

***Arnold M.  
Ludwig***

***Principles  
of  
Clinical  
Psychiatry***

# *Principles of Clinical Psychiatry*

Arnold M. Ludwig



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## *Preface*

Common academic lore holds that clinical competence is difficult, if not impossible, to teach, since it must be learned mainly through experience. Whatever truth is contained in this lore must be subject to two qualifications. First, many physicians become competent very early in their careers. In other words, they appear to be learning "something" at a much more accelerated rate than others. Second, experience is not necessarily the best or most efficient teacher. Age does not always confer either clarity of thought or wisdom.

Certain features characterize the lack of clinical competency, whether it be due to inexperience or faulty learning. Physicians engage in relatively inefficient, repetitious, and tortuous data gathering, and adopt a clumsy and rote approach to the mental status and physical and neurological examinations, despite their adequate factual knowledge of medicine and psychiatry. The clinical process tends to be characterized by a poorly integrated data base, the perfunctory listing of differential diagnoses with little appreciation for diagnostic probabilities, the indiscriminate use of laboratory tests, and the unsystematic formulation of treatment plans. Diagnostic and treatment formulations do not

seem governed by any internal logic, clinical rhythm, or direction.

Certain changes accompany the development of clinical competence. Physicians learn to conduct interviews and examinations which are governed by an implicit or explicit type of branch logic or algorithm, respond to pertinent and obscure cues, sort out relevant from non-relevant details, and form sound judgments based upon probabilities. They develop the ability to deal with atypical, deviant, unusual, and complex situations in the absence of firm guidelines or textbook descriptions. Decisions are made smoothly and rapidly, signals are separated from noise and artifact, priorities are established, and information is organized within a coherent conceptual framework.

These abilities have been too long enshrouded in mystery. If they are capable of being learned, then they should be governed by rules, operations, and logic, and these rules, operations, and logic should be made more explicit. This book is my effort to do so. To this end, it focuses more on principles than facts, strategies than specifics, understanding than memorization, and clinical applications than theory.

The primary focus of this book is on the

practice of adult psychiatry. Unlike many standard textbooks, its organization attempts to parallel the actual clinical process. Sequential sections of the book deal with information gathering, differential diagnosis, specific diagnoses, and therapeutic management. Certain liberties have also been taken with the format. Controversies and complexities are avoided unless they have practical implications for clinical processes. Also, since most clinicians are not blessed (or burdened) with photographic memories, parsimony and simplicity are emphasized. This dictates the ample use of tables, drawings, schema,

and even mnemonics to organize information, illustrate concepts, increase understanding, and facilitate recall of important material.

As with other textbooks, most of the “factual” and theoretical material contained within this book will eventually be made obsolete by new scientific discoveries and conceptualizations of diagnosis, etiology, and treatment. Hopefully, with this particular book, what will withstand the test of time will be the strategies for dealing with clinical information, the essential skills required for clinical competence, and the general format through which clinical psychiatry can be taught.

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## PART I

# *Elicitation of Information*



# Chapter 1

## *The Clinical Information Base*

### Introduction

The two major responsibilities of a physician are the proper diagnostic management and therapeutic management of patients (1). Diagnostic management includes all the steps necessary for clear understanding of the patient's problem. Therapeutic management includes all the steps necessary for correction or relief of the problem. Sound therapy depends upon sound diagnosis.

The nature of the clinical information base determines the nature of the derived conclusions about diagnosis. An overinclusive information base interferes with the detection of important signals within the background noise. An over-exclusive information base hampers problem-solving because of the absence of crucial information. An inaccurate or biased data information base inevitably leads to erroneous diagnosis and inappropriate treatment.

Though experience contributes to clinical competence, not all experienced clinicians are competent diagnosticians. Some are capable of arriving at accurate diagnosis on the basis of minimum bits of information: others require

many more bits of information, and still others may prove incapable of formulating an appropriate diagnosis. Relative diagnostic competency appears related to the nature of the decision-making processes employed by physicians to elicit and evaluate clinical data. Some processes are far more effective and efficient than others.

While diagnostic styles vary in nature, two general types can be distinguished (2). The first, mostly employed by students or in research protocols, is the "adding machine" approach, which defers the final tabulation until the last entry is made. The second, more likely to be employed by experienced psychiatrists, is the "sensing or tracking" device that seeks and zeroes in on its target.

While difficult to define the mental operations of a sensing or tracking approach, at least two processes, operating independently or in concert, seem involved. These processes can best be described by analogy.

The first pertains to holography, a computer process whereby any element within a complex pattern or composition contains all the information intrinsic to the entire pattern (3). The presence of any part of the hologram, therefore, can reconstruct an entire image and all images

associated with it in the recording. Clinicians capable of making instantaneous diagnoses based on minimal clinical cues, such as the mannerisms, appearances, or even smells of patients, appear to be relying upon an analogous holographic process whereby these condensed packages of information for any given patient can be matched against available diagnostic holograms. These diagnostic holograms, pertaining to typical and atypical presentations of disease, become automatically elaborated whenever sufficient clinical information becomes available which is specific to the particular diagnosis. Subsequent inquiry then becomes highly targeted and directed toward confirming or disconfirming the remaining details of the clinical picture. Sole reliance on this process, while highly efficient, carries with it the inherent danger of premature, diagnostic closure.

The second companion process by which clinicians arrive at diagnoses is through internal forms of branch logic or algorithms, proceeding from one decision point to the next in the most rapid and efficient manner. In most instances, this branch logic moves from one general diagnostic category to another until an appropriate match is made, and then to more specific diagnoses within that category. While many forms of branch logic can be employed, this concept is illustrated in Figure 1.1 for a type of branch logic relying on the hierarchical ordering of diagnostic categories, proceeding progressively from organic brain syndromes and eventually to nonpsychiatric disorders.

Regardless of the mental operations used to arrive at diagnosis, and the form of medical record keeping used for documentation, the entire diagnostic process is simply a reformulation of the scientific method. It is an inductive reasoning process, derived from a body of information, which attempts to apply the best hypothesis (i.e., diagnostic label) available to account for the problems of the patient and then to test this hypothesis by utilizing the best known

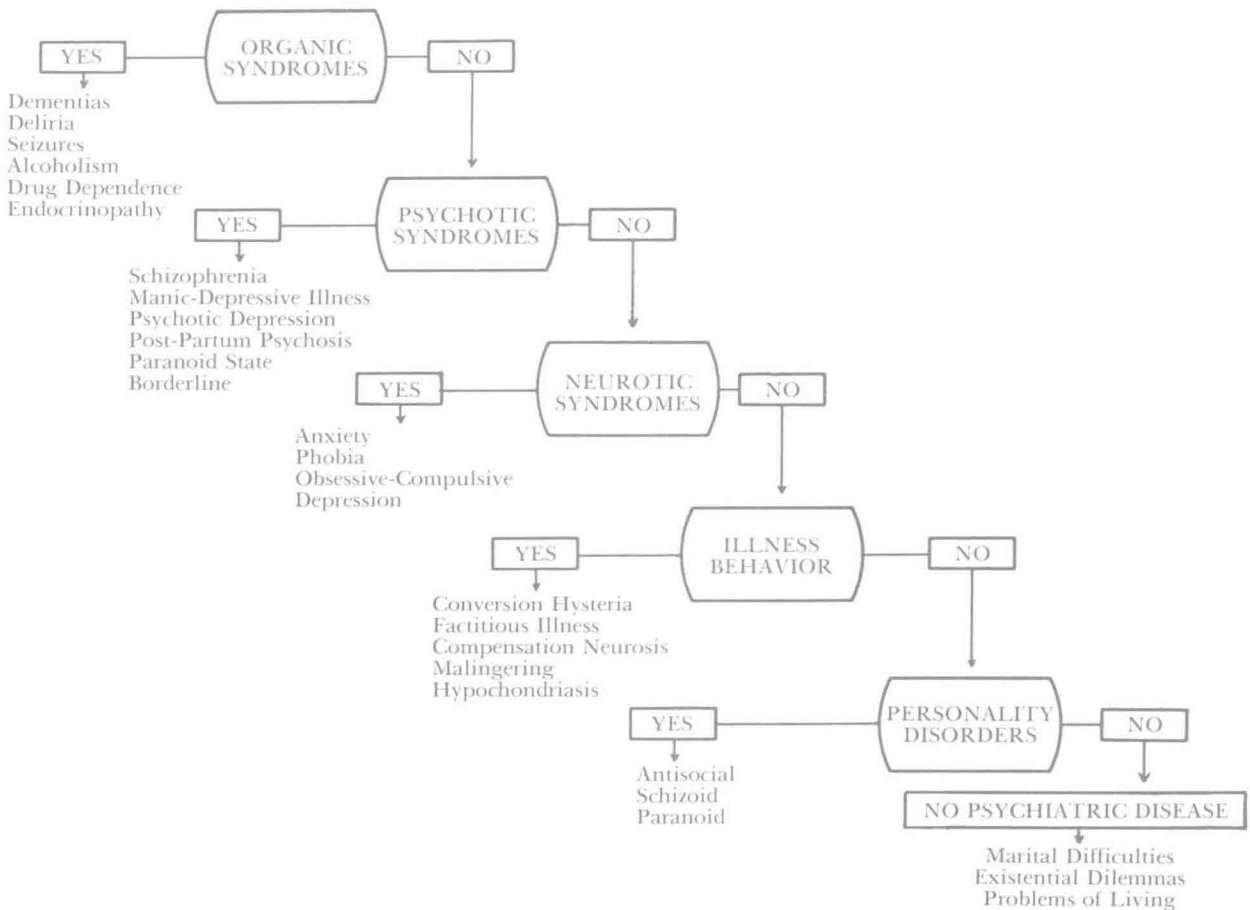
treatments to remedy the problem. This process also presumes that the clinician will always be open to new sources of information which do not support his working hypothesis and which, therefore, require the consideration of alternative hypotheses. As long as this basic process is followed, it makes little difference whether the clinician gathers and records information according to a traditional medical format, the problem-oriented format or an idiosyncratic format, since all should serve identical purposes—namely, hypothesis testing and problem solving. This point is illustrated in Table 1.1.

### THE MEANING OF SYMPTOMS AND SIGNS

A definition of symptoms and signs is necessary since they play such a vital role in differential diagnosis. Symptoms represent subjective complaints. They are labels employed by the patient to describe the nature of his distress, discomfort, or dysfunction. As such, they are greatly influenced by culture, socioeconomic status, intelligence, and symbolic capacity. There is no objective way to determine if they are “real” or “true” (e.g., pain, illusions, hallucinations). Certain symptoms may be nonspecific to many diagnoses (e.g., “nerves”); other symptoms may be highly specific to limited diagnoses (e.g., “peculiar smells”). The clustering of certain symptoms and their association with certain signs facilitate diagnosis.

Signs, on the other hand, represent objective findings which can be reliably agreed upon by experienced or trained observers. They pertain to all varieties of abnormal, deviant, or unusual behavior, findings on mental status, physical or neurological examination, or results of laboratory and diagnostic tests. In general, they can be observed, measured, quantified, reproduced, or substantiated by the patient, the physician, or others.

The primary signs and symptoms indicative of disease are often characterized by five major



**FIGURE 1.1** Branch Logic in the Diagnostic Process

features: (a) with the exception of genetic-congenital conditions, they indicate a change from a prior healthy state; (b) they represent deviations from an appropriate reference group for the individual; (c) they display varying probabilities of association (e.g., certain signs occur almost always with certain symptoms, and conversely); and (d) their cross-sectional patterns of association may differ from their patterns over time. The primary disease, in turn, may give rise to nonspecific secondary signs and symptoms associated with impairment in psychological and social functioning (4).

When different *patterns of symptoms and signs* are associated with different patterns of morbidity and/or mortality, different diagnostic labels are used to distinguish among these patterns, each of which is presumed due to natural causes. The diagnosis of disease, then, represents an attempt at categorization of information and a probability statement regarding the expected association among the presenting symptoms and signs, their course over time, underlying pathologic findings and their possible etiologic basis (5). For most of the typical, “functional” psychiatric diseases, the physician can usually

TABLE 1.1 The Physician as a Problem-Solving Scientist\*

Scientific Method	Problem-Oriented Medical Record	Traditional Medical Record
Define the <i>Problem</i>	Problem	Chief Complaint
Gather <i>Data</i>	S Subjective Complaints	Hx History of Present Illness Past Medical History Family History Social History Review of Systems
	O Objective Signs	PE Physical Examination MS Mental Status Examination (Lab Studies and Tests)
Formulate a <i>Hypothesis</i>	A Assessment	Dx Diagnosis DDx Differential Diagnosis
Test the <i>Hypothesis</i>	P Plan	Rx Treatment Plan
If necessary, utilize test results as further data to formulate a new hypothesis	Utilize results of treatment plan as further data to reassess and revise treatment plan	Utilize results of treatment plan as further data to re-evaluate diagnostic assessment and revise treatment plan

\* Adapted from Brown University, Department of Psychiatry, Bio Med 369 Syllabus, 1976-1977.



elicit the cardinal symptoms and signs within the context of the clinical interview to make the probable diagnosis. For atypical conditions or neuropsychiatric or medicopsychiatric disorders, a more extensive information base will be required.

## The Clinical Interview

The diagnostic process starts at the very moment of initial contact with patients and long before the collection of a complete data base. In fact, the clinical interview and subsequent evaluations are successfully shaped by a series of progressively more specific hypotheses about the nature of the patient's disorder. Relative diagnostic uncertainty gives way to relative certainty as potential diagnoses are simultaneously eliminated by contradictory data and probable diagnoses confirmed by compatible data. This transition from "possible" to "probable" to "definite" diagnosis may take place within the first two to three minutes of the clinical interview (6-8) or may await more detailed information or evaluation.

### RULE OF "THE FIVE VOWELS"

Just as the four general rules of inspection, palpation, percussion, and auscultation govern the physical examination, comparable rules pertain to the conduct of the clinical interview. These are the rules of "the five vowels," i.e., *audition*, *evaluation*, *inquiry*, *observation*, and *understanding*.

Through *audition*, the physician listens to the patient's content of thought, relative coherency of verbal communication, and personal evaluation of the problem.

Through *evaluation*, the physician judges reliability and consistency of the report, sorts out relevant from nonrelevant details, and assigns weights and priorities to all the information. He then constantly matches this accumulated infor-

mation against high-probability diagnoses and population norms. The relative concordance or discordance of the match determines the nature of subsequent clinical probes and further evaluation.

Through *inquiry*, the physician probes into necessary areas and elicits information not spontaneously or readily volunteered.

Through *observation* of the patient, the physician notes deviations or incongruities in appearance, unusual behavior, or variations in mood. Most important, he attends to all varieties of nonverbal communication. Regardless of what the patient says or does not say, he simply cannot not communicate.

Through *understanding*, the physician adopts an empathic posture and attempts to appreciate the concerns, apprehensions, and confusion of the patient, all those factors which interfere with optimal communication in an interview situation.

### REASON FOR REFERRAL

Even before the patient is first seen, the presumed reason for referral already provides the clinician with some basic hunches about potential diagnosis, the type of information to be collected, predictable characteristics of the ensuing doctor-patient relationship, expected treatment compliance, and prognosis. This is because psychiatric patients are brought to the attention of general physicians or psychiatrists for one of two reasons. Either *they are disturbed*, or *they are disturbing* others.

If they are *disturbed* (i.e., hurting or seeking relief), it is more probable that their office visit or hospitalization will be voluntary, that they will be reliable informants (within limits of cultural variables, psychological mindedness, and intelligence), that they internalize the cause of their problems and assume some degree of responsibility for them, that they are neurotic or suffering from a situational or reactive disorder, that they will comply with treatment plans, and