

treatment. It is also important to know how long patients are maintained on drugs, how frequently they return to the physician, what other drugs may have been prescribed by this or some other physician, and so on. Detailed longitudinal data on patients and physicians is difficult to obtain and seldom, if ever, available on a national basis.

Senator NELSON. Are you talking about all drugs here?

Dr. LEVINE. Yes. This will hold true for all drugs. We will present information on psychotropic drugs specifically.

More commonly available are data on physicians' prescribing behavior which cover a limited time period and provide only limited information on the patient, usually no more than age, sex, and current diagnosis. In those instances where longitudinal data on prescribing behavior are available, it is seldom possible to follow individual patients over time. Thus, most data currently available on prescribing behavior must be interpreted with caution.

#### THE NATURE OF PSYCHIATRIC ILLNESS

Before proceeding to a discussion of the extent of drug use in the treatment of psychiatric disorders, it is important to point out that the etiology of the major psychiatric disorders is essentially unknown. Psychiatric disorders, therefore, are descriptive constellations of psychological symptoms or psychopathology shown by an individual. In some cases the psychopathology may be observable by others in the behavior of the individual, but in other cases it is only by the patient's description of his subjective experience that the disorder is detected.

For example, in some patients with depression we may observe that the individual's movements and thinking are slowed. There may be a loss of appetite evidenced by lack of eating and an inability to have normal sleep characterized by early morning awakening. If the patient is asked, it is likely that subjectively he will report feeling blue and unhappy, a loss of energy and interest in his surroundings, feelings of guilt, and perhaps even a desire to be dead. The point to be made is that the diagnosis of mental disorders is difficult because the etiology is unknown, no objective laboratory tests exist, and heavy reliance is placed on the subjective report of the patient. Treatment, therefore, is directed for the most part at relief of subjective symptomatology and the guidelines for when medication should or should not be used are not as clear and definite as, for example, indications for the use of antibiotics, diuretics, or antihypertensive agents. Psychotherapeutic agents act by unknown mechanisms to reduce the level of symptomatology of patients but do not, to our knowledge, directly affect the causative agent of the illness in the same manner as antibiotic agents attack the microbes which cause infectious diseases.

#### CLASSIFICATION OF PSYCHOTROPIC AGENTS

For purposes of orientation to our presentation, I would like to present a classification of psychotropic drugs which is based primarily on clinical use of these agents and secondarily on their chemical structure. Other classifications based on pharmacological action or other parameters are possible and perhaps more comprehensive, but we have