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THE PRINCIPLES OF GENERAL SYSTEMS THEORY APPLIED TO THE MEDICAL MODEL. WHO BENEFITS?

Introduction

The term "Medical Model", though frequently used by professionals, theoreticians and laymen in referring to certain aspects of the medical profession, or of the entire medical system, is rarely used with any degree of precision. The term, indeed, has been used as a shorthand expression, leaving it unnecessary to explicate descriptively the interrelated components of the medical arena. The theories, conceptual constructs, practice, and operating ideologies of the Medical Model, and their association with bi-cultural, economic, political and other concepts are left unspoken. These elements are simply assumed to be implicit in the use of the term. It is our contention, however, that many using the term are not cognizant of the relationship between the variables that hold the model intact Because of this, relevant linkages and causative relations generally do not receive proper attention.

This essay will not attempt to prove that individuals misuse the term. Instead, efforts will be directed toward delineating the properties of the medical model of psychiatric practice (which has strong influence on most social service systems) in terms of principles associated with general systems theory Within this context, we will introduce systematic aspects of the medical model, showing how many of its parts are independently systematized, and how each part, as a collective, serves as a model for psychiatric determination.

General Systems Structure

The characteristics of any model should include those properties which explain, predict and control events according to natural or

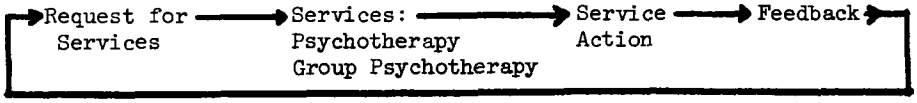
regulated patterns within an environment. Such characteristics must include interrelating and interacting variables. Those variables should be systematically organized and explainable in the context of logical deduction. According to Ludwig von Bertalanffy, "circular causality" must also exist if a model is to have a general systems structure; that is, the model must introduce "feedback of output into input, so making the system self-regulating with respect to maintenance of a desired variable or target to be reached."[1] Figure I illustrates what the process of any system looks like.

Figure I

Ludwig von Bertalanffy, introduces us to a general systems structure which will help us better understand the medical model of psychiatry by examining its functional parts and how those parts work collectively to support the entire model. By viewing the medical model of psychiatry from a general systems structure, we will investigate how the self-regulating component could serve as a controlling device, while at the same time not disrupting the equilibrium of this model. (See Figure II) It is also important to point out other vital aspects of the general systems model: i.e. theory, goal-directedness, ideology, equilibrium, etc. The mechanical processes of this model are interchangeably related to the organism which have established laws concerning "'organization', 'wholeness', order by parts and 'negentropy'...." The law, according to Bertalanffy, in part, claims that "(i)nteraction among many variables and free dynamic order may be indicated as central notions."[2] Both the mechanism and organism trends, provide an informative feedback process which, in turn, allows for input and output vehicles. This can be said to be a check and balance process or circular causality.

Figure II

Action Terms (Medical Model)



The Medical Model: A System Approach

The medical model of psychiatry is a scientifically structured mechanism which serves as an interpretative concept. The concept describes the structural aspects of the model, making it possible for every sentence and statement to be understandable in the context of logical deduction.[3] The theory of the model is, in part, grounded on the belief that abnormal behavior is a result of an organ lesion or psychogenic dysfunctioning. The model delineates human reactions to stress inducing situations or physical impairment, and therefore, is capable of correlating human stress with mental adaptation. In other words, if a person is having emotional difficulty in their sexual relationships, this model would isolate the malfunction as originating in the mind; rather than examining the totality of this person's relationships. Consequently, this process serves as a tool to make possible determinations or assumptions regarding etiology, diagnoses, prognoses, and the treatment of mental illness.

With discrete and systematized concepts of human adaptation to cultural patterns, man's orientation to behavioral patterns, coupled with appropriate or inappropriate personality development, and the cultural transmittance of social values and ideals (socialization) from one generation to another,[4] the medical model has become so structured as to provide diagnosticians with the constructs necessary to determine whether one has, or has not, adequately adapted to orderly life development patterns. These patterns are considered to be an organized system of human maturation, societal adaptation, and, as Talcott Parsons puts it, "a mode of organization of action elements relative to the persistence or ordered processes of change of the interactive patterns of a plurality of individual actors."[5]

These processes further reflect what von Bertalanffy calls "mechanismic and organismic trends."[6] The trends make possible methods of introducing, testing, weighing and evaluating information existing within the model, while also producing feedback on an input and output level. Consequently, these methods with their complementary parts (isomorphorms) assist in making the model an organized "whole".[7]

As a conceptually derived instrument of making determinations of whether abnormality is present, psychiatry has established a systematized manual, DSM (the Diagnostic and Statistical Manual), which categorizes abnormal behavior. The manual consists of descriptive psychiatric categories within three distinct sections: 1) impairment of the brain tissues, 2) mental deficiency, and 3) functional disorders.[8] This method of associating abnormal symptoms with categories serves the interest of the medical profes-

sion by providing specific classification to non-conforming behaviors according to the severity of the aberration. The manual's classifications complement and support the psychiatric profession's understanding of the development of personalities, cultural adaptation and socialization mechanisms. The two process are indeed interrelated and supporting variables within the medical model.

An example of how this classification system works as a controlling device is outlined in this case example, but the reader should keep in mind that the equilibrium of the model is intact, and it is the family that is experiencing disequilibrium:

> A young probationer was under court supervision and had strict orders to remain with responsible adults. His counselor became concerned because the youth appeared to ignore this order. The client moved around frequently and, according to the counselor, stayed overnight with several different females. The counselor presented this case at a formal staffing, and fellow professionals stated this suspicion: the client was a pusher or a pimp. The frustrating element to the counselor was that the young women knew each other and appeared to enjoy each other's company. Moreover, they were not ashamed to be seen together in public with the client. This behavior prompted the counselor to initiate violation proceedings.
>
> A Minneapolis Indian professional came upon the case quite by accident. He knew the boy's family well and requested a delay in court proceedings to allow time for a more thorough investigation. It was discovered that the young women were all first cousins to the client. He had not been frivolously "staying overnight with them"; he had been staying with different units of his family. Each female was as a sister. Moreover, each family unit had a responsible and obligated adult available to supervise and care for the client.
>
> A revocation order in this case would have caused irreparable alienation between the family and human service professionals. The casework decision would have inappropriately punished the youth as well as several members of his family for simply conducting normal family behavior. Moreover, its impact would affect people far beyond the presenting client and the identified actors. The young man had a characteristically large Indian network consisting of over 200 people, spanning three generations.
>
> Structural characteristics of Indian family networks confront human service professionals with judgmental issues beyond that

of labeling. Extended family often serves as a major instrument of accountability. Standards and expectations are established which maintain group solidarity through enforcement of values.

Single-parent and single-adult households do appear in Indian communities. Professionals bound by nuclear family parameters point to this in planning service resources. They are consequently reluctant to either use or legitimate aunts, uncles, cousins, and grandparents as alternate or supportive-service caregivers.

American Indian family networks assume a structure which is radically different from European extended family units. The accepted structural boundary of the European model is the household. Thus, an extended family is defined as three generations within a single household. Indian family networks, however, are structurally open and assume a village-type characteristic. Their extension is inclusive of several households representing significant relatives along both vertical and horizontal lines.

Network structure influences individual behavior patterns because family transactions occur within a community milieu. This is important for professionals to understand so that mislabeling may be avoided. Normal behavioral transactions within the network relation field, for example, may appear bizarre to an outside observer.[9]

Conceptual Tools to Restore a Balanced State

Indeed, the medical model would not be complete without having mechanisms to control abnormalities once they are identified. This process is accomplished through the model's derived treatment modalities. The treatment modalities serve as the tools necessary in controlling tension, stress, strain and conflict (in short, symptoms of behaviors identified as abnormal by the classification system); if successful, a balance state is established.

Again, the aforementioned case study typifies this. Like the DSM, this phase of psychiatry has component parts. Rather than discuss all treatment methods, we will simply address the two primary and most acknowledged methods: 1) hospitalization, and 2) internal and external stimuli used to control abnormal symptoms.

Hospitalization

Since importance is placed on a person's adaptability to his/her social environment, major deviations are attended to through the process of treatment and care. To accomplish this end, while also providing a controllable milieu, patients considered to be dangerous to self and others are hospitalized (voluntarily or involuntarily). In this environment, facilities are available to stabilize the abnormal condition.

The primary service of the hospital is to treat and prepare (re-socialize) the patient for re-entry into the community. The prevailing thought accepted by diagnosticians remains: patients are hospitalized because they found normal life situations too stress-inducing, and consequently were psychologically unable to cope with the daily demands of society. (The key concept for this essay is "prevailing thought"--Lang, Szasz, Becker and Scull and others have written extensively on the opposing sides. It is not within the scope of this essay to address those points of conflict, even though that task is long overdue.) Each patient, upon admission, is examined and located within the diagnostic classification system (DSM). This diagnosis serves as an instruction guide. That is, it tells hospital officials the severity and nature of the patient's disease. Additionally, diagnostic labels serve as a mechanism in predicting, explaining and understanding the symptoms manifested by the patients and as determinants of treatment approaches. Let us examine another case example:

> Nancy, for example, was an 18 year old mother identified as mentally retarded and epleptic by welfare officials. Although retardation was subsequently disproved, welfare assumed control and custody of Nancy's infant child.
>
> Nancy's parents insisted that the family network was available for assistance, if necessary. Welfare, however, considered this offer untenable. The grandparents were deemed too old and senile to care for an infant. They were in their early fifties.
>
> Welfare ignored that the grandparents had just finished caring for three other young and active grandchildren without depending upon institutional social intervention. Moreover, these children appeared well-adjusted. Welfare officials simply insisted in this case that standard placement procedures be followed; a

foster home was secured for Nancy's child.

> Welfare placement orders were eventually overruled in Nancy's case. But not without heroic legal intervention. It is unfortunate that such adversarial strategies are necessary to prove competencies of natural family networks. As the aforementioned case illustrates, family competency and responsibility springs forth as a normal process of network accountability.[10]

Within the hospital community an orderly process exists, similar to that of any institution. The bureaucracy functions as a community, having interrelating and interacting variables, each accountable to the entire hospital system. This isomorphic relationship (unit dynamics, ward dynamics, professionalism, treatment approaches, etc.) is not by chance, but rather a systematically planned process, reflecting the principles of the general systems theory.

Internal and External Stimuli

Internal stimuli are those methods used to control behavior through the use of foreign substances or elements used to affect the bodily processes; i.e., psychogenic chemicals, electric shock and insulin shock treatments, lobotomies, etc. These methods are administered to control stress, tension and excitement or to restore cognitive awareness (for instance, stupor states common among schizophrenics are said to be sometimes alleviated after ECT). The overriding purpose of this process is to assist the patient in regaining appropriate perception, and in the re-establishment of milieu adaptation. Generally internal stimuli are accompanied by external stimuli.

A number of non-psychochemical treatment methods are used by practitioners in confronting psychogenic disorders. External stimuli in part include: psychotherapy, psychoanalysis, and milieu, group, family and individual therapies. Like chemotherapy, these treatment methods are designed to restore the patient to a balanced state. This balanced state will allow the individual to adequately react to life situations.[11]

In retrospect, the medical model of psychiatry is a systematic structure which has a defined boundry, an orderly composition and organization and mechanisms for input and output serving as a feedback process. While being organismic and mechanismic, the model has methods for establishing and maintaining equilibrium where stress,

strain, tension and conflict exist. Together their characteristics are properties of the general systems theory. (Again, the two aforementioned case illustrations explain how the Medical Model controls for balance by not allowing for cultural differences to emerge. But, even though those case examples show the positive outcome, the process that the families were subjected to were a direct reflection of the Medical Model.)

Further elaboration of the properties of the medical model of psychiatry would primarily address itself to characteristics heretofore not mentioned. Such an endeavor would merely look into discrete variables of the model, showing isomorphorms where they may exist. In simplifying the model, we maintain that the model has a systematic structure which basically describes 1) theory of disease, 2) classification system, 3) treatment modalities (practice), and 4) the agent (client/practitioner). The boundary for this model is twofold: 1) the society as a social, political and economic system and 2) psychiatry as a practicing profession, which serves as a regulatory agent to maintain the societal system.

Adequacy of the Medical Model: Who Benefits

Questioning the adequacy of the medical model means questioning psychiatry and its influences on social service systems in general. Is it a systematized profession? How does it account for its existence? Does it adequately provide service to the population? Does it have natural boundaries? Is it a medical profession? All of these questions cannot be addressed here, although they should be considerations for further discussion. What does appear significant to discuss is professional legitimation and accountability.

In the context of the psychiatric profession, and its influence on social service systems, the medical model delineates the orderly process of psychiatric practice and determination. What makes the model reasonable and acceptable is societal endorsement of its practicing theory. A question to be considered when any subject or situation is being questioned is which professional discipline has been legitimated as the authenticated body to define and contain the problem at hand; in other words, the discipline which has provided an acceptable definition of the characteristics of the behavior, and how that behavior has been described, categorized, systematized and confronted. For whichever discipline it is, the manner in which the definition of the behavior is delineated is indicative of how the findings will be perceived and accepted.

Again, it is significant to emphasize that problematic behavior is by definition a deviance from established social norms, thus creating a disturbance in the state of equilibrium. Since this is true, any theory that is created to explain the peculiar behavior must legitimate social norms. Hence, any contention for managing deviance must be among socially accepted professions. Here the word "accepted" is a key. If a researcher's theory is in contradiction with the norms, rules and regulations of the society--that is, if there is a proposed change in the dominant social system, which often requires a possible social alteration, then the theory will confront opposition, and other less threatening theories will receive preferential consideration.[12] At this juncture, we are faced with concluding that the existing theories, concepts, and methods used to explain, predict, control and understand non-conforming behavior are predicated on the belief that the medical model of psychiatry (a legitimated profession) is in compliance with the values of the dominant social system. This belief makes the model acceptable to the broader society. It can be therefore said that the medical model of psychiatry must be perceived as a regulatory agent that adequately services those who find benefit in maintaining the status quo.

The above discussion brings us to a point sufficient to attempt an analysis of the medical model in light of general systems theory. To this end, efforts will be directed toward observing the controlling forces which allow the model to maintain itself without consideration of external and internal changes. This does not mean that the model does not account for changes and is therefore, incapable of making internal adjustment to correct conflict. We have already indicated that circular causality allows for a functional and information feedback process to exist. This process further creates avenues for the model to account for alterations in human behavior, methodological processes, medical advancement, and societal changes. It also serves as a mechanism to solidify the model--an established state of equilibrium. This built-in, self-reinforcing process in the core of the medical model or psychiatry is such that societal codes of performance become sanctioned, the practice of psychiatry becomes legitimated based on definitions of human deviations and non-conformity and the two together allow society to divert attention from other possible causes of mental dysfunctioning, namely capitalism, competition, socialization, mystification, poverty and the like. This model does not allow consideration of possible transformations.

Processes for retooling the theory,[13] that is, organized mechanisms serving as functional parts of the model allowing for correction of the

model as a "whole" and thereby introduction of other alternatives, do not exist. Self-reinforcing processes within the model go unchallenged. Thus, without a critical evaluative process, equilibrium becomes a forced condition, possibilities for change do not exist and variables which should become obsolescent due to social change and the introduction of alternative methodologies, do not. So the model stays in a state of forced adherence, guiding society toward and advanced state of oppression.

FOOTNOTES

1. Gray, Duhl and Rizzo, General Systems Theory and Psychiatry, Little Brown Company, Boston, 1969, page. 37.

2. Ibid, page 37.

3. Kaplan, Abraham, Conduct of Inquiry, Chandler Publishing Company, San Francisco, CA 1964 , page 267.

4. See Talcott Parson's, The Social System, The Free Press, New York, Collier-MacMillan Limited, London Chapters I and II.

5. Ibid, page

6. Gray, Duhl and Rizzo, General Systems Theory and Psychiatry, Little Brown Company, Boston, 1969, page 37.

7. Ibid, page 7.

8. AMA, Diagnostic and Statistical Manual, Second Edition, AMA, Washington, D.C., 1968.

9. This case was drawn from the files of Ah-be-no-gee, an innovative demonstration program in child abuse and neglect. Ah-be-no-gee is located in Minneapolis, Minnesota, and funded by the National Center for Child Abuse and Neglect, Office of Child Development, HEW. Also, see Redhorse, Decker, Urban Indian Family Behavior: Implications for Human Service Delivery Models, Social Casework, February, 1978.

10. Ibid.

11. Kolb, Lawrence C., M.D. Modern Clinical Psychiatry, Eighth Edition, W.B. Saunders Company, Philadelphia, London, Toronto, 1973 pp. 620-655.

12. See Thomas S. Kuhn, The Structure of Scientific Revolution, The University of Chicago Press, Chicago and London, 1962

13. Ibid, page 76.