness, inside or outside their cells, or were left to the dubious ministrations of untrained and often thuggish attendants. (p. 500)

It is important to understand that psychiatry, at this time, was able to establish itself as a medical profession—not because it identified any true diseases—but because it *medicalized* a highly successful nonmedical program. After the takeover by the medical profession, overcrowding became the norm, and asylum living conditions gradually deteriorated once again to pre-moral management levels. Toward the end of this period, organized psychiatry began work to categorize the behaviors associated with madness into “disease” syndromes.

Period Four: Kraepelin and the Establishment of Modern Psychiatry

The modern era of psychiatry began in 1883 with the publication of *Textbook on Psychiatry* by the German psychiatrist Emil Kraepelin (1856–1926). With the publication of his textbook, Kraepelin became the designated “father of modern psychiatry.” Since psychiatry today is said to be in the Neo-Kraepelin era, let’s now examine Kraepelin’s notions about mental illness.

During the last half of the 19th century, medicine in general was enjoying tremendous success. For example, the germ theory of disease led to discoveries of many pathogens and to the eventual control of many diseases. Besides discovering the causes and treatments for several biological diseases, new branches of medicine such as pathology, physiology, and bacteriology were established. But psychiatry was still struggling to prove itself as a legitimate medical specialty.

Kraepelin, as did most of the members of the psychiatric profession at that time, endorsed the central role of brain pathology in mental disturbances (Bockoven, 1956; Calhoun, 1977), even though no pathophysiological evidence was available. Since most medical progress during this time started with an identification of the symptoms of a particular biological disease, it was only logical that anyone attempting to discover the biological origins of mental illness would follow the same pattern.

Kraepelin, who was chairman of the Department of Psychiatry in Munich in the late 19th century, was hoping to identify the first psychiatric “diseases.” Most of his staff were not psychiatrists but neurologists, whose expertise was in the function and structure of the brain. Alois Alzheimer, who in 1907 described the biological brain disorder now known as “Alzheimer’s disease,” was one of the researchers in Kraepelin’s department.

Many neurological advances were taking place at this time. Nissl developed a staining technique that permitted brain cells to be seen more clearly under the microscope. Progress was also being made in understanding certain neurological diseases. Krafft-Ebing determined that general paresis, a mysterious mental syndrome involving the gradual and irreversible breakdown of physical and mental functioning, was really an advanced case of syphilis. This condition was

the result of syphilitic spirochetes having passed through the bloodstream and into the central nervous system and the brain. As many as 30% of patients in the mental hospitals were suffering from this condition. This development gave Kraepelin and other researchers even more fuel for their efforts to prove that mental illness had a physiological base (Calhoun, 1977).

One factor made the process of categorizing symptoms difficult: The behavior of the mad varied so much that it was very difficult to organize the symptoms into a definable syndrome. For example, one person remained frozen in a catatonic state for hours, another constantly hallucinated, another used her feces to paint her “masterpiece” on a hospital wall, another paced the floor muttering to himself, and someone else screamed for no apparent reason.

Standard medical procedure stipulated that if a defect of some sort resulted in a particular kind of madness, then the first step was to correctly identify the symptoms of the madness. These symptoms then would represent a *syndrome*. A *syndrome* is “a group of symptoms and signs of disordered function related to one another by means of some anatomical, physiological, or biochemical peculiarity” (Thomas, 1997, p. 1885). A syndrome provides a frame of reference for the investigation of an assumed biological cause.

Following medical procedure, Kraepelin classified major mental disorders by describing their symptoms. According to Andreasen (1984), “Kraepelin laid the foundations of modern biological psychiatry by identifying some of these specific diseases” (p. 15).

How did Kraepelin actually identify these first “biological” psychiatric disorders? As with other medical investigators of his time, he observed the patients carefully over time, noting common symptoms and patterns. One of the patterns he noticed was that mania or euphoria was commonly followed by depression. He labeled this condition as “manic-depressive insanity.” He also noticed another syndrome consisting of teenage onset, hallucinations, delusions, general mental confusion, and deterioration over time, resulting in complete incapacity. He labeled this group of symptoms as “dementia praecox” (deterioration with early onset), which later became known as “schizophrenia.”

Once these syndromes were identified and published in Kraepelin’s textbook, psychiatry simply assumed that they were brain diseases. Yet no brain pathology associated with any of these syndromes had been discovered. These syndromes were “identified” and “classified” by observation alone, with no substantiating biological testing. No tissue samples, blood samples, or urine samples were ever taken to pathologically authenticate the theory that they were dealing with a “biological disease.” Today, the claim that schizophrenia, manic-depression, and other “mental illnesses” are diseases is purely an assumption based on the myth created by Kraepelin.

Anyone with organizational and observational skills could also have categorized the behaviors as Kraepelin did. This task did not require a medical degree. But because Kraepelin had a medical degree and he assumed a biological cause, his assumptions and conclusions were “medicalized.” However, not all psychiatrists agreed with Kraepelin’s identifications of the categories of mental illness. Eugen Bleuler, a highly influential Swiss psychiatrist, believed that the term *dementia praecox* was grossly inaccurate. Bleuler stated:

There is hardly a single psychiatrist who has not heard the argument that the whole concept of dementia praecox must be false because there are many catatonics and other types who, symptomatologically, should be included in Kraepelin’s dementia praecox, and who do not go on to complete deterioration. Similarly, the entire question seems to be disposed of with the demonstration that in a particular case deterioration has not set in precociously but only in later life. (Bleuler, 1911/1950, p. 8)

To clear up this confusion, Bleuler decided to give the syndrome a new name.

Thus we are left with no alternative but to give the disease a new name, less apt to be misunderstood. I am well aware of the disadvantages of the proposed name but I know of no better one.... I call the dementia praecox “schizophrenia” because the “splitting” of the different psychic functions is one of its most important characteristics. For the sake of convenience, I use the word in the singular although it is apparent that the group includes several diseases. (p. 8)

To summarize, during the last half of the 19th century and early part of the 20th century, medicine was making considerable progress in identifying and treating certain diseases. Neurologists were specifying diseases such as senile psychosis, toxic psychoses, and mental retardation. Each of these mental syndromes could be tied to a specific brain pathology. Psychiatry, however, was left sitting empty-handed. Ignoring the progress that the moral managers had made in the treatment of the insane, and insisting that there must be a biological basis for insanity, they looked for some common ground among the almost unlimited number of behaviors associated with those seen as mad.

Kraepelin provided the necessary credibility that psychiatry so badly needed via the grouping and labeling of certain behaviors. Psychiatry, it was claimed, had finally established madness as a medical disease.

Period Five: The Beginning of Biological Treatment

The rest of medicine was marching forward with the identification of *true* biological diseases such as embolism, jaundice, and degenerative lesions including necrosis, gangrene, uremia, and diabetes. However, metaphorically speaking, psychiatry was still in the Dark Ages. Patients continued to be restrained with chains, handcuffs, straightjackets, camisoles, and belts. The need to establish legitimate treatments of some kind became increasingly imperative.

Many psychiatrists and neurologists at this time were establishing private practices to treat the “nervous disorders” of the upper-class and growing middle-class population. These “urban nerve specialists” had more status and better remuneration than the asylum doctors who treated the poor and the more severe cases. Psychiatry remained affiliated with the asylums, however, and understandably a sense of desperation was felt in the professional psychiatric community. Edward Shorter (1998), a historian, writes:

The asylums were filling, and psychiatry stood helpless in the face of disorders of the brain and mind. In these years, the profession reached the nadir of its descent from the therapeutic promises that had beckoned so brightly a century before. In the 1920s and 1930s, the center of gravity of psychiatry lay in the mental hospitals. In these snake pits, bleakness prevailed that would have turned away any but the most resolute young medical graduate. (p. 190)

These unpardonable conditions were pushing professionals such as John Lord (1929), a psychiatrist at a London mental hospital, to ask, “Has scientific psychiatry failed?” (p. 309). In his analysis of this period, Shorter (1998) commented that “asylum psychiatry counted scarcely as a branch of medicine at all” (p. 192).

To save its reputation, psychiatry began to experiment with somatic-based treatments. From 1900 to 1920, hydrotherapy became the first major biological treatment modality. This approach was followed by malaria fever therapy (injecting malarial organisms into the body to produce hyperthermia) in the 1920s, and insulin shock, electroshock, and lobotomy in the 1930s.

While these treatments were in vogue, they were thought to be scientifically justified. Psychiatrists meting out these abusive and damaging treatments believed they were effective remedies for actual diseases.

Insulin Shock

In 1933, Manfred Sakel introduced insulin shock as a treatment for schizophrenia. By injecting patients with massive doses of insulin, he induced a state of hypoglycemic shock. Sakel believed that neurons functioned much like engines and that too much fuel (glucose) produced the symptoms associated with brain damage. In Sakel's (1938) words:

With chronic schizophrenics, as with confirmed criminals, we can't hope for reform. Here the faulty pattern of functioning is irrevocably entrenched. Hence we must use more drastic measures to silence the dysfunctioning cells and so liberate the activity of the normal cells. This time we must kill the too vocal dysfunctioning cells. But can we do this without killing normal cells also? Can we select the cells we wish to destroy? I think we can (p. 26).

Sakel failed to report that an overdose of insulin produces profound negative effects on both the brain and the autonomic nervous system. Patients were brought to a comatose state for an hour during treatment session—a series usually entailing 40–60 sessions. Today we know that no such “energy” correction took place, but inducing a sustained state of hypoglycemia was a horrifying experience—a fact to which many insulin-dependent diabetics will attest.

Lobotomy

Lobotomy is another extremely cruel, disabling method that biopsychiatry has justified as a medical treatment. Walter Freeman (as cited in Braslow, 1998) was one of the leaders in the development of the lobotomy procedure in the United States. Here is Freeman's own description of the technique:

One takes a thing that looks just like an ice pick and positions it right above the eye. Using a hammer, the pick is pounded into the skull. Then ping!!! the bone breaks enough to let the ice pick slide easily into the patient's brain. You then swing the pick back and forth, cutting the nerves that connect to the front of the brain. That's it. (p. 11)

The faulty scientific rationale for this most obvious of cruel brain-disabling methods arose from research conducted with animals. In a paper delivered to the Second International Neurological Congress in 1935, John Fulton (chairman of the Yale University Physiology Department) and his younger colleague, Carlisle Jacobson, explained that they were able to drastically alter the behavior of chimpanzees by destroying the frontal lobes of their brains. Based on these

findings, in 1935 Portuguese neurologist Egas Moniz introduced lobotomy as a treatment for mental illness (Pressman, 1988).

Moniz proposed that schizophrenia resulted from a fixed but imperfect set of neuronal pathways within the brain's white matter. By severing these imperfect "fixed" pathways, the perfect, normal pathways were free to function (Valenstein, 1986).

It is critical that we now look at just how and why these early methods were scientifically structured, if we are to also understand the groundless nature of the chemical imbalance model. A disease model was built around each of these treatments. Yet today we are at a loss to understand the conclusions that were drawn. If there is no validity to the chemical imbalance model, then it too, becomes just another method of control or restraint.

Hydrotherapy

Hydrotherapy was the first major somatic treatment modality developed at the turn of the 20th century. The hydrotherapy technique not only is based on the belief in the healing power of water but is also rooted in psychiatry's frustrations. The "water as healer" belief dates back hundreds of years. Porter (1998) stated that hydrotherapy gained a strong following in the later half of the 19th century "amongst those with faith in the healing powers of nature, cold water and physiological puritanism; no pain, no gain" (p. 393).

Hydrotherapy was administered in several ways. The "wet sheet pack" method consisted of wrapping the patient for several hours in a sheet. The sheet had been dipped in water ranging in temperature from about 40 degrees to 100 degrees. Agitated and uncooperative patients were wrapped in cold sheets, while fragile patients were wrapped in warmer sheets. The more resistive patients were wrapped with an additional sheet and tied to their beds. Often a rubber sheet was wrapped around the wet sheets, thereby further restricting the patient's ability to move, maintaining the water temperature of the sheet and keeping the sheet from drying out.

Another form of hydrotherapy was called the "continuous bath" method. It utilized a tub with an inlet for hot or cold water and an outlet to drain the water. Patients were tied into a hammock and placed in the tub with the water continuously circulating.

Patients were left in the wet sheet packs or tubs, often for hours, until their out-of-control behavior subsided. Because there was a "positive" change in behavior—the behavior became what the doctor wanted it to be—hydrotherapy was viewed as a legitimate treatment for mental illness. The inmate's compliance was considered a sign of improvement.

Joel Braslow (1998), in his book *Mental Ills and Bodily Cures*, studied the records in California mental hospitals in an attempt to understand the way in

which hydrotherapy was legitimized. He declared that it was the first so-called treatment modality to replace the use of restraints. In other words, people diagnosed as mentally ill and admitted to the asylums as a result of their out-of-control, unusual, or unacceptable behaviors were restrained and/or physically abused because those in charge saw no other way to quiet them. Although hydrotherapy was viewed as a viable calming agent, it was obviously just a new restraining technique.

As physicians achieved patient control using hydrotherapy in lieu of the older forms of restraint, they began to refer to hydrotherapy as a “medical treatment.” In studying hydrotherapy and other abusive treatment modalities such as shock therapy and lobotomy, Braslow drew an important conclusion: Once physicians believed that a control method was a “medical” treatment (and not just another form of restraint), they then, after the fact, developed complex physiological explanations to justify its use. For example, once hydrotherapy was seen as a medical treatment, physicians created explanations for its therapeutic effects. Some of the explanations offered were (a) it relieved cerebral congestion, (b) it eliminated toxic impurities, and (c) it facilitated the excretory function of the skin and kidneys (Braslow, 1998).

Once hydrotherapy was considered a medical treatment based on a set of disease theories with remedial explanations, a body of research then developed around the explanation. Measurements of blood pressure, pulse rate, respiratory rate, and differential blood count were used to substantiate this treatment as a scientifically based medical procedure (Strecker, 1917).

Let us make sure this progression is correctly understood. First, a new treatment modality is developed that is nothing more than a new form of control. Next, depending on the nature of the treatment, disease explanations are constructed. Then, through the use of measuring instruments, changes are noted which correspond to changes in behavior. Finally, the noted physiological changes are used in research to scientifically validate the treatment and the theories, even though *no defect or pathophysiology has been found*.

Assume now that a mental patient in an asylum is screaming at the top of his lungs: “The world is trying to hurt me, and I want out of here!” His behavior is likely to be viewed as paranoid, in which case he may be diagnosed as a “paranoid schizophrenic” and forced into a straightjacket or four-point restraints (both arms and legs secured) until he calms down. One might logically assume here that his behavior is, in fact, not paranoid but appropriate to the situation due to both the kind of treatment he is receiving (forced into a straightjacket) and the abuse that may have taken place at the hands of the attendants.

Now, assume that the doctors have decided that during his next paranoid episode they will use the new treatment of hydrotherapy in an attempt to rid the person of his “toxic impurities.” In the midst of his next episode, his blood

pressure, pulse, and respiratory rate are taken. Of course they are all high. As he is wrapped with sheets or placed in a tub, he may continue to fight for a while, but finally he either will give in or perhaps will relax as a result of his cathartic activity (the yelling and struggling). At the end of the hydrotherapy treatment, the doctors once again measure his vital signs and discover that all measurements are approximately normal. The doctors now conclude that the hydrotherapy treatment relieved the cerebral congestion, eliminated the toxic impurities, or facilitated the excretory function of his skin, whichever theory the doctor happens to hold. In this way, the doctor has “scientific data” to show that not only does such a disease exist but also that it can be successfully treated.

Remarking about the process, Braslow (1998) stated that:

... in order for doctors to believe in hydrotherapy’s efficacy, they had to see incorrigible behavior and disease as equivalent categories. On an everyday level, hydrotherapy allowed physicians to collapse disease and behavior into a single category so that methods that controlled behavior were considered therapeutic. (p. 43)

Braslow makes an extremely important point. In order for the medical model to exist, incorrigible or non-acceptable behavior must be seen as a “disease.” *The two must first be seen as synonymous.* Then, any process that tends to restrain or have an effect on behavior can be seen as a “medical” treatment. It is not relevant to this “incorrigible behavior is disease” view that no actual pathology is found. From Kraepelin’s work to the present, the validation of the medical model has been based on the view that disruptive or socially unacceptable behaviors are pathological. Braslow (1998) confirmed that “when a particular patient’s actions taxed the already meager resources of his or her ward, he or she often became the object of therapeutic intervention” (p. 44).

To justify their methods as valuable medical treatments, psychiatrists had to blind themselves to what was actually taking place. Braslow stated that “this difference [restraints versus treatment] defined their identity as physicians, an identity they believed to be grounded in efficacious and scientific practices” (p. 46). Braslow continued, “Hydrotherapy allowed physicians to see disruptive behaviors as the essence of disease and the body as the primary object of their therapeutic ministrations” (p. 52).

Electroshock Treatment

When Braslow investigated the use of electroshock treatment, the same pattern emerged. Below is an actual medical record that Braslow used to introduce one of his chapters:

July 9, 1943. Patient has had 12 electric shocks, resulting in 8 grand mal and 4 petit mal attacks. She has shown some improvement such as she is more concerned about her appearance than she was before. She is not as impudent and sarcastic as she has been on the ward. She claims that the reason she has not gotten along at home is because her husband is rather neglectful of her by leaving on weekends, she having to take care of the children and the house. At present she says she feels well but there are two things that are worrying her and she is afraid of. One is the electric shock treatments, she is morbidly in fear of them and worries a day or two before she gets them. The other is the operation that she is going to have performed for sterilization. If those two things could be eliminated she believes that she may make good if given a chance. For those reasons the examiner is discontinuing the electric shock treatments for the present to see what improvement the patient will make now. (p. 1)

Obviously, the whole justification for electroshocking this woman was to produce a desired behavioral change (desired by the doctor and the husband). The change in behavior did not result from some medical or biological correction, but because of her fear of a hellish procedure that caused horrifying seizures and the anticipated frightening sterilization procedure which would rob her of her femininity.

The Impact of Biological Treatments

As difficult as it may be to fathom, this is roughly how every major biological treatment has been justified and made “scientific,” including the present use of psychotropic medications. Whether we consider the odd behaviors that Kraepelin observed, the “sarcastic” behavior of this woman, the voices that some patients hear, or the behavior of a child diagnosed as having attention deficit hyperactivity disorder (ADHD), a disease model is built around the behavior if a somatic procedure can be developed that shows a reduction in symptoms.

Again, psychiatrists needed to medicalize these methods not only to free themselves from a pure maintenance position in the asylums but also to give themselves credibility and financial stability. Shorter (1998) wrote that “psychiatry had been a poor Cinderella, eking out a paltry existence in the asylum. Malaria therapy, deep sleep, and the shock treatments represented the first independent therapies over which psychiatrists themselves disposed” (p. 224).

This same realization motivated Louis Casamajor (1943), a New York psychiatrist, to state: “One may question whether shock treatments do any good to the patients but there can be no doubt that they have done an enormous amount of good to psychiatry” (p. 607). What is becoming obvious from a critical review of

the history of psychiatry is that the disease model and its corresponding somatic treatments have saved psychiatry from extinction time and time again. In summarizing his investigation, Braslow (1998) stated:

Whether cutting the vas deferens, wrapping a patient in a wet sheet, severing the frontal lobe tracts, or administering antipsychotic drugs, physicians performed these acts because of a faith in the ability of these remedies to “work.” For a therapeutic practice to “work,” doctors constructed a way of looking at disease that reaffirmed the existence of the disease and reinforced its treatable nature. (p. 173)

As difficult as it may have been to integrate this reversed view, the disease model for mental illness (including, of course, the present chemical imbalance model) obviously did not originate from any pathophysiological evidence. Each disease model for mental illness originated only after a new method of *restraint* for undesirable behavior had been developed.

Summary of the History of Biological Psychiatry

Below is a short summary of the major points surrounding biopsychiatry’s attempt to validate a biological view of mental illness.

- Early 1800s: The moral management model was quite successful using nonmedical treatment modalities.
- Mid 1800s: Physicians became interested in the madhouse trade as a source of profit and status.
- Through political action, physicians gradually gained control over the madhouses in England.
- Knowing that their methods were not nearly as effective as those of the moral managers and fearing that they would be viewed as “mere custodians of the insane,” psychiatrists had to establish madness as a medical condition for which they possessed special skills.
- Psychiatrists then began to construct their own biological theories of insanity.
- To further increase their status, they started professional organizations and journals. Many applicable innovations in other branches of medicine were duplicated in the asylums, replacing the moral management techniques with a disease view of mental illness.
- 1883: Kraepelin identified several so-called disease syndromes of mental illness by grouping together and labeling various behaviors and/or syndromes.

- As a result, psychiatry created its own branch of medicine, which had not previously existed.
- Early 1900s: Psychiatry still had little to show for its efforts, even though there were major advances in all other branches of medicine.
- 1920 to the present: Any somatic intervention that had any sort of impact on the symptoms of mental illness was called a “treatment.”
- Once an intervention was labeled a treatment, a theory (with corresponding research) was then constructed to give credence to that “treatment” modality.
- With the passage of time, however, each somatic intervention, including the use of psychotropic medications, came to be seen as nothing more than another form of restraint and control.

Some Concluding Remarks

In conclusion, if we care to be honest, biopsychiatry has been able to exist over time primarily as a fallacious medical profession with the main goal of the restraint and control of others. These may be strong words, especially for those psychiatrists who are sincerely trying to help people. Nevertheless, this history lesson allows us to understand the truth with clearer vision.

Does that make the use of any and all psychiatric drugs wrong? No. But it does make it wrong to use drugs for the use of profit and control without properly informing those involved of the truth. If drugs are to help, they help by disabling the brain so less emotional pain is felt. They work much the same as alcohol, marijuana, and illegal mind-altering drugs (Hyman, 1996).

But, just as the other past methods were eventually understood as nothing more than the attempt to control a person’s feelings, emotions, and behavior, this is exactly how we must view the use of psychiatric drugs. Consequently, in the field of biopsychiatry, history does unfortunately repeat itself.

References

- American Psychiatric Association. (1980). *The diagnostic and statistical manual of mental disorders* (3rd ed.). Arlington, VA: Author.
- American Psychiatric Association. (1994). *The diagnostic and statistical manual of mental disorders* (4th ed.). Arlington, VA: Author.
- Andreasen, N. (1984). *The broken brain*. New York: Harper & Row.
- Andreasen, N. (2000). Schizophrenia: the fundamental questions. *Brain Research Reviews*, 31, 106–112.
- Bleuler, E. (1911/1950). *Dementia praecox or the group of schizophrenias*. New York: International Universities.

- Bockoven, J. S. (1956). Moral treatment in American psychiatry. *The Journal of Nervous and Mental Disease*, 124 (2 & 3), 167–194 & 292–321.
- Boyle, M. (1990). *Schizophrenia—a scientific delusion?* New York: Routledge.
- Braslow, J. (1998). *Mental ills and bodily cures*. Los Angeles: University of California.
- Breggin, P. R. (1997). *Brain disabling treatments in psychiatry*. New York: Springer.
- Bynum, W. F. (1964). Rationales for therapy in British psychiatry: 1780–1835. *Medical History*, 18, 317–35.
- Calhoun, J. F. (1977). *Abnormal psychology: Current perspectives*. New York: Random House.
- Casamajor, L. (1943). Notes for an intimate history of neurology and psychiatry in America. *Journal of Nervous Mental Disorders*, 98, 600–608. [check #141 of Chap 6 in Shorter or his p.224]
- Colbert, T. (2001). *Rape of the soul*. Tustin, CA: Kevco.
- Comings, D. E. (1996). *Search for the tourette syndrome and human behavior genes*. Duarte, CA: Hope Press.
- Cooter, R. (1981). Phrenology and British alienists, ca. 1825–1845. In A. Scull (Ed.), *Madhouses, mad-doctors, and madmen: The social history of psychiatry in the Victorian era* (pp. 58–104). Philadelphia: University of Pennsylvania Press.
- Fancher, R. T. (1995). *Cultures of healing*. New York: Freeman.
- Gamwell, L., & Tomes, N. (1995). *Madness in America*. New York: Cornell University.
- S. E. Hyman and E. J. Nestler, “Initiation and Adaptation: A Paradigm for Understanding Psychotropic Drug Action,” *American Journal of Psychiatry*, Vol. 153, No. 2 (February 1996), pp. 151–162
- Insel, T. “Director’s Blog: Mental Illness Defined as Disruption in Neural Circuits” (blog, August 12, 2011), retrieved from www.nimh.nih.gov/about/director/2011/mental-illness-defined-as-disruption-in-neural-circuits.shtml.
- Karon, B. P., & Vandenbos, G. R. (1981). *Psychotherapy of schizophrenia: The treatment of choice*. New York: Jason Aronson.
- Kellogg, T. H. (1887). Hydrotherapy in mental diseases. *New York Medical Journal*, 46, 427–431.
- Khan, A. U. (1999, October). How do psychotropic medications really work? *Psychiatric Times*, 16(10), 11.
- Koplewicz, H. S. (1996). *It’s nobody’s fault: New hope and help for difficult children and their parents*. New York: Times.
- Kraepelin, E. (1909–1913). *Psychiatrie*, 8th ed. Leipzig: J. A. Barth.
- Lord, J. R. (1929). The evolution of the “nerve” hospital as a factor in the progress of psychiatry. *Journal of Mental Science*, 75, 309–315.
- Maxmen, J. S., & Ward, N. G. (1995). *Essential psychopathology and its treatment*. New York: W. W. Norton.

- Mosher, L. R. (1998, December 4). Resignation letter to the American Psychiatric Association.
- National Institute of Mental Health. *What causes schizophrenia?* Retrieved January, 25, 2015, from <http://www.nimh.nih.gov/health/publications/schizophrenia/what-causes-schizophrenia.shtml>
- National Institutes of Health. (1998, November 18). National Institutes of Health Consensus Development Conference statement: Diagnosis and treatment of attention deficit hyperactivity disorder (ADHD). Washington, DC: Author.
- Page, C. W., & Butler, J. S. (1901). The man and his hospital methods. *American Journal of Insanity*, 57, 477–499.
- R. W. Pies, blog (July 27, 2014), retrieved from www.psychiatrytimes.com/blogs/couch-crisis/psychiatry-new-brain-mind-and-legend-chemical-imbalance.
- Porter, R. (1998). *The greatest benefit to mankind*. New York: Norton.
- Pressman, J. (1988). Sufficient promise: John F. Fulton and the origins of psychosurgery. *Bulletin of the History of Medicine*, 62, 1–22.
- C. Rose, The Brain Series, PBS TV (June 22, 2010), retrieved March 3, 2012, from www.charlierose.com/view/collection/10702.
- Sakel, M. (1938). The nature and origin of the hypoglycemic treatment of psychoses. *American Journal of Psychiatry*, 94 (Supplement), 24–40.
- Scull, A. T. (1979). *Museums of madness: The social organization of insanity in nineteenth century England*. London: Allen Lane.
- Shorter, E. (1998). *A history of psychiatry*. New York: Wiley.
- Strecker, E. A. (1917). The continuous bath in mental disease. *Journal of the American Medical Association*, 68, 1797.
- Thomas, C. L. (1997). *Taber's cyclopedic medical dictionary*. Philadelphia: Davis.
- Valenstein, E. (1986). *Great and desperate cures: The rise and decline of psychosurgery and other radical treatments for mental illness*. New York: Basic Books.
- Wirshing, W. (1999, April, 7). The neurophysiology of schizophrenia: Focus on the action of the “novel” antipsychotics. Lecture presented at *The Schizophrenic Patient: Profiles, Diagnosis and Treatment* [seminar] presented at Loma Linda University, Loma Linda CA.
- Wu, J. (1996, December 18). Talk given to Depression Mania Support Group of Orange County, CA.
- Zilboorg, G. (1941). *A history of medical psychology*. New York: Norton.