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# THE DISCOVERY OF HYPERKINESIS: NOTES ON THE MEDICALIZATION OF DEVIANT BEHAVIOR\*

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The increasing medicalization of deviant behavior and social control is seen in the way hyperkinesis, a medical label for certain deviant behaviors in children, has become prevalent in recent years. First, this paper presents a brief history of the diagnosis and treatment of hyperkinesis; social and clinical factors involved with this medicalization are discussed. The social control mechanism (stimulant drug treatment) was available twenty years before the medical label was described. We speculate on whether available social control leads to new medical labels. The process of medicalization, often seen as humanitarian reform, has another side. The second section of the paper will consider: (1) the problem of expert control; (2) medical social control; (3) the individualization of social problems; and (4) the depoliticization of deviant behavior. Ramifications for the study of the sociology of deviance are presented.

## INTRODUCTION

The increasing medicalization of deviant behavior and the medical institution's role as an agent of social control has gained considerable notice (Freidson, 1970; Pitts, 1971; Kitterie, 1971; Zola, 1972). By medicalization we mean defining behavior as a medical problem or illness and mandating or licensing the medical profession to provide some type of treatment for it. Examples include alcoholism, drug addiction and treating violence as a genetic or brain disorder. This redefinition is not a new function of the medical institution: psychiatry and public health have always been concerned with social behavior and have traditionally functioned as agents of social control (Foucault, 1965; Szasz, 1970; Rosen, 1972). Increasingly sophisticated medical technology has extended the potential of this type of social control, especially in

terms of psychotechnology (Chorover, 1973). This approach includes a variety of medical and quasi-medical treatments or procedures: psychosurgery, psychotropic medications, genetic engineering, antilife, and methadone.

This paper describes how certain forms of behavior in children have become defined as a medical problem and how medicine has become a major agent for their social control since the discovery of hyperkinesis. By discovery we mean both origin of the diagnosis and treatment for this disorder; and discovery of children who exhibit this behavior. The first section analyzes the discovery of hyperkinesis and why it suddenly became popular in the 1960's. The second section will discuss the medicalization of deviant behavior and its ramifications.

## THE MEDICAL DIAGNOSIS OF HYPERKINESIS

Hyperkinesis is a relatively recent phenomenon as a medical diagnostic category. Only in the past two decades has it been available as a recognized diagnostic category and only in the last decade has it received widespread notice and medical popularity. However, the roots of the diagnosis and

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treatment of this clinical entity are found earlier.

Hyperkinesis is also known as Minimal Brain Dysfunction, Hyperactive Syndrome, Hyperkinetic Disorder of Childhood, and by several other diagnostic categories. Although the symptoms and the presumed etiology vary, in general the behaviors are quite similar and greatly overlap.<sup>1</sup> Typical symptom patterns for diagnosing the disorder include: extreme excess of motor activity (hyperactivity); very short attention span (the child flits from activity to activity); restlessness; fidgetiness; often wildly oscillating mood swings (he's fine one day, a terror the next); clumsiness; aggressive-like behavior; impulsivity; in school he cannot sit still, cannot comply with rules, has low frustration level; frequently there may be sleeping problems and acquisition of speech may be delayed (Stewart, 1966; 1970; Wender, 1971). Most of the symptoms for the disorder are deviant behaviors.<sup>2</sup> It is six times as prevalent among boys as among girls. We use the term hyperkinesis to represent all the diagnostic categories of this disorder.

#### THE DISCOVERY OF HYPERKINESIS

It is useful to divide the analysis into what might be considered *clinical factors* directly related to the diagnosis and treatment of hyperkinesis and *social factors* that set the context for

the emergence of the new diagnostic category.

#### *Clinical Factors*

Bradley (1937) observed that amphetamine drugs had a spectacular effect in altering the behavior of school children who exhibited behavior disorders or learning disabilities. Fifteen of the thirty children he treated actually became more subdued in their behavior. Bradley termed the effect of this medication paradoxical, since he expected that amphetamines would stimulate children as they stimulated adults. After the medication was discontinued the children's behavior returned to premedication level.

A scattering of reports in the medical literature on the utility of stimulant medications for "childhood behavior disorders" appeared in the next two decades. The next significant contribution was the work of Strauss and his associates (Strauss and Lehtinen, 1947) who found certain behavior (including hyperkinesis behaviors) in postencephalic children suffering from what they called minimal brain injury (damage). This was the first time these behaviors were attributed to the new organic distinction of minimal brain damage.

This disorder still remained unnamed or else it was called a variety of names (usually just "childhood behavior disorder"). It did not appear as a specific diagnostic category until Laufer, et al. (1957) described it as the "hyperkinetic impulse disorder" in 1957. Upon finding "the salient characteristics of the behavior pattern . . . are strikingly similar to those with clear cut organic causation" these researchers described a disorder with no clear-cut history or evidence for organicity (Laufer, et al., 1957).

<sup>1</sup> The U.S.P.H.S. report (Clements, 1966) included 38 terms that were used to describe or distinguish the conditions that it labeled Minimal Brain Dysfunction. Although the literature attempts to differentiate M.B.D., hyperkinesis, hyperactive syndrome, and several other diagnostic labels, it is our belief that in practice they are almost interchangeable.

<sup>2</sup> For a fuller discussion of the construction of the diagnosis of hyperkinesis, see Conrad (forthcoming), especially Chapter 6.

In 1966 a task force sponsored by the U.S. Public Health Service and the National Association for Crippled Children and Adults attempted to clarify the ambiguity and confusion in terminology and symptomology in diagnosing children's behavior and learning disorders. From over three dozen diagnoses, they agreed on the term "minimal brain dysfunction" as an overriding diagnosis that would include hyperkinesis and other disorders (Clements, 1966). Since this time M.B.D. has been the primary formal diagnosis or label.

In the middle 1950's a new drug, Ritalin, was synthesized, that has many qualities of amphetamines without some of their more undesirable side effects. In 1961 this drug was approved by the F.D.A. for use with children. Since this time there has been much research published on the use of Ritalin in the treatment of childhood behavior disorders. This medication became the "treatment of choice" for treating children with hyperkinesis.

Since the early sixties, more research appeared on the etiology, diagnosis and treatment of hyperkinesis (cf. DeLong, 1972; Grinspoon and Singer, 1973; Cole, 1975)—as much as three-quarters concerned with drug treatment of the disorder. There had been increasing publicity of the disorder in the mass media as well. The *Reader's Guide to Periodical Literature* had no articles on hyperkinesis before 1967, one each in 1968 and 1969 and a total of forty for 1970 through 1974 (a mean of eight per year).

Now hyperkinesis has become the most common child psychiatric problem (Gross and Wilson, 1974: 142); special pediatric clinics have been established to treat hyperkinetic children,

and substantial federal funds have been invested in etiological and treatment research. Outside the medical profession, teachers have developed a working clinical knowledge of hyperkinesis' symptoms and treatment (cf. Robin and Bosco, 1973); articles appear regularly in mass circulation magazines and newspapers so that parents often come to clinics with knowledge of this diagnosis. Hyperkinesis is no longer the relatively esoteric diagnostic category it may have been twenty years ago, it is now a well-known clinical disorder.

#### *Social Factors*

The social factors affecting the discovery of hyperkinesis can be divided into two areas: (1) The Pharmaceutical Revolution; (2) Government Action.

(1) *The Pharmaceutical Revolution.* Since the 1930's the pharmaceutical industry has been synthesizing and manufacturing a large number of psychoactive drugs, contributing to a virtual revolution in drug making and drug taking in America (Silverman and Lee, 1974).

Psychoactive drugs are agents that effect the central nervous system. Benzadrine, Ritalin, and Dexedrine are all synthesized psychoactive stimulants which were indicated for narcolepsy, appetite control (as "diet pills"), mild depression, fatigue, and more recently hyperkinetic children.

Until the early sixties there was little or no promotion and advertisement of any of these medications for use with childhood disorders.<sup>3</sup> Then

<sup>3</sup> The American Medical Association's change in policy in accepting more pharmaceutical advertising in the late fifties may have been important. Probably the F.D.A.

two major pharmaceutical firms (Smith, Kline and French, manufacturer of Dexedrine and CIBA, manufacturer of Ritalin) began to advertise in medical journals and through direct mailing and efforts of the "detail men." Most of this advertising of the pharmaceutical treatment of hyperkinesia was directed to the medical sphere; but some of the promotion was targeted for the educational sector also (Hentoff, 1972). This promotion was probably significant in disseminating information concerning the diagnosis and treatment of this newly discovered disorder.<sup>4</sup> Since 1955 the use of psychoactive medications (especially phenothiazines) for the treatment of persons who are mentally ill, along with the concurrent dramatic decline in inpatient populations, has made psychopharmacology an integral part of treatment for mental disorders. It has also undoubtedly increased the confidence in the medical profession for the pharmaceutical approach to mental and behavioral problems.

(2) *Government Action.* Since the publication of the U.S.P.H.S. report on M.B.D. there have been at least two significant governmental reports on treating school children with stimulant medications for behavior disorders. Both of these came as a response to the national publicity created by the *Washington Post* report (1970) that

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approval of the use of Ritalin for children in 1961 was more significant. Until 1970, Ritalin was advertised for treatment of "functional behavior problems in children." Since then, because of an F.D.A. order, it has only been promoted for treatment of M.B.D.

<sup>4</sup> The drug industry spends fully 25 percent of its budget on promotion and advertising. See Coleman et al. (1966) for the role of the detail men and how physicians rely upon them for information.

five to ten percent of the 62,000 grammar school children in Omaha, Nebraska were being treated with "behavior modification drugs to improve deportment and increase learning potential" (quoted in Grinspoon and Singer, 1973). Although the figures were later found to be a little exaggerated, it nevertheless spurred a Congressional investigation (U.S. Government Printing Office, 1970) and a conference sponsored by the Office of Child Development (1971) on the use of stimulant drugs in the treatment of behaviorally disturbed school children.

The Congressional Subcommittee on Privacy chaired by Congressman Cornelius E. Gallagher held hearings on the issue of prescribing drugs for hyperactive school children. In general, the committee showed great concern over the facility in which the medication was prescribed; more specifically that some children at least were receiving drugs from general practitioners whose primary diagnosis was based on teachers' and parents' reports that the child was doing poorly in school. There was also a concern with the absence of follow-up studies on the long-term effects of treatment.

The H.E.W. committee was a rather hastily convened group of professionals (a majority were M.D.'s) many of whom already had commitments to drug treatment for children's behavior problems. They recommended that only M.D.'s make the diagnosis and prescribe treatment, that the pharmaceutical companies promote the treatment of the disorder only through medical channels, that parents should not be coerced to accept any particular treatment and that long-term follow-up research should be done. This report served as blue ribbon approval for

treating hyperkinesis with psychoactive medications.

#### DISCUSSION

We will focus discussion on three issues: How children's deviant behavior became conceptualized as a medical problem; why this occurred when it did; and what are some of the implications of the medicalization of deviant behavior.

How does deviant behavior become conceptualized as a medical problem? We assume that before the discovery of hyperkinesis this type of deviance was seen as disruptive, disobedient, rebellious, anti-social or deviant behavior. Perhaps the label "emotionally disturbed" was sometimes used, when it was in vogue in the early sixties, and the child was usually managed in the context of the family or the school or in extreme cases, the child guidance clinic. How then did this constellation of deviant behaviors become a medical disorder?

The treatment was available long before the disorder treated was clearly conceptualized. It was twenty years after Bradley's discovery of the "paradoxical effect" of stimulants on certain deviant children that Laufer named the disorder and described its characteristic symptoms. Only in the late fifties were both the diagnostic label and the pharmaceutical treatment available. The pharmaceutical revolution in mental health and the increased interest in child psychiatry provided a favorable background for the dissemination of knowledge about this new disorder. The latter probably made the medical profession more likely to consider behavior problems in children as within their clinical jurisdiction.

There were agents outside the medical profession itself that were signifi-

cant in "promoting" hyperkinesis as a disorder within the medical framework. These agents might be conceptualized in Becker's terms as "moral entrepreneurs," those who crusade for creation and enforcement of the rules (Becker, 1963).<sup>5</sup> In this case the moral entrepreneurs were the pharmaceutical companies and the Association for Children with Learning Disabilities.

The pharmaceutical companies spent considerable time and money promoting stimulant medications for this new disorder. From the middle 1960's on, medical journals and the free "throw-away" magazines contained elaborate advertising for Ritalin and Dexedrine. These ads explained the utility of treating hyperkinesis and urged the physician to diagnose and treat hyperkinetic children. The ads run from one to six pages. For example, a two-page ad in 1971 stated:

MBD . . . MEDICAL MYTH OR DIAGNOSABLE DISEASE ENTITY What medical practitioner has not, at one time or another, been called upon to examine an impulsive, excitable hyperkinetic child? A child with difficulty in concentrating. Easily frustrated. Unusually aggressive. A classroom rebel. In the absence of any organic pathology, the conduct of such children was, until a few short years ago, usually dismissed as . . . spunkiness, or evidence of youthful vitality. But it is now evident that in many of these children the hyperkinetic syndrome exists as a distinct medical entity. This syndrome is readily diagnosed through patient histories, neurologic signs, and psychometric testing—has been classified by an expert

<sup>5</sup> Freidson also notes the medical professional role as moral entrepreneur in this process also:

The profession does treat the illnesses laymen take to it, but it also seeks to discover illness of which the laymen may not even be aware. One of the greatest ambitions of the physician is to discover and describe a "new" disease or syndrome . . . (1970:252)

panel convened by the United States Department of Health, Education and Welfare as Minimal Brain Dysfunction, MBD.

The pharmaceutical firms also supplied sophisticated packets of "diagnostic and treatment" information on hyperkinesis to physicians, paid for professional conferences on the subject, and supported research in the identification and treatment of the disorder. Clearly these corporations had a vested interest in the labeling and treatment of hyperkinesis; CIBA had \$13 million profit from Ritalin alone in 1971, which was 15 percent of the total gross profits (Charles, 1971; Hentoff, 1972).

The other moral entrepreneur, less powerful than the pharmaceutical companies, but nevertheless influential, is the Association for Children with Learning Disabilities. Although their focus is not specifically on hyperkinetic children, they do include it in their conception of Learning Disabilities along with aphasia, reading problems like dyslexia and perceptual motor problems. Founded in the early 1950's by parents and professionals, it has functioned much as the National Association for Mental Health does for mental illness: promoting conferences, sponsoring legislation, providing social support. One of the main functions has been to disseminate information concerning this relatively new area in education, Learning Disabilities. While the organization does have a more educational than medical perspective, most of the literature indicates that for hyperkinesis members have adopted the medical model and the medical approach to the problem. They have sensitized teachers and schools to the conception of hyperkinesis as a medical problem.

The medical model of hyperactive behavior has become very well accepted

in our society. Physicians find treatment relatively simple and the results sometimes spectacular. Hyperkinesis minimizes parents' guilt by emphasizing "its not their fault, its an organic problem" and allows for nonpunitive management or control of deviance. Medication often makes a child less disruptive in the classroom and sometimes aids a child in learning. Children often like their "magic pills" which make their behavior more socially acceptable and they probably benefit from a reduced stigma also. There are, however, some other, perhaps more subtle ramifications of the medicalization of deviant behavior.

#### THE MEDICALIZATION OF DEVIANT BEHAVIOR

Pitts has commented that "medicalization is one of the most effective means of social control and that it is destined to become the main mode of *formal* social control" (1971:391). Kitterie (1971) has termed it "the coming of the therapeutic state."

Medicalization of mental illness dates at least from the seventeenth century (Foucault, 1965; Szasz, 1970). Even slaves who ran away were once considered to be suffering from the disease *drapedomania* (Chorover, 1973). In recent years alcoholism, violence, and drug addiction as well as hyperactive behavior in children have all become defined as medical problems, both in etiology or explanation of the behavior and the means of social control or treatment.

There are many reasons why this medicalization has occurred. Much scientific research, especially in pharmacology and genetics, has become technologically more sophisticated, and found more subtle correlates with human behavior. Sometimes these find-

ings (as in the case of XYY chromosomes and violence) become etiological explanations for deviance. Pharmacological technology that makes new discoveries affecting behavior (e.g., anti-buse, methadone and stimulants) are used as treatment for deviance. In part this application is encouraged by the prestige of the medical profession and its attachment to science. As Freidson notes, the medical profession has first claim to jurisdiction over anything that deals with the functioning of the body and especially anything that can be labeled illness (1970:251). Advances in genetics, pharmacology and "psycho-surgery" also may advance medicine's jurisdiction over deviant behavior.

Second, the application of pharmacological technology is related to the humanitarian trend in the conception and control of deviant behavior. Alcoholism is no longer sin or even moral weakness, it is now a disease. Alcoholics are no longer arrested in many places for "public drunkenness," they are now somehow "treated," even if it is only to be dried out. Hyperactive children are now considered to have an illness rather than to be disruptive, disobedient, overactive problem children. They are not as likely to be the "bad boy" of the classroom; they are children with a medical disorder. Clearly there are some real humanitarian benefits to be gained by such a medical conceptualization of deviant behavior. There is less condemnation of the deviants (they have an illness, it is not their fault) and perhaps less social stigma. In some cases, even the medical treatment itself is more humanitarian social control than the criminal justice system.

There is, however, another side to the medicalization of deviant behavior. The four aspects of this side of the

issue include (1) the problem of expert control; (2) medical social control; (3) the individualization of social problems; and (4) the "depoliticization" of deviant behavior.

1. *The problem of expert control.* The medical profession is a profession of experts; they have a monopoly on anything that can be conceptualized as illness. Because of the way the medical profession is organized and the mandate it has from society, decisions related to medical diagnoses and treatment are virtually controlled by medical professionals.

Some conditions that enter the medical domain are not *ipso facto* medical problems, especially deviant behavior, whether alcoholism, hyperactivity or drug addiction. By defining a problem as medical it is removed from the public realm where there can be discussion by ordinary people and put on a plane where only medical people can discuss it. As Reynolds states,

The increasing acceptance, especially among the more educated segments of our populace, of technical solutions—solutions administered by disinterested politically and morally neutral experts—results in the withdrawal of more and more areas of human experience from the realm of public discussion. For when drunkenness, juvenile delinquency, sub par performance and extreme political beliefs are seen as symptoms of an underlying illness or biological defect the merits and drawbacks of such behavior or beliefs need not be evaluated (1973:220-221).

The public may have their own conceptions of deviant behavior but that of the experts is usually dominant.

2. *Medical social control.* Defining deviant behavior as a medical problem allows certain things to be done that could not otherwise be considered; for example, the body may be cut open or psychoactive medications may be given.



This treatment can be a form of social control.

In regard to drug treatment Lennard points out: "Psychoactive drugs, especially those legally prescribed, tend to restrain individuals from behavior and experience that are not complementary to the requirements of the dominant value system" (1971:57). These forms of medical social control presume a prior definition of deviance as a medical problem. Psychosurgery on an individual prone to violent outbursts requires a diagnosis that there was something wrong with his brain or nervous system. Similarly, prescribing drugs to restless, overactive and disruptive school children requires a diagnosis of hyperkinesia. These forms of social control, what Chorover (1973) has called "psychotechnology," are very powerful and often very efficient means of controlling deviance. These relatively new and increasingly popular forms of social control could not be utilized without the medicalization of deviant behavior. As is suggested from the discovery of hyperkinesia, if a mechanism of medical social control seems useful, then the deviant behavior it modifies will develop a medical label or diagnosis. No overt malevolence on the part of the medical profession is implied: rather it is part of a complex process, of which the medical profession is only a part. The larger process might be called the individualization of social problems.

3. *The individualization of social problems.* The medicalization of deviant behavior is part of a larger phenomenon that is prevalent in our society, the individualization of social problems. We tend to look for causes and solutions to complex social problems in the individual rather than in the social system. This view resembles

Ryan's (1971) notion of "blaming the victim;" seeing the causes of the problem in individuals rather than in the society where they live. We then seek to change the "victim" rather than the society. The medical perspective of diagnosing an illness in an individual lends itself to the individualization of social problems. Rather than seeing certain deviant behaviors as symptomatic of problems in the social system, the medical perspective focuses on the individual diagnosing and treating the illness, generally ignoring the social situation.

Hyperkinesia serves as a good example. Both the school and the parents are concerned with the child's behavior; the child is very difficult at home and disruptive in school. No punishments or rewards seem consistently to work in modifying the behavior; and both parents and school are at their wits' end. A medical evaluation is suggested. The diagnoses of hyperkinetic behavior leads to prescribing stimulant medications. The child's behavior seems to become more socially acceptable, reducing problems in school and at home.

But there is an alternate perspective. By focusing on the symptoms and defining them as hyperkinesia we ignore the possibility that behavior is not an illness but an adaptation to a social situation. It diverts our attention from the family or school and from seriously entertaining the idea that the "problem" could be in the structure of the social system. And by giving medications we are essentially supporting the existing systems and do not allow this behavior to be a factor of change in the system.

4. *The depoliticization of deviant behavior.* Depoliticization of deviant behavior is a result of both the process of medicalization and individualization

of social problems. To our western world, probably one of the clearest examples of such a depoliticization of deviant behavior occurred when political dissenters in the Soviet Union were declared mentally ill and confined in mental hospitals (cf. Conrad, 1972). This strategy served to neutralize the meaning of political protest and dissent, rendering it the ravings of mad persons.

The medicalization of deviant behavior depoliticizes deviance in the same manner. By defining the overactive, restless and disruptive child as hyperkinetic we ignore the meaning of behavior in the context of the social system. If we focused our analysis on the school system we might see the child's behavior as symptomatic of some "disorder" in the school or classroom situation, rather than symptomatic of an individual neurological disorder.

#### CONCLUSION

I have discussed the social ramifications of the medicalization of deviant behavior, using hyperkinesis as the example. A number of consequences of this medicalization have been outlined, including the depoliticization of deviant behavior, decision-making power of experts, and the role of medicine as an agent of social control. In the last analysis medical social control may be the central issue, as in this role medicine becomes a *de facto* agent of the *status quo*. The medical profession may not have entirely sought this role, but its members have been, in general, disturbingly unconcerned and unquestioning in their acceptance of it. With the increasing medical knowledge and technology it is likely that more deviant behavior will be medicalized and medicine's social control function will expand.

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