

American Handbook of Psychiatry

MEDICAL PSYCHOTHERAPY

A General Systems Approach

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Medical Psychotherapy: A General Systems Approach

Medical psychotherapy is the application of psychotherapeutic principles and techniques to the emotional and behavioral responses of individuals who are catastrophically and/or chronically ill (Balint, 1961). It includes all of the traditional approaches to problems of behavior that fall under the broad label of psychotherapy: psychoanalytically oriented psychotherapy (Sifneos, 1972), behavioral therapy (Wolpe, 1958), client-centered psychotherapy (Rogers, 1954), psychopharmacology (Klein, 1969), family therapy (Ackerman, 1970), group therapy (Lieberman, 1973), and sociotherapy (Edelson, 1970). In short, any interaction between a physician and a patient—frequently without the conscious awareness of either party—carries the potential for a psychotherapeutic relationship.

In this chapter a deliberate effort is made to focus on the general rather than the specific problems encountered by such patients. All of them experience an upheaval in their total psychophysiological equilibrium, requiring adjustments on their part in the spheres of self-concept, family, and community. During the past several decades, investigators have studied a number of disease processes that have long been identified as having major psychological aspects. Franz Alexander's "Holy Seven" (Alexander, 1948)—bronchial asthma, hypertension, peptic ulcer (Karush, 1968; Karush, 1969),

neurodermatitis, thyrotoxicosis, ulcerative colitis, and rheumatoid arthritis—still dominate the scene as *the* psychosomatic diseases. Other investigators have demonstrated that diseases such as myocardial infarction (Friedman, 1959), diabetes (Hinkle, 1952), and cancer (LeShan, 1958; Peck, 1972; Pilowsky, 1969) also have major psychological correlates.

Recently, attention has been focused on the reactions of patients to specific procedures and environments and the experience of illness itself. These studies focus on Hemodialysis (De-Nour, 1970; De-Nour, 1972), intensive care units (Kornfeld, 1965), cardiovascular surgery (Kimball, 1969; Kimball, 1972), transplantation (Eisendrath, 1969), cataract surgery (Weisman, 1958), plastic surgery (Goldwyn, 1972), burns (Andreasen, 1972) and chronic pulmonary disease (Agle, 1973). The reader is referred to the specific sections in Vol. 4 of this *Handbook* for an overview of the literature referable to these conditions.

The Role of the Psychiatrist in Liaison-Consultation Activities

The subject of liaison psychiatry is discussed in Volume 4, Chapter 36 of this *Handbook*. Since it is difficult to mark the precise division between evaluation and therapy, it is important to reexamine briefly the role of the psychiatrist in the non psychiatric inpatient and outpatient services of a general hospital.

Psychiatry is emerging as a collection of several languages through which behavioral problems may be approached. These languages are developing at a prodigious rate, and they extend far beyond the confines of psychiatry to the social and behavioral sciences. The student of psychiatry who is training in a modern academic center needs to learn several of these conceptual approaches if he is to adequately evaluate and identify appropriate therapeutic measures for a variety of behavioral situations. While these approaches are not mutually exclusive, each represents an attempt to view behavior in a logical framework of reference that involves hypotheses, methods, observations, and conclusions. The psychiatrist who uses several conceptual approaches to behavior functions to a large extent as a general systems analyst, selecting one or several models for formulating the diagnostic and therapeutic approach to a specific problem (Bertalanffy, 1950; Grinker, 1967).

Among the currently useful models available to the psychiatrist are (1) dynamic psychiatry; (2) behavioral psychiatry (learning); (3) biological psychiatry; and (4) social psychiatry (Lazare, 1973). The model identified here is largely based on dynamic psychiatry. However, it is important to emphasize that these principles have been applied to patients sustaining catastrophic and chronic illness on the basis of detailed examination of patients with many different illness problems. The therapy of such individuals must always remain particular for the case involved. The therapist

must become intimately familiar with the facts of the underlying disease, its treatment, and the relationship between the patient and his physician, as well as with the patient's life situation, personality, and reaction to illness. A general approach is never a substitute for precise attention to the details of a patient's experience.

Compatible with such an approach is the use of pharmacological agents, sedative-hypnotics, analgesics, major and minor tranquilizers, antidepressants, conditioning therapies (DiCara, 1968), hypnosis (Gill, 1959; Wolberg, 1948), relaxation therapy (Jacobsen, 1938), or electroconvulsive therapy. These methods facilitate improvement in certain defined conditions, but they are not alternatives to the psychotherapeutic relationship between the patient and his doctor. Similarly, group and family processes that attempt to define both the commonality and the uniqueness of similar illness experiences are adjuncts rather than alternatives to the one-to-one doctor-patient relationship.

The Medical-Psychiatric Interview

The interview is the *sine qua non* of the diagnostic and therapeutic approach to the patient (Kimball, 1969). It is the vehicle through which physician and patient establish a relationship which in turn influences the ongoing data collecting and therapeutic aspects of the interview. The interview

is not restricted to a verbal interchange but is based also on nonverbal communications (Birdwhistell, 1960). Awareness by the physician not only of the patient's facial expressions, hand movements, and changing bodily positions but also of the physician's own nonverbal expressions are essential to understanding what is going on in the interview process. The senses of touch and smell are also useful in collecting data from patients and relating with them.

Together, the verbal and nonverbal processes assist the physician in the essential task of accumulating the data needed to formulate a diagnosis and therapeutic plan. In the process of accumulating the data, he communicates a sense of competency and self-confidence that reassures the patient that the strange and disturbing symptoms and signs of his complaint may be understood and approached. The physician, through listening, allows the patient to express his feelings about these symptoms. He assists the patient in clarifying the chronology and patterns of the illness, which leads the patient toward a more objective observational approach. At the same time, through the explanations of the physician, the patient learns something of the meaning of his complaints.

Determinants of the Interview Process

The medical psychiatrist's work is facilitated by an awareness of what

his patient brings to the interview situation. He becomes familiar with his patient's biological predisposition to physical and emotional stress, his life cycle status, and his defensive style. The physician also adds his own determinants to the interview situation. Having this data in mind allows the physician to make more rational decisions about the medical and psychological management of the patient.

The Illness-Onset Situation

Before considering the medical-psychiatric interview as such, it is of interest to look into some of the hypotheses as to why illness occurs at a given time. Many of these hypotheses will remain touchstones for the physician as he collects the raw data of the interview. Recently, the attention of investigators has turned toward an examination of the multiple factors associated with the onset of illness. Repeated studies emphasize the high correlation between stressful environmental and social situations, psychological reactions, and physiological symptoms and signs (Kahn, 1960; Rahe, in preparation; Rahe, in preparation).

Real or symbolic social situations representing *loss* are seen as contributing to changes in psychological status. Engel and Schmale identify the situation of loss as precipitating the "giving-up—given-up" complex (1968). This is described as: (1) an affect of helplessness or hopelessness; (2)

a sense of inadequacy in the ability to cope; (3) a feeling of being trapped; (4) a diminished sense of the future; and (5) a preoccupation with past misfortunes and tragedies. They suggest that in this state the individual exists at greater risk and is more vulnerable to physiological and psychological decompensation. At times of stress, individuals showing this psychological reaction are liable to pathophysiological decompensation of vulnerable organ systems because of concurrent physiological changes. For instance, the individual with structural heart disease, leading to a psychological state associated with an altered state of metabolism, at times of stress, is more likely to develop congestive heart failure than an individual without structural disease (Chambers, 1953). The enlisted soldier with a high serum pepsinogen and significant psychological vulnerability, when exposed to the stress of basic training, is more likely to develop peptic ulcer disease than an enlistee with a low serum pepsinogen and less psychological vulnerability (Weiner, 1957).

The relationship between stress and onset of illness is not only manifest at the time of first occurrence but is also present for exacerbations of the same condition (Reiser, 1951). In the latter situations, it behooves the clinician to attend to possible stimulus-response patterns. An identification of recurrent patterns may lead either to a modification in the social system or to altered responses to similar stimuli. These responses may be learned either through traditional psychotherapeutic techniques, in which the patient

becomes aware of relationships and consciously alters them once the conflict behind the bodily response has been uncovered, or through various behavioral techniques. The setting of each recurrent exacerbation of illness needs to be identified in terms of environmental events and psychological reactions that may be associated with the process. In addition to the reaction of the patient to illness, on-going social stresses and his psychological reaction to them may need to be identified, investigated, and therapeutically dealt with by social services as well as by the clinician-therapist.

The Patient and the Life Cycle

Another major touchstone in the physician's orientation to the patient is his perception of the patient's place in life (Lidz, 1968). Age, sex, ethnic background, religion, and profession are among the major orienting variables around which the physician develops a picture of the patient (which may or may not be correct). Much of the interview process involves substantiating or deleting the physician's biases that have been based on this picture. Age, for example, immediately elicits a list of possible disease processes that are more or less age-specific. Sex, race, profession, and socioeconomic status increase or decrease the possibility of a specific disease factor, as well as modifying its presentation and the patient's reaction to it. The physician needs to make himself aware of conscious and unconscious prejudices based upon these variables. To the extent that he is able to do this, it will augment his diagnostic

acumen and also help to sensitize him to his own reactions to patients.

A knowledge of the life cycle, in such terms as Erikson's (1963) "eight ages of man," is helpful to the physician in identifying where the patient is in his negotiations with life. For example, if the physician can recognize that an adolescent with diabetes mellitus may inappropriately use the illness in attempting to cope with those tasks of adolescence identified by Blos (1960) (sexual identity, separation from parents, and career projections), this then becomes an essential and frequently the major focus of treatment. Again, it depends upon a physician's knowledge of life cycles as to whether he recognizes that a middle-aged woman experiencing an organ-referable complaint may have a covert depression reflecting an involitional situation (with fears of the consequences of her changing physiology, the "loss" of her children, increasing distance from her husband, and an indeterminate sense of the future).

The coping processes of individuals in relation to catastrophic and chronic illnesses are different at different times in the life cycle, depending also on their previous experiences with sickness. The young person with a congenital heart problem may view himself as having been cheated by his parents and feel that life owes him something (Kennedy, 1966). The middle-aged man confronted with debilitating and progressive illness may work out his depressive reactions, with his physician, by identifying the objective tasks

he must perform: putting his affairs in order; and providing for the continued well-being of his wife and children (Bowers, 1964).

The Patient and Personality Factors

Early in the course of the interview, the therapist becomes aware of psychological processes in his patient through which the latter attempts to control and monitor emotion. The emotions and the defenses that serve to regulate the expression of emotion, together with cognitive aspects of behavior, suggest patterns that are identified as personality styles. A consideration of such styles is useful for the physician who models his diagnostic and therapeutic evaluation on their early identification (Dollard, 1950).

Personality styles may be regarded as the result of an exaggeration of one or several normal defense patterns, patterns that have become fixed and stereotyped responses to external or internal processes that make an individual feel anxious or otherwise unpleasant. (More recently, the displeasure associated with a depressive reaction has also been conceived as a basic affect state against which the organism defends [Engel, 1962].) These responses to anxiety and depression serve to bind experiences in such ways as to maintain a relatively stable state, helping to keep in check the unpleasant emotions generated around conscious or unconscious conflicts.

When these conflicts come too close to the conscious life of the patient and cause feelings of displeasure, or the displeasure generated by actual experience in conscious life becomes too great, the individual utilizes the defensive patterns that have been useful in the past. These patterns, for our purposes, may be viewed as deriving from both the genetic predispositions and the learned experiences of the individual. The patterns may be considered pathological when they are over-determined in response to the initiating stimulus, resulting in behavior that is maladaptive for the biological and/or social adjustment of the individual.

An individual who reacts to any consciously or unconsciously determined affect of displeasure with a stereotyped, non-selective, rigid set of defenses may be considered to demonstrate a psychoneurosis. The characteristic defenses used by the individual on a repetitive basis in response to stress will serve to identify his neurotic style. All individuals may be considered as having life styles characteristic of and polarizing more closely toward one neurosis rather than another. However, so long as these are effective in maintaining a stable state that is not maladaptive for the individual in most of his life experiences, they are not considered pathological. It is when they are employed inappropriately, at unsuitable times, that they no longer serve adaptively for the individual. Rather, they lead toward disharmony with life, in terms of the individual's inner tranquility and his interaction with the environment. At the same time, it is

pertinent to recognize that these styles may serve as a protection against a less adaptive state and further disintegration of the ego.

The Basic Defenses. These are characteristic verbal means whereby an individual attempts to allay or modify the experience of anxiety or depression that occurs in response to conscious external and unconscious internal processes. Of the large number of defenses, the following are presented and grouped for identification and definition (English, 1964).

1. Denial, suppression, and repression are processes used by an individual in attempting to eliminate feelings or thoughts from conscious life that usually give rise to unpleasant affect. The processes may be thought of as being somewhat on a continuum, varying from a deliberate conscious effort to an effort of which the individual is not consciously aware. These terms should necessarily require an identification of what affect or conflict is so being handled. For example, an individual may deny an event such as illness by a flat statement that he is well, or by a failure to acknowledge either to himself or others that he experiences any affect relating to that event. Suppression is a more or less conscious effort to keep from thought an incident that causes the experience of discomfort, whereas repression is a process whereby the conflict that could give rise to a feeling of displeasure is neither consciously identified nor accepted.

2. Intellectualization and rationalization are specific maneuvers that an individual uses in order to avoid experiencing the affect associated with uncomfortable events or the thought of them. The individual binds the event in so many verbal explanations that he is often able to convince himself (auto-suggestion) that there is no need for further concern about this event.

3. Displacement and projection are means by which an individual attempts to rid himself of the affect associated with a conflict, or of the conflict itself, by attributing it to another event or identifying it as actually existing in another individual.

4. Reversal of affect occurs when an individual attempts to deny the real affect experienced in relation to a conflict, and to demonstrate or suggest that he is instead feeling the opposite emotion.

5. Introjection is considered a primitive means of coping with a conflict and with emotion. The individual fails to identify the objective existence of the conflict as only one part of his life. Instead, he incorporates it and elevates it as the central concern of his life, to which all of his actions are related. In other words, the individual comes to represent, or *be*, the actual conflict or situation that has caused discomfort. In doing so, he may be said to become the affect by acting it out, and by so doing he loses his own autonomous ego functioning.

6. Sublimation, in contrast, is a highly sophisticated process whereby the libidinal energies associated with (usually) sexual and aggressive conflicts or events are directed or channeled toward activities and concerns that are adaptive for the individual's security and welfare.

7. Obsessive and compulsive mechanisms are those defenses whereby the organism attempts to deny or repress conflicts by means of involved, worrisome thought processes or complex, ritualistic physical activity. The obsession or ritual is only symbolic of the repressed conflict.

8. Regression is a kind of mental withdrawal and retreat from the use of more sophisticated defense processes to more primitive ones. The term is essentially an ambiguous one, inasmuch as it refers to both psychological and behavioral processes that do not necessarily correlate with one another.

Many other terms could be listed that identify defense processes and/or the behavior exemplifying these processes. To a large extent, any such activity of an individual may be interpreted as representing a psychological mechanism serving to bind the affect associated with an unconscious conflict and/or as a means of keeping the conflict from the conscious life of the individual. When these activities fail, the individual may be so flooded with the affect associated with the conflict that he can no longer pursue life-facilitating activity. Instead he must seek refuge in an increasing distortion of

reality in order to escape from the tortures of uncomfortable affect.

Neurotic Personality Styles. When characterized by increasing rigidity of thought and action, these represent combinations of defense mechanisms that have become so formalized and stereotyped and so pervasive in the life of the individual that they no longer serve the specific defense purpose for which they were originally intended. Instead they are employed indiscriminately by the individual in his interaction in life, thereby becoming inefficient and maladaptive. It is possible to hypothesize an almost infinite number of more or less specific neurotic patterns based upon the various combinations and permutations of basic defenses. However, several investigators (Fairbairn, 1952; Kahana, 1964; Ruesch, 1948; Shapiro, 1965) have identified personality styles that appear more basic than others and that are pragmatically useful for the clinician, both from the standpoint of diagnosis and therapy. These are: (1) the obsessive-compulsive; (2) the paranoid; (3) the hysterical; (4) the impulsive; (5) the depressive; and (6) the infantile.

Obsessive-Compulsive. The individual with an obsessive-compulsive personality is frequently hard-working, conscientious, industrious, and perfectionistic. His habits are marked by orderliness and stereotypy, his work by rigidity and inflexibility. He cannot accept change, which may in fact cause his behavior to become even more rigid and stereotyped. Things have to be

just so. There needs to be a place for everything and everything needs to be in its place. Until this state is achieved the obsessive cannot sit back and rest, and since things are never just right he is always busy, always thinking about something that needs doing. Even when he is sitting still, he needs to somehow be doing two things at once. If he is looking at television, he is also doing something with his hands. While he listens to music his thoughts are far afield, turning to something that he is planning or needs doing. In all that he does there is a sense of urgency, a need to get things done and over with, while at the same time his perfectionism may drive him to exact repetition until things are the way they should be.

There is only one way, one method, one perfection. This one way is dictated not so much by the individual as by his conscience, or superego, which seems to have moved in, dominating and directing his every action. Such emphasis on an idealized perfection frequently interferes with productivity. The inability to deviate prevents innovation. On the other hand, the individual may do extremely well performing technical tasks requiring unswerving attention to detail and rigid adherence to procedure. As long as there is work to be done, a task—anything that will provide a structure for him to organize and direct his activities—he is able to bind his underlying anxieties by compulsive activity. His style of thinking is stimulus-bound, dogmatic, opinionated, and appears unresponsive to anything anyone else may say. This is not necessarily because the other person is disagreed with,

but more likely because the obsessive-compulsive is unable to countenance or hear anything that will distract from the thought sequence already in motion. Such an interference would upset everything, resulting in chaos and anxiety.

When not in absolute control of his environment—i.e., when not at home or in a familiar and secure work situation—the obsessive-compulsive experiences a pervasive sense of uneasiness that leads to a stilted social manner and posture, lacking in spontaneity and burdened with perfunctoriness that is made only more acute by the individual's self-awareness. While often opinionated and dogmatic in responding to peripheral issues, the individual, when confronted by a problem central to his own life, is plagued by doubts, reservations, and deliberateness. This leads to indecisiveness, failure to act, frustration, and, finally, anxiety or depression and an awareness of inadequacy, missed opportunities, and resulting loss. The lack of a sense of self is everywhere apparent as the individual attempts—always unsuccessfully—to adopt one role and then another, which, in his continual search for absolute perfection, he disregards in turn because of the failure of each to satisfy his superego demands. He never does anything exactly because he wants to, but rather because he should. This style serves to weave a web in which the individual is eternally entrapped and which prevents him from ever doing anything of his own in his own right, hence assuring that he will never achieve any real satisfaction or gratification.

The more entrenched and formidable these patterns become, the more maladaptive they are, tending to result in increasing purposeless and goalless activity. The importance of recognizing these styles lies in their prevalence among patients. At a time of illness and of resulting increased anxiety, such patterns usually become exaggerated. The physician who realizes this can help his patient to overcome this anxiety by working with the patient in structuring his illness experience in ways that reinforce the patient's need for control. This is frequently accomplished with a precise outline of what is wrong, what needs to be done, and when it will be done, with gratifying results for both patient and physician. When the neurotic patterns become so formidable as to interfere seriously with the social and domestic functioning of the individual, there is generally a need for further exploration and treatment by a psychiatrist. At times of increased stress, these patients may exaggerate latent phobias that may respond to conditioning therapies if treated early.

Paranoid. The paranoid individual is best characterized by a single word: suspiciousness. He is at every moment on the watch for the overt or covert insult, slight, or potential threat to himself and the world that he has built around him. Such a style attempts to protect him from his sense of vulnerability and penetration. His fear of violation demands that he be ever on guard against all manner of attacks on all sides at all times. To this end he scans word and picture, deed and talk, the slightest movements or sounds in

his perceptual sphere, for the personal message they may have for him. The fear (and its underlying wish that he might be slighted or otherwise selected for vulnerability or honor) is projected outward onto the environment, which is always viewed as menacing and hostile.

At the same time as he experiences an omnipresent fear of external control, the paranoid individual exercises intense internal control. There is a lack of spontaneity in his behavior that leads to a loss of affective expression. Constant preoccupation with autonomy leads to a narrowing of behavior. Rigidity and intentionality characterize his external behavior, which is always calculated and frequently gives the impression of being feigned or imitative. Whether the individual gives an external appearance of furtiveness and constriction and suspicious apprehensiveness, of aggressive edginess and arrogance bordering on the megalomaniacal, or of rigid preoccupation, the quality of hyper vigilance is ever present. Beneath these facades, almost always hidden from public view, are extreme hypersensitivity and feelings of shame and inadequacy that the externalized projections have been erected to shield.

The paranoid position is both a psychological and a physical one. The individual is in a continuous state of mobilization in preparation for an emergency. In this defensive vigilance there is continual muscular tension. In situations in which the predisposed individual is threatened with real or

fantasized injury, these usual modes of perception are exaggerated, leading to a loss of a sense of proportion and to behavior out of context with the social situation. Delusions may occur that dramatize the internal fears of the individual. At the same time there is a frightening intactness and internal logic to the delusion that may escape the unsuspecting physician and may only be detected after talking with the patient's relatives and family.

When threatened with physical injury or discomfort, the paranoid patient exhibits high-level anxieties and defenses. At these times he will view the environment with even more than his usual suspicion and will need very simple, direct explanations from all those working with him to account for what is wrong, what is to be done, and how it will be done. Even then, the physician and staff should be prepared for constant criticism and antagonism from the patient. Understanding that an acutely anxious and sensitive individual exists beneath this facade will tend to alleviate the negative reactions of the staff in response to these projections.

Hysterical. The basic mechanism of the hysterical personality is the repression of underlying conflicts, resulting in emotions that are often out of context and always out of proportion to the environmental or social stimulus. The hysteric lives his life by reacting to stimuli with affect, projecting theatrical, seductive, and exhibitionistic presentations of himself. A single affect, however, is rarely sustained, and the general mood is one of

fleetingness and changeability. At times, especially around issues or incidences likely to give rise to affects of displeasure, the hysteric appears unconcerned. This style—the lack of sustained presentation—has caused investigators to note the apparent shallowness of the hysteric’s behavior and to suggest an underlying sense of inadequacy and core of depression or emptiness.

The affectual style is matched by an equally superficial cognitive style characterized by a global approach to events—that is, grasping events in their totality by visual impressions rather than by careful and detailed analysis. There is an incapacity for intense or persistent intellectual activity, but rather an exaggerated tendency toward distraction, vagueness, and suggestibility. The hysteric shows an obliviousness to factual detail and an inability to describe things with sharp definition and precision, contributing to an impression of naiveté, incredulity, and deficient intelligence. Ideas are not developed but are seemingly pulled out of the air, or they materialize as hunches and are presented in their initial form as accomplished fact. There appears to be a failure in the ability of the hysteric to work through any thought or problem according to traditional logic.

It is suggested that the purpose of this mode of behavior and cognition is to deliberately prevent the individual from taking a look at himself, thus shielding himself from an awareness of the underlying emptiness and

uncertainty that he vaguely feels. Such an individual, confronted with catastrophic environmental situations or physical difficulties, reacts in characteristic dramatic ways that are often marked by exhibitionism or indifference. The hysteric may not be able to summon the necessary attitudes for the remediation of problems and may need the reassuring guidance of the physician. This is best provided in a matter-of-fact manner that suggests certainty and allows for the dramatic, though medically irrelevant, productions of the patient. Hysteric patients do not require precise and detailed descriptions of their illness. In fact, they may often become extremely uncomfortable when such descriptions are attempted. The denial utilized by such a patient in regard to his illness (which may interfere with diagnostic procedures or therapy) may require ingenious efforts on the part of the physician to convince the patient, through processes that defy logical explication.

Impulsive. In the impulsive personality, there is an impairment of normal feelings of deliberateness and intention. Individuals with this handicap seem to act on impulse, whim, or urge. Action is unplanned and instantaneous, abrupt and discontinuous. It is as though there were a short circuit between stimulus and response, whether arising internally or externally. Impulsive activity is not limited to small and inconsequential acts. It may also be involved in monumental and frequently catastrophic ones, such as robbing a bank. The incriminated individual may offer the seemingly

shallow but matter-of-fact explanation, "I just felt like it," without any show of affect. However, on closer scrutiny, it would seem as though the act itself is a way of handling an affect that is only dimly perceived, never documented. It would also appear that such persons have a low tolerance for frustration or tension.

It may be hypothesized that impulsive personalities lack a discriminatory perception of a range of emotions. Rather, at the time of feeling a vague discomfort, they strike out in a way that often appears antisocial. This has led many to view impulsive individuals as lacking in the development of a superego, or conscience, but on closer scrutiny one is struck with their rigid conformity to the prevailing moral and social code, even in the face of contradictory behavior. This pattern is also reflected in the concrete and passive thinking that is manifested. Odd behavior is explained in terms of having been made to do the inappropriate act by the simple mechanism of projection. That is, because an urge to do something has been felt, this is offered as the complete explanation for the act. The individual's concern rarely extends beyond the immediate boundary of his own existence. There appears to be either an absence of or intolerance for imagination or speculation. Thought is devalued and sacrificed for the physical act, in which there appears to be more compulsion than pleasure.

Because of this, the impulsive person appears to be lacking in the ability

to have meaningful and empathic relationships with others. Other people are viewed in terms of their use or compliance in some immediate action at hand. The impulsive person's inability to see himself objectively assures that reflectiveness and revision are not part of his style. Individuals with impulsive disorders may become sociopaths, alcoholics, and drug addicts, because their perceptual and cognitive styles lead to indiscriminatory behavior and dependency on objects outside of themselves. When such an individual is confronted by physical difficulties, both of these results may be exaggerated in the face of rising anxiety and frustration. The physician aware of the predilection of his patient to such actions may allay some untoward precipitous and catastrophic behavior by attempting to anticipate the anxiety. This may be done by simple formulations of what the difficulty is, how it will be investigated and treated, and what the prognosis is, with the physician setting matter-of-fact limits in terms of his own or the hospital's authority. Longer-term care may require frequent, brief reinforcement of the terms of the initial contract between patient and physician.

Depressive. A case may be made for a basic depressive style of life. It is characterized by reacting to internal or external events less with anxiety than depression and less with an active response than with one of withdrawal. It is a style marked by passivity, and one that is easily and readily vulnerable to environmental manipulation. While it contains characteristics also found among the hysteric and impulsive styles, it is less ritualized, less structured,

and in many ways more primitive. While many individuals may react with a giving-up—given-up state in the face of insurmountable catastrophes, the depressive is always so predisposed. The precipitating stimulus is frequently mild and sometimes merely imagined. A psychological and physical withdrawal immediately ensues. The psychological stance includes ideations of inadequacy and emptiness, sometimes proceeding to more aggressive self-condemnation. More often, expression is given to fears of being left, abandoned, or ignored, and to attitudes of helplessness or hopelessness.

Depressive individuals are inordinately dependent on external supplies coming from others in the environment and seem to have an omnipresent fear that these will be denied them for one reason or another, usually because they feel undeserving. Their whole life style appears to be one of assuring an ever-present supply, and their behavior is a manipulative attempt to achieve this. Their behavior is marked by a passive aggression that defies the environment to deny them their just but undeserved due. Since they are always fearful that external resources will be withdrawn and that they will come face to face with their own emptiness, much of their cognitive style is aimed at achieving involved and symbiotic relationships with others. When there are no others around with whom to make these involvements, the search for refuge from internal feelings of displeasure may lead to dependence on drugs or alcohol. When there is a sense of total abandonment, the characteristic posture is one of helplessness; and when this is not

effective in securing the attention and help of others, a hopelessness may ensue that defies help.

The passivity of this state is not without aggressive manipulation, which is directed both at the self and others. The individual entrapped in it is vulnerable to his own destructive acts as well as prey to persons who would take advantage of him for their own purposes. It is more than likely that the depressive state itself has correlative biological aspects that make the individual more vulnerable to the environment. At times of physical illness, the patient with this predilection gives up and becomes entirely dependent on the environment. He may do this even while maintaining the semblance of independence through defiance. The depressive state thus calls for a reassuring, sympathetic, nurturing attitude on the part of the physician and nursing staff, who may also have to decide to what extent regression is to be allowed. The description presented here should not suggest that these individuals lack perception or even great capability at times when they are not faced with the threat of diminished external supplies.

Infantile. The infantile personality described by Ruesch (1948) is mentioned here because it contains characteristics that have been given for the preceding five. Thus the infantile personality is more amorphous and results in less rigid, formalized, and consistent patterns of cognition and behavior. Ruesch identified it as the core problem in psychosomatic medicine,

listing its characteristics: (1) arrested or faulty social learning; (2) impaired self-expression channeled through either direct physical action or organ expression; (3) a persistence of childhood patterns of thinking and ideation; (4) dependency and passivity; (5) a rigid and punitive conscience; (6) overextended ideals; and (7) an absence of the ability to integrate experience. Ruesch, less concerned with specificity factors, did not offer an explanation as to why one organ system rather than another was chosen for the expression of conflict. Rather, he outlined a therapeutic approach—rare in the history of psychosomatic medicine—for physicians working with patients having infantile or immature personalities. This included: (1) reeducation through benevolent firmness; (2) instruction of the patient as to the manipulative and implicit content of his complaint; (3) reduction of long verbal productions to single words or sentences concerning problems; (4) externalization of feelings and emotions as objectifications in their own right, rather than resorting to organ expressions and complaints; (5) acceptance of the patient himself as a psychological and biological entity distinct from others; and (6) the model of the physician as a consistent, accepting, available, and self-expressive person.

Physician-Related Determinants

The physician also introduces his person into the interview situation, in terms of both his physical presence and his personality. An awareness of the

effect his physical presence, its appearance, and his personality may have on a patient will help him to understand the various forms that the relationship takes. He may in time learn to use these in a facilitative way in relating with his patient.

The physician also comes to the interview with various feelings that may determine its course. He may be rushed, preoccupied with other problems, hungry, or fatigued. As far as possible, he needs to attend to these feelings in order to be comfortable and relaxed during the ensuing interview. At times it may be appropriate to communicate some awareness of these pressures to the patient.

The physician likewise comes to the interview with prejudices and biases related to his stage in life, sex, social position, religion, ethics, and politics. Each one of them consciously or unconsciously intrudes upon his relationship with the patient. An identification of these biases as they affect his relationship with the patient is a necessary part of the physician's task. Added to this are the biases generated in the physician by the patient's own sex, social position, and so forth. The latter biases will need to be identified and objectified as fact or non fact during the course of the interview.

Generally and specifically, the physician-therapist, in the course of his relationship with patients, will identify with a patient in a number of ways.

The identification may be in terms of life stage, problems, sexual attraction, and/or the patient's reaction to illness. Becoming aware of and acknowledging the identification is the first step in evaluating its adaptive or compromising effect on the patient-physician relationship. Once aware of the feelings and secondary defenses generated by this identification, and with the conflicts involved, the therapist is in a better position to be objective. The awareness by the physician of identification or of other defenses will lead him to an assessment of their applicability in a constructive patient-physician relationship. In some physician-patient relationships, the identification itself may be utilized in a positive way, especially if it leads to empathy.

There are many patients, illness processes, and procedures that are anathema to a physician. An analysis of these reactions by the therapist will be required if a relationship is to evolve. Physicians react with the same basic emotions and defend against these feelings with the same defenses as their patients do. Attitudes towards chronicity, debilitation, and death are also present in physicians, although usually rigidly defended against, and they may need help in coming to a recognition of these feelings and reactions. A psychiatrist who works with physicians caring for patients with catastrophic and chronic illnesses will assist them in this process of awareness. In turn, the psychiatrist participating with his colleagues in such a process will need assistance in working through his own feelings and defenses in regard to many of the problems on which he is asked to consult.

The Extended Interview as Medical Psychotherapy

Medical psychotherapy commences with the initial medical interview, which is the vehicle for the therapeutic process (Kimball, 1969). Crucial to the success of the relationship and accumulation of data that are the objectives of the interview are: (1) making sure that the patient is as comfortable as possible; and (2) assuring an environment that is a quiet one in which distractions are minimal and confidentiality is assured. The interview begins with the contract, which is both implicit and explicit. Both physician and patient have implicit expectations about each other. The patient has a complaint and sees the physician as someone who can diagnose and subsequently alleviate suffering. The physician sees the suffering patient as someone who seeks him out in the anticipation that suffering will be alleviated, based on the former's application of knowledge and skill.

The psychiatric physician referred to a non psychiatric patient may come to the initial interview with extensive information about the patient's condition and the referring physician's reason for the consultation request, but he needs to view his relationship with the patient as commencing in the here and now. The consultant's first task is to make himself aware of and attentive to the patient's comfort before beginning the formal interview. It is also important that he make the situation as acceptable as possible to his own needs. Bedpans may need to be removed from under patients and emptied,

television turned off, doors closed, beds raised, and so forth. The consultant must try to understand what is going on at this moment with the patient in his attempt to adjust to his altered state of health. He may open the dialog with a simple question such as "How are you feeling?" or "Can you tell me about your illness?"

From this point on, the physician's task is to stay with the patient, following his lead in focusing on the seemingly random and spontaneous subject matter brought into the interview. Whatever the patient introduces into the conversation is data for the physician in his effort to understand what is going on. Not only is it the physician's task to accumulate verbal data, he must also consider the manner in which this material is discussed, and with what emotion; when it is presented in the course of the interview; and whether or not the verbal identification reflects the actual circumstance. In listening to the words, he needs to listen also to their possible other meanings (Graham, 1962). He must always observe the patient's facial expression, his posture, the attitude of the body, and the use of hands and feet. Do the emotional expressions of affect match up with what is being said? At the same time, the physician has the opportunity to observe the general environment of his patient, the disarray of the bed clothes, the orderliness of the bedside table, the reading material scattered on the floor, the carefully aligned slippers next to the bed.

The dialog frequently begins with the patient's immediate illness problems. This is what the patient is feeling and what he is most interested in talking about. Allowing the patient to speak freely about his illness accomplishes several therapeutic objectives: it suggests the patient's ability to cope with his feelings about catastrophic illness; and it provides the physician with important facts about the illness, its onset, its course, and the negotiations that have already taken place in the patient's acceptance and partial resolution of this event. At this stage of the interview, the psychiatrist may facilitate this process by helping the patient focus on: (1) the symptoms and signs of illness; (2) the setting in which the illness occurred in terms of the environment; (3) who was present at the time of illness; (4) the steps taken by the patient to remedy his discomfort and secure assistance; and (5) what the patient thought was happening. A precise description by the patient of these aspects of the illness assists the physician in gaining an understanding of the illness. Simultaneously, through this process of clarification, as the patient orders his experience into objectified awareness, he can stand at some distance from it and join with his therapist in the slow process of making the necessary adaptations.

The Grieving Process as a Therapeutic Model

Catastrophic illness comes as a shock, especially for the individual with little illness experience. It brings in its wake the slow realization of

vulnerability and mortality. Illness represents a loss. It is responded to by the patient in ways partially predictable from his defensive style and partially determined by the more or less predictable process that begins with any such loss, or threatened loss. The psychological reaction to loss may be conceptualized as a bereavement, or grieving, process. Assisting the patient through the grieving process in terms of the extended interview is the core of medical psychotherapy. The process (Engel, 1961; Lindemann, 1944) is conceptualized as having four phases: (1) denial; (2) ventilation of affect; (3) defensiveness; and (4) reconstitution. Although these may be seen as sequential, they overlap and recur with diminishing intensity over a period of time with the patient's gradual acceptance of and resignation and adaptation to the losses and limitations incurred by the illness. Specific techniques, useful in assisting the patient to work through this process, are identified (Castelnuovo-Tedesco, 1965; Colby, 1951).

Denial. During the early phase of illness, the patient may often deny his illness or deny the feelings that he has about illness. Denials of illness, or of the effects associated with illness, often involve delay by the patient in obtaining assistance or his refusal in accepting appropriate medical intervention (Cassem, 1971). Until this denial is confronted, life-saving efforts by physicians may be thwarted, resulting in deterioration in the patient's condition and engendering frustration and hostility, at first, on the part of the attending physician. Such patients need to be directly confronted with their

condition in matter-of-fact terms, at the same time allowing for and giving permission for the ventilation of anxiety, sadness, and anger. It is not until the denial is confronted and broken through that the patient will begin to accept his condition and engage in the treatment process.

Ventilation. In Western society, particularly in the hospital environment, the process of ventilating unpleasant affects such as anxiety, sadness, and anger is difficult for patient and professional staff alike. Patients (men more frequently than women) attempt to repress or displace emotions attendant to catastrophic illness and the dislocations that such illness brings about in their lives. Similarly, physicians and nurses, in an attempt to maintain distance and objectivity as well as to preserve their own equanimity, all too frequently attempt to suppress the expression of emotion by patients. It is often necessary to give permission to the patient to express his feelings. This may be done by asking the patient how he feels or suggesting that he does not look very comfortable. Once the patient has begun to express his feelings, the physician needs to resist his own inclinations to intervene with reassurances, the proffering of a tissue, or a defense against the anger that the patient may be directing toward him. Rather, whatever techniques the physician has learned that can help him to facilitate expression by the patient will enhance his therapeutic prowess at this stage. Silence at such times is often of great value, especially when facial expressions communicate "It is all right" or "I understand." Ventilation of emotion may need to be a daily

process until the patient has begun to find adequate coping processes for coming to grips with his condition.

As the physician follows the patient's lead in eliciting an account of the present illness, he will note frequent reference by the patient to other illnesses, other life events, other persons. That these facts and feelings are introduced at a specific time in the interview is always pertinent and should be further identified at that point by simple repetition, such as "Your father . . ." or "You say you were seven when you had your appendix out". ... In this way the therapist is assisted in extending back in time his knowledge of his patient as a person, while noting the past associations that the patient makes to his present circumstance. An interview conducted in this manner does not regiment a patient's presentation of himself along a stereotyped history form. It allows for the easy backward and forward movement of the individual along the life continuum. If the physician finds it useful to structure the content of the interview either on the basis of chronology or in some other way, he may do this periodically during the interview or at the end of it by a succinct summary. Summarization allows the physician to order his own thoughts, with the patient in attendance to make appropriate addenda and corrections. It also serves to communicate to the patient that he has been heard and that some ordering and sense has been made out of his complaint.

Subsequent interviews with the patient may begin by asking how the

patient is feeling and frequently may progress through sequences similar to but more abbreviated than earlier ones, with particular points explored in greater detail. Again, emotional correlations with verbal presentations are compared, and the ventilating process is facilitated. As the relationship between physician and patient develops through identification of the personality traits and the particular life history of the patient, increasing attention may be directed toward the defensive patterns used by the patient in handling his feelings about his illness. The initial denial and anxiety characterizing the early phases of catastrophic illness are always present, but they become less marked. They are replaced by a second phase characterized by sadness (and sometimes other aspects of depression) and by defenses characteristic of the patient's personality prior to illness.

It is during this phase, when anxiety and sadness may be overwhelming—especially for patients also afflicted with an impairment of cognitive processes and in the unfamiliar environment of an intensive care unit—that psychotic-like delirium may be precipitated. The psychological significance of this behavioral state may be that it represents the last defense the individual has against the multiple insults of the illness and the environment. Patients demonstrating such behavior frequently are seen to emerge from the interlude with ventilation of affect still to be accomplished.

The sadness of the second phase of self-grieving is frequently difficult to

assess. It may be characterized by many of the phenomena associated with grieving subsequent to loss, which is appropriate for catastrophic illness. The patient is indeed now grieving for a loss of a part of self in terms of function and role. The symptoms and signs of this stage of grieving include many of those associated with depressive syndromes: vegetative signs comprising disturbances in appetite, sleep, libido, and body symptoms; and mental feelings of inadequacy, inability to cope, despair, hopelessness or helplessness, inability to project a future, and, sometimes, suicidal preoccupation. These features have been variously conceptualized as reactive depression, the giving-up-given-up state (Engel, 1968), depression-withdrawal (Engel, 1962), and reactive withdrawal. The degree and intensity of the symptoms and signs are perhaps the clearest guides for the clinician as he evaluates the significance of this stage in the patient's illness. This is best done by the frequent and close observation of the patient, and especially by attending to his verbal behavior.

Following major surgery, during the second week, it is not unusual to observe a patient who turns away from family, friends, and the physician, sleeps long hours, eats minimally, and reacts to solicitations with irritability and annoyance. This behavior is especially ungratifying to clinicians who have, in their own minds, triumphantly attended the patient through the critical period, and is viewed as both undesirable and possibly pathological. Many of these patients are in fact communicating that they are aware of their

behavior, that they are worn out, that they feel that they have "made it," and that all they want to do is to be left alone. They feel a need to withdraw (lick their wounds) and can do so quite well in private. This response, viewed as a form of conservation-withdrawal (Engel, 1962), appears both psychologically and perhaps even physiologically appropriate to acute exhaustion and trauma. Such a phase is self-limited and may cease more or less abruptly during the third week of convalescence.

When more depressive elements are present, the possibility of a reactive depression and/or the giving-up—given-up syndrome must be considered. The intervention of the clinician in this state is appropriate. Depression may suggest that the patient has not moved through the second phase of grieving (ventilation of affect), and is attempting to repress these feelings by inappropriate defenses such as anger turned inward, guilt, and projection, which lead to maladaptive behavior interfering with recovery. The therapist may need to reopen the wounded ego, allowing once again for the outpouring of anxiety, anger, and sadness before he can assist the patient into the third stage of grieving, that of ascending the scale of defenses.

Defensiveness. In the third stage, the reaction of the patient to catastrophic illness and loss is seen as having progressed from denial through ventilation of emotion to the use of increasingly sophisticated defenses in the control of affect. This defensive stage is viewed as one in which the patient

ascends from denial, shame, guilt, projection, displacement, identification, rationalization, intellectualization, and other defenses to attain sublimation. Again, this is an approximate process, with as many regressions as forward steps. It is rarely accomplished during the acute hospitalization period, and much remains to be done at the time of discharge to the continuing care unit, the convalescent or nursing home, and, even later, upon return to social and community roles. Coincident with the more sophisticated psychological processes involved in handling the emotion generated by reaction to illness are the actual coping steps taken by the patient in facilitating his own rehabilitation and adaptation. The clinician's task during this phase of therapy is to work with the patient in sorting out the adaptive and maladaptive defenses and coping styles. Inappropriate defenses may need to be met by directly confronting the patient with their maladaptiveness or, indirectly, by giving him an opportunity to examine examples of his behavior or that of other patients with similar conditions. Confrontations may lead the clinician to the identification of new or old unconscious conflicts that have been brought nearer to consciousness because of illness. Some of these may be identified by listening for the patient's reports of dreams, whose manifest or near-manifest content is frequently profuse and vivid during this period. Depending on the seriousness of these conflicts and their nearness to the patient's present life-field they may deserve immediate attention or may be deferred until a later time for definitive investigation and treatment. During

this phase of the therapeutic process the therapist helps the patient gain self-reassurance by exploring with him the positive assets of self, in terms of previous accomplishments, family, and social relationships.

Since many of the problems confronted by patients during the convalescent stage of illness are realistic ones, didactic approaches are of considerable value. Often these approaches have been used with groups of patients with similar disease processes (Williams, 1970). Groups serve to assist the patient in identifying with other individuals in a similar situation and to begin to exchange confidences as well as sometimes useful methods of coping with a disability. Therapists working with these groups can introduce didactic instruction regarding the dos and don'ts of treatment, some common problems met by patients with a particular handicap, problems encountered by spouses, sexual counseling, and reintegration problems at home and work. Individual family counseling has also been useful. It provides an opportunity for the therapist to work with a family in exploring the emotions and attitudes experienced by individual members in reaction to the patient, the shifts that have occurred in the home as a result of an absence, and the readjustments and problems that are and might be anticipated on the return home. Follow-up visits by the therapist in the home help the family and clinician to monitor the reintegration process. For many patients with chronic and extraordinary illness processes, the formation of special groups such as Mended Hearts, Ileostomy Clubs, Prosthesis Clubs, and so forth, proves

helpful in continuing this process of identification and sublimation by providing consultation services to other patients undergoing similar procedures.

Reconstitution. The final stage of grieving, that of reconstitution, rarely occurs in the hospital or during the immediate hospital period. It may never occur, or it may develop slowly through long and frequently painful months of rehabilitation. It is perhaps best epitomized by that individual who actively and constructively utilizes his handicap in helping others with a similar condition to pull through. Such an individual may continue to require therapy from time to time, but frequently he has learned to provide some of this himself through his ability to empathize with the experiences of others and to hear their problems without resurrecting his own resolved ones.

Throughout this process, the usual unspoken but omnipresent stance of the therapist is one of hope, of affording the suggestion of working together with the patient toward improvement in the patterns of coping (Frank, 1961; Frank, 1968).

Specific Psychiatric Problems on Medical Floors

Conversion

Conversion processes are among the most challenging and interesting

problems confronting consulting psychiatrists on the medical, surgical, and obstetrical floors. These frequently show themselves as pain (Engel, 1959). They are often unsuspected and undetected by physicians until after elaborate and sometimes traumatic investigative and operative procedures have failed to identify a pathophysiological basis for the illness. It is at this point that a psychiatric consultation is requested. In his interview with the patient the consulting physician may first be struck by the somewhat bizarre language with which the patient describes his symptoms. For example, a headache may be described as "seven little men inside my head hammering away." Subsequently the therapist may identify that the pattern of the symptom is atypical in terms of the usual physio anatomical presentation. In one patient, there may be glove-like anesthesia of the hand and wrist (i.e., loss of feeling which defies neurophysiological explanation). In another, the therapist may note an affect of relative indifference to a paralysis, known as "la belle indifference." In yet another, he may be impressed by a dramatic affect discordant with what would seem a relatively minor symptom. As the illness-onset situation is explored, the clinician may discover a time correspondence with a major social stress or a circumstance whose significance or even occurrence may have been and may still be denied by the patient. For example, after several interviews, the patient may suddenly recall that he had totally wrecked his automobile the day before the onset of symptoms. The identification of the illness-onset situation, once again, reveals

an event of actual or symbolized loss and vulnerability. The loss may be reacted to with the same grieving response described above, in which denial is subsequently replaced by more sophisticated defenses. During the third stage of grieving the process of *identification* occurs, a process sometimes manifested by a conversion reaction in which the bereaved attempts to "hold onto" the lost person by adopting one or more of his traits, including symptoms of illness. Conversion reactions are also quite frequent during depressive states, especially those accompanying involitional periods. A woman experiencing difficulty at menopause may develop itching or pain in the perineal area, which on further investigation is found to symbolize her concern over loss of reproductive functions.

The interpretation of the symptom is crucial to therapy involving a patient with a conversion process. A model almost always exists for this symptom. The model may be the dead person or another key individual in the individual's past or present life, a person about whom unresolved conflicts persist. Sometimes the patient himself serves as the model, in terms of utilizing a previously elaborated symptom for which there is no identifiable pathophysiology—much like the dog who, having at some time in the past injured his leg, now feigns an injured leg when scolded. Often patients with chronic disease patterns associated with symptoms such as angina pectoris or dyspnea, superimpose conversion reactions modeled after these symptoms. For example, the patient with a classic history of angina pectoris may develop

a conversion pattern based on this, with pain over the left nipple. The reactions, however, are rarely identical, although it takes a precise description in order to differentiate one from the other.

Secondary gains relating to conversion processes are examined last, only because it is all too easy to identify manipulative aspects related to illness. The best example of a secondary gain is probably that of the school child who awakens with a stomach ache and is kept home from school, and upon recovering has a perfectly great day at home with mother. The stomach ache may then begin to recur with increasing frequency, resulting in both a shorter period of resolution and more days spent at home.

In considering pain, the physician needs to be simultaneously aware of both the universal and the idiosyncratic, or private, experience of pain for the individual (Szasz, 1957). Universal pain may direct both the physician's and the patient's attention to a physio anatomical conceptualization. Private pain is endowed with subjective characteristics that are based upon the individual's unique ways of responding to pain, the memories he has of other pains, and the expectations that he has of others in responding to pain.

Symptom Formation

Symptom formation in conversion processes is theoretically as well as pragmatically interesting, as investigators attempt to obtain a clearer

understanding of how mental conflicts come to be manifested in physical symptoms or processes. One way of viewing conversion processes is to see them as the physical symptoms of psychological illness. From the above examples one might speculate that at some time in a patient's past, a memory trace related to a traumatic event has been established that is recalled or reinvoked when a new stress occurs in which the old trauma, or conflicts about that trauma, are resurrected. A possible mechanism for the sensitization of nerve-possessing structures that are secondary to psychological conflict is the antidromic phenomenon. That is, when the distal end of a sectioned afferent nerve is stimulated, an antidromic impulse occurs, resulting in the peripheral release of substance P, kinins, and histamines at the nerve ending. In this situation, in which a definitive physiological change may be observed, there is at least a model for possible psychophysiological mechanisms. Accordingly, it is possible to hypothesize that neurophysiological processes secondary to psychological activity in the frontal lobes could bring about such an antidromic response along afferent (and other) nerves innervating organ systems.

An extension of the conversion hypothesis to include the autonomic as well as the voluntary nervous system suggests that conversion processes and psychophysiological reactions may be similar processes (Engel, 1968). In each, the end organ selected is based upon a sensitized or vulnerable organ system that is used for the expression of an unconscious conflict. The reaction

attempts to resolve an unconscious conflict— symbolizing simultaneously the wish for and the defense against its actualization and ultimate resolution—by channeling it through a body process and thereby keeping it from consciousness. For example, a 33-year-old Catholic speech therapist and father of six changed jobs in order to increase his income, and for the first time he drastically altered his marital relations in order to preclude the possibility of another child. Shortly thereafter he developed paralysis of the left upper extremity. As the history unfolded, it was noted that the man had previously worked with hemi-paretic patients. Shortly after assuming private practice, he enrolled a 19-year-old woman in therapy. He saw her at her home in the early evening. Arriving at the home, he would be greeted by the woman's mother and escorted into the parlor, where he would place his tape recorder on a coffee table in front of the couch, sitting to the right of the patient. As speech therapy progressed, he began to arrive earlier and earlier and, as his wife later noted, began wearing his best suit. Presented to a neurologist, he was finally diagnosed as having multiple sclerosis. The above information was obtained through six interviews, during which time the patient's symptoms gradually diminished as he became increasingly conscious and accepting of the conflict situation and of the underlying emotions.

When a majority of these criteria are fulfilled, the diagnosis of a conversion reaction can be entertained on positive grounds, rather than by

the exclusion of pathophysiological processes after elaborate and oftentimes traumatic diagnostic and therapeutic approaches.

In many ways, the phenomenon of hyperventilation (often accompanied by aerophagia) may be conceptualized as a conversion process, fulfilling the criteria suggested above. In hyperventilation, the model is often the individual. There would seem to be a learned element in the development of this process, possibly extending back to the early difficulty in coordinating the complex acts of breathing and sucking-swallowing during nursing. In any event, an environmental situation symbolizing an internal repressed conflict triggers this common response, precipitating the symptoms of hyperventilation described by the patient: light-headedness; dizziness; wooziness; tremulousness; shortness of breath; tightness in the chest; "pins and needles" in the extremities; and muscle cramps. Signs of the condition include fainting, muscular spasms, rapid shallow respirations, yawning, sighing, and occasionally coughing. Hyperventilation is sometimes also seen in individuals complaining of *globus hystericus*, the symptoms of which are: a lump and tightness in the throat; an inability to swallow; and signs of gagging, regurgitation, and spitting. The latter condition still is seen most commonly among individuals who have conflicts over participating in fellatio (Fenichel, 1945), although in some individuals it would seem to relate more to an attempt to repress crying and even the production of tears. Although several traumatic situations may serve as models for the hyperventilation syndrome,

a frequent one appears to be the first sexual experience. Situations that stir unconscious associations with this experience and its unresolved conflicts precipitate the symptoms (and, secondarily, the signs) related to physiological changes induced by hyperventilation. A careful exploration, first of the symptoms and then of the situation, leads the therapist and his patient to a diagnosis. Frequently, over a few sessions, they reach an understanding of the dynamics of the process, including the secondary gains.

Hyperventilation is only one of several conversion processes in which symptoms that lead to physiological reactions re-enact the drama of an original situation that produced conflict around sexual situations. Many of the symptoms experienced among middle-aged men and women, when further investigated, reflect unresolved sexual conflicts. These include frigidity, impotency, infertility, dyspareunia, premature ejaculation, inability to achieve orgasm, and other complaints referable directly or indirectly to the genital apparatus (Courtenay, 1968; Dalti, 1969; Masters, 1970). The specific nature of the unconscious conflicts is varied. The conflict may have been satisfactorily handled for years with acceptable sexual practices until some disequilibrium becomes introduced into the marital situation, not the least of which may be aging or the pressure of adult responsibilities and obligations. Many parents of adolescents find increasing anxiety about their own sexuality as they witness the development of sexuality in their children and the vicarious identifications that are projected. Symptoms of sexual dysfunction

in this age group may be part of a greater decompensation of ego functions, such as depression or the increasing use of alcohol or other addicting drugs for whatever reason. Rarely can single determinants be identified as the *raison d'être* of these "middle-aged syndromes." The relationships are complex and cyclical, reflecting one or more disbalances in the current life cycle that resurrects conflicts previously held in check by adaptive mechanisms. Attention by the therapist to the total life field will assist him in determining which of the problems requires priority in treatment. Frequently, this will be depression, which, once diagnosed, can be approached by a variety of therapeutic routes—frequently a combined pharmacological and psychotherapeutic one.

Therapy of Conversion

As suggested above, the therapy of conversion begins in the interview process of listening to the patient's account of his illness, and taking note of the atypicalness of the symptom, the bizarre language with which it is described, the dramatic or unconcerned affect, the identification of recent loss, the presence of a model, the underlying psychopathology such as grief or depression, and secondary gains. As the therapist explores these aspects in detail over six to twelve sessions, the patient frequently begins to develop some insight into the relationship of the onset of the symptom with significant contemporary stresses in his life field. Not infrequently in this

process he will experience an *abreaction*; that is, the repressed conflict suddenly comes into consciousness along with the outpouring of intense emotion, anger, sadness, or anxiety. The therapist often first gains a handle on this process by helping the patient to become aware of the repressed grief experience or of an underlying depression. By focusing the attention of the patient on his grief or depression and working with this over several sessions, the therapist assists the patient in expressing these feelings.

With this expression of affect, the underlying conflict is brought to consciousness. The therapist is then in a position to help the patient work through the four stages of grief described above. When a depression is uncovered, the therapist can address his attention to it by using psychopharmacological agents such as the tricyclic antidepressants, or electroconvulsive therapy, while continuing the psychotherapeutic process. Frequently the dramatic abreaction does not occur, and insight by the patient into the conversion process is more slowly attained. Rather, the therapist gains remediation of the symptom complex through the use of suggestion and by helping the patient to gradually translate the symptom representing body language into an appropriate psychological concept such as depression or grief.

Cognitive Impairment

Early in the course of an interview, a patient may appear a bit slow in responding to the morning greeting, show some confusion when asked questions about events occurring on the previous day, have trouble following the physician's explanations, yawn, and answer slightly irrelevantly in a slow speech. The patient may be showing signs of mild confusion, inattention, and memory deficits. A review of the nurses' notes may turn up greater confusion, with disorientation in terms of time, place, and person—especially during the evening, which is suggestive of the so-called "sun-downer" syndrome in older patients. The patient is, in fact, suffering from delirium (Engel, 1959). One way of viewing delirium is as the psychological symptom of a physical process. Two of its essential characteristics are: (1) fluctuations and reversibility; and (2) a characteristic EEG pattern, with slowing and decreased amplitude of the alpha rhythm. In contradistinction, chronic organic brain syndromes (usually related to permanent morphological changes in the brain) are irreversible, and they present varying EEG patterns (including normal ones).

Signs

A brief examination at the bedside may help the physician uncover (1) *disorientation* in one of three areas—person, place, or time; (2) *memory impairment*—more often in the areas of recent and immediate recall (as in giving hack numbers backward and forward) and less often in relation to the

distant past. For immediate recall it is important to choose the numbers randomly and to space them equally in a monotone without identifying the ending. (Incidentally, it is helpful to have the numbers written down so that the examiner remembers them.) Another test for immediate recall is to ask the patient to count from one to twenty-two; then, after a three-minute wait to ask him to continue counting for three more numbers. For a test of recent memory, having the patient identify some of the events of the previous day will do. (3) *Attentiveness* and *concentration* may be tested by asking the patient to subtract seven from 100 and then seven from this answer and to continue doing so in the same pattern. If seven from 100 seems too difficult, three from 100 will do; even less difficult is the test of counting backward from twenty by twos. The significance of this test is that once the patient has started, he provides his own cues and does not rely on the stimulus of the examiner. Impairments in attention and concentration are frequently difficult to pick up unless tested for specifically. And (4) *Impairment in abstractive ability* may be spotted in the form of faulty reasoning in a patient's judgment concerning his daily activity. It may also be tested for by asking the patient to complete standard proverbs such as "A rolling stone . . ." or by asking him to find similarities, working from rather simple ones such as "How are an apple and an orange the same?" to difficult ones such as "How are a tree and a fish the same?"

On the basis of this brief examination the clinician may satisfy himself as

to the presence and quality of intellectual impairment in the areas of orientation, memory, concentration, and abstraction. When required, more formal and extensive testing is available, such as the Wechsler Adult Intelligence Scale (WAIS) Block Design Test, the Bender Test, and other tests. A convenient test is to ask the ten questions of Kahn and Goldfarb (1960), which may be used daily to identify changes in the mental status: (1) Where are you now? (2) Where is that? (3) What are today's date and day? (4) Month? (5) Year? (6) How old are you? (7) When were you born? Month? (8) Year? (9) Who is the President of the United States? (10) Who was President before him? A checklist of symptoms frequently associated with delirium has also been found useful in intensive care units (Kimball, 1972). On a five-point scale, nurses rate the status of eleven items: orientation, alertness, sleep, activity, appropriateness, anxiety, complaints, agitation, delusions or hallucinations, confusion, and mood. With ratings from the three nursing shifts, time fluctuations for the various factors can be identified easily.

The changes observed in mild states of delirium have been described. Moderate and severe states are characterized by more severe disruptions in each of the cognitive areas, with the development of illusions, hallucinations, and delusions, accompanied by increasing anxiety and agitation in reaction to these. At the extreme end are diminished levels of responsiveness and coma. In contrast, the earliest phase of delirium may be characterized by hyper alertness and hyper vigilance. The patient may observe that perceptions are a

bit sharper, colors brighter, and thought processes faster.

Causes

The causes of delirium are frequently specific, iatrogenic, and identifiable. The most frequent offenders are drugs. Of these, the most often incriminated in the hospital are barbiturates, which are hypnotic as well as sedative. Older people and children are most vulnerable to the effects of barbiturates and, paradoxically, frequently show irritability rather than sedation. For this reason, antihistamines such as diphenhydramine hydrochloride (Benadryl) have gained favor as nighttime sedatives in many hospitals. Other drugs frequently associated with delirium are analgesics—pentazocine (Talwin) is a frequent offender—and drugs used for the treatment of the underlying illness. The latter would include almost any medication.

Factors associated with the underlying illness and affecting the circulation to the brain constitute another cause of delirium. Circulatory factors may include not only a diminished supply of essential nutrients to the brain but also the accumulation of toxic products as a result of an impairment of venous return from the brain. In short, any disease process, and almost any medication used in sufficient quantities, can contribute to the development of delirium.

A third cause of delirium, frequently overlooked among surgical patients, is that associated with withdrawal and the use of unauthorized medications. Frequently a patient enters the hospital the day prior to surgery. Two to five days later, after an uneventful recovery, the patient may demonstrate increasing confusion and agitation. He is, in fact, suffering from alcoholic withdrawal. He may not match everyone's definition of an alcoholic. He may have reported only three or four highballs a night when queried about drinking habits. Nevertheless he has become physiologically dependent. A preoperative evaluation had ignored, or more frequently the patient has denied, a history of high alcoholic intake. Identification is the key to prevention and treatment. The patient may be in incipient delirium tremens. The mortality rate is high (15 to 30 percent) in this kind of medical emergency. Immediate and energetic intervention is essential, in terms of measures to support vital functions and calm the extreme agitation. Methods differ. Usually it is best to use the methods with which one is most familiar or those in vogue at a particular hospital. They include the administration of chlordiazepoxide (Librium), sodium amytal, or phenothiazines. Chlorothiazide (50-100 mg.) may be given orally or parenterally every thirty to sixty minutes until the insomnia and agitation are controlled. The cumulative dose required to control these symptoms is subsequently given every six to eight hours, depending on the condition of the patient.

With narcotic addiction, withdrawal symptoms develop after twenty-

four to forty-eight hours. Withdrawal can be accomplished with methadone. The amount will depend on the dose and purity of the narcotics the patient is on. It is most important to monitor the physiological and psychological signs and symptoms: agitation; lacrimation; rhinorrhea; nausea and vomiting; sweating; and diarrhea. Five to fifteen mg three times a day in decreasing doses over three days is usually effective to overcome physiological signs of withdrawal. Other patients may demonstrate alterations of consciousness in the hospital unexplained by either the authorized medications or the underlying disease process. These patients may have their own drugs or may be given drugs by visitors. This occurs even on well-supervised psychiatric services. Above all, a thorough examination of the patient is necessary. This may include laboratory examinations for the suspected drug. Depending upon the endogenous or exogenous chemical and its predilection for particular areas of the central nervous system (CNS) the picture of delirium may vary, with one or another of the stages heightened and of greater duration.

Treatment

The treatment of organic brain syndromes includes: (1) diagnosis; (2) identification of cause; (3) removal or remediation of cause; and (4) symptomatic support. Diagnosis, as suggested above, requires a high index of suspicion. It also requires paying attention to the patient's appearance, how he looks, how he speaks, and his motor behavior, as well as his verbal content.

Does he appear drowsy and lethargic? Is he hyper vigilant? Does he slur his speech? What are his pupils like? Does he make sense? Does he understand you? What have nurses, aides, and relatives observed in the past twenty-four hours? Is he a lonely old man without relatives who is quietly hallucinating unbeknown to the staff? Several of the causes of organic brain syndromes are obvious. Oxygen may help some patients with organic brain syndromes. For a patient with congestive heart failure, raising the bed to a more upright position may dramatically change his symptoms and identify the cause. The physician should ask what medication and treatment, including the corticosteroids, are being used. Can a suspect medication be changed, removed, substituted for? Different individuals respond differently from one analgesic, antihistamine, or sedative to another.

Supportive measures include the recognition that disorientation and confusion themselves generate anxiety and agitation. Calendars and clocks, radios and music may be useful. Lights may help prevent the development of illusions, which sometimes contribute to delusions and hallucinations. Contacts should be with a few, fully identified individuals. Simple and repeated reassurances by all who attend the patients are the order of the day. Of greater value is the attendance by a limited number of staff who reassure and reorient. "You are in this place." "It is one o'clock." "This is what happened." "We are doing this in order to take care of you." "Tomorrow this will happen." Brevity and conciseness are important, but more important, are

the patience, slowness, and repetition with which communications are made. When agitation is great and associated with delusions and hallucinations, the need for reassurance is equally great. The patient should not be left unattended. An aide is a good companion. She should not talk too much or enter into a discussion of the delusions. Relatives often are not good at this because they get too involved. Simple and concise reassurance and repetition are the best medicine.

Small doses of phenothiazines are usually successful in treating extremely agitated patients suffering from delirium. The objective is to calm the patient by suppressing his hallucinations and delusions without adding another medication that may have untoward effects of its own or interact adversely with other medications. Phenothiazines are cardiotoxic in terms of arrhythmias and may cause orthostatic hypertension, but in small amounts neither of these side effects is of great danger to bedridden patients. A small amount is defined as under twenty-five mg of perphenazine (Trilafon) a day, given orally if possible but otherwise intramuscularly. If given orally, the dosage should be 2 mg hourly or every two hours 3 or 4 times until the patient is quieter. Supervision and attention to vital signs is imperative prior to each new dose. Usually after six to eight mgs the symptoms are controlled. A maintenance dose of the minimal cumulative dose that has been effective should be given every eight hours thereafter. If effective and tolerated, this should be maintained for a week to ten days following the delirium. One

reason for this dosage and duration is that frequently it is this long before the contributing factors to the delirium are controlled. Another reason is that delusional and hallucinatory phenomena tend to remain with the patient, continuing to frighten him and possibly causing cardiac arrhythmias or other aspects of anxiety.

Patients experiencing delirium are and remain fearful that they are "going crazy." Frequently they are aware that the unconscious material that has been dredged to the surface tells them something about themselves and their conflicts, and this is rarely pleasant. A very few of these patients will need to review this development with a psychiatrist. Most, however, will be able to handle it as they would a bad dream or nightmare. When they have recovered, it is helpful to talk and laugh with them about it. Understanding how it occurs may help—that it is the brain reacting as an end organ to unsatisfactory chemicals in the same way that a heart goes "wacky" with too much coffee or adrenalin or digitoxin. In this way anxiety may be reduced, leaving the individual to accept his natural boundaries again.

Delirium continues to be the most frequent adverse behavioral phenomenon that the consulting psychiatrist sees on the inpatient medical and surgical floors, accounting for up to 40 percent of consultation requests.

Death and Dying

The liaison consultant, in his or her work with physicians and nurses, is frequently called upon to help with the patient whose illness is rapidly progressive and terminal. To some extent, the concept of the dying patient is an arbitrary and relative one (Hinton, 1967). Most patients who come to the hospital for serious illness as well as for suspicious symptoms and signs have a naturally increased fear of vulnerability and death. In a sense, most adults have a sense of the possibility of death at any time (Kimball, 1971). We defend against this, appropriately or inappropriately, by a number of different psychological processes. As physicians, our defenses have developed early and have been constantly reinforced on the basis of our experience with patients during our training and work. In our work with other professionals around the dying patient, we need to begin with how we and they think about our own deaths, inasmuch as these attitudes determine our interaction or lack of interaction with patients. Sessions that explore these feelings and attitudes assist professional groups who are continually working with dying patients to help them communicate their feelings.

In working with the dying patient, it is essential to stay with what the patient feels, what he knows, what his thoughts are. By staying with these, the psychiatrist augments and facilitates his patient's expression, allowing for the development of empathy. Most physicians find this role difficult, imbued as they are with an unconscious if not conscious fantasy of their superhuman ability to prevent death. The dying patient usually knows that death is

inevitable and that he is dying, and no longer needs his physician's defenses to deny this fact. However, the patient does frequently need permission to ventilate his feelings to a neutral individual—the physician. This communication in and of itself is a vital life process, the expression of personal thoughts and feelings rarely shared with another individual. It is private, confidential and often confessional. In these communications, the physician permits and encourages the ventilation of affect, anxiety, shame, anger, and sadness. He assists the patient in examining appropriate and inappropriate defenses against these affects, depending upon the physical and psychological state of the person.

The level of the cognitive functions in the dying patient requires evaluation. The extent to which orientation, memory, concentration, and abstraction are compromised will determine the affectual and cognitive level at which the communication of the physician with the patient will take place. Many dying and terminally ill patients are thus compromised because of the underlying disease process and/or sedative and analgesic medications. Patients with organic brain syndromes demonstrate emotional changeability and cognitive disorientation, which prohibit abstract discussions and rational decision-making processes. These individuals require an attention on the part of the physician that allows for regression and supportive therapy. Supportive therapy includes reassurance, which frequently can be ministered through relatives who may understand from the physician what is going on

with the patient. Keeping the patient tied in with close family relationships frequently maintains orientation in the present.

Psychotherapy of the Dying Patient

The principle psychotherapeutic maneuvers that the therapist uses with dying patients are:

- 1) facilitating a self-grieving process; and
- 2) allowing a regressive process (Payne, 1964). In the first instance, the patient is permitted to grieve for his lost functions, physical and psychological: his diminishing control over life processes in terms of his physical functions, and the implications that this has for his participation in family, social, and professional life. These are real losses for the patient. By helping him and his family to acknowledge them, both can communicate the real emotions that such losses evoke. With this ventilation of affect, the therapist is in a position to help the patient objectify adaptive defenses from maladaptive ones. Appropriate defenses will assist the patient in coping with the life processes still in his control. These will vary, depending upon the life stage of the patient and the tasks peculiar to his life situation. For the mother of children not yet grown, her task may be to plan for the care of the children after her death (Norton, 1963). In this way, the dying patient gains some projection of herself into the future, and thus some assurance that she is continuing to fulfill her role as a responsible mother.

As death becomes more imminent with continual and rapid decrease of physical and often mental functions, the therapist assists the patient in delegating (to family members and others) increasing responsibility for tasks he formerly undertook. The patient is given permission to regress to a more dependent state in which he can accept the assistance of others, without the burden of guilt and ambivalence toward those on whom he depends. Examples of the regressive process include not only the permission for ventilation of affect but also the support of less sophisticated defense mechanisms such as identification, minimalization, and symbiosis (Kubler-Ross, 1969). The therapeutic art involved in regressive therapy is to stay with the patient's physical and mental state and to allow for fluctuations in this state. At one time the patient will be capable of functioning at a more sophisticated psychological state than at another. Throughout the course of regression, most patients will carry on with greatest facility if they have the close attention of immediate relatives. The therapist's task during the later stages of regression will often become increasingly directed toward the relatives, who are absorbing an increasing role in facilitating the process. As the patient's cognitive functions become increasingly diminished, the interaction between therapist, family, and others needs to become simpler and more direct. It should be largely aimed at the life events most meaningful to the patient, which usually include family and business affairs. By focusing attention on these, relatives and therapist often successfully maintain the

patient's orientation to the environment.

Concluding Remarks

The extended interview is seen as the vehicle of medical psychotherapy. It is based upon an ever-widening acquaintance with the patient, starting with his present illness stage, the gradual unraveling of that illness, the life situation of the patient at the time the illness occurred, the patient's previous experiences with life and illness catastrophes, and the patient's personality prior to illness. As this information gradually develops, patient and physician form a therapeutic alliance that is directed toward the facilitation of a grieving process: the patient grieves for his lost health and the functions also lost thereby. The therapist's role in the patient's reaction to illness is to assist him through the four stages of grief: denial; ventilation of affect; the defensive stage; and restitution. During these stages, the therapist uses such maneuvers as confrontation, clarification, interpretation, educational remarks, review of patient assets, and reassurance. Specific attention is paid to the therapy of patients with conversion processes, acute organic brain syndromes or delirium, and terminal illness.

The liaison role of the psychiatrist in the general hospital is discussed in terms of his relationship to the non psychiatric physician, nurses, and the patient's family. Adjunct therapeutic processes include pharmacological

agents, group and family therapy, and behavior therapy.

Bibliography

- Ackerman, N. W., J. Lieb, and J. K. Pearce, eds. *Family Therapy in Transition*. Boston: Little, Brown, 1970.
- Agle, D. P., G. M. Baum, and E. H. Chester. "Multidiscipline Treatment of Chronic Pulmonary Insufficiency: I. Psychologic Aspects of Rehabilitation," *Psychosom. Med.*, 35 (1973). 41-49.
- Alexander, F. and T. M. French. *Studies in Psychosomatic Medicine*. New York: Ronald, 1948.
- Andreasen, N. J. C., R. Noyes, and C. E. Hartford. "Factors Influencing Adjustment of Burn Patients during Hospitalization," *Psychosom. Med.*, 34 (1972), 517-52.5.
- Balint, M. *Psychotherapeutic Techniques in Medicine*. London: Tavistock, 1961.
- Bertalanffy, L. von. "An Outline of General Systems Theory," *Br. J. Phil. Sci.*, 1 (1950). 134-165.
- Birdwhistell, R. L. "Kinesics and Communication," in E. Carpenter and M. McLuhan, eds., *Exploration in Communication*. Boston: Beacon, 1960.
- Blos, P. *On Adolescence: A Psychoanalytic Interpretation*. New York: Free Press, 1960.
- Bowers, M. K., E. N. Jackson, J. A. Knight et al. *Counseling the Dying Patient*. New York: Thomas Nelson, 1964.
- Cassem, N. H. and T. P. Hackett. "Psychiatric Consultation in a Coronary Care Unit," *Ann. Intern. Med.*, 75 (1971), 9-14.
- Castelnuovo-Tedesco, P. *The Twenty-Minute Hour: A Guide to Brief Psychotherapy for the Physician*. Boston: Little, Brown, 1965.
- Chambers, W. N. and M. F. Reiser. "Emotional Stress in the Precipitation of Congestive Heart

Failure," *Psychosom. Med.*, 15 (1953), 38-60.

Colby, K. M. *A Primer for Psychotherapists*. New York: Ronald, 1951.

Courtenay, M. *Sexual Discord in Marriage: A Field for Brief Psychotherapy*. Philadelphia: Lippincott, 1968.

Dalti, Z. "Psychogenic Male Infertility," *Psychosom. Med.*, 21 (1969), 326-330.

De-Nour, A. K. "Psychotherapy with Patients on Chronic Haemodialysis," *Br. J. Psychiatry*, 116 (1970), 207-215.

De-Nour, A. K. and J. W. Czaczkes. "Personality Factors in Chronic Hemodialysis Patients Causing Non-Compliance with Medical Regimen," *Psychosom. Med.*, 34 (1972), 333-344.

DiCara, L. V. and N. E. Miller. "Instrumental Learning of Systolic Blood Pressure Responses by Curarized Rats: Dissociation of Cardiac and Vascular Changes," *Psychosom. Med.*, 30 (1968), 489-494.

Dollard, J. and N. Miller. *Personality and Psychotherapy*. New York: McGraw-Hill, 1950.

Edelson, M. *Sociotherapy and Psychotherapy*. Chicago: University of Chicago Press, 1970.

Eisendrath, R. M. "The Role of Grief and Fear in the Death of Kidney Transplant Patients," *Am. J. Psychiatry*, 126 (1969), 381-387.

Engel, G. L. "Delirium, A Syndrome of Cerebral Insufficiency," *J. Chronic Dis.*, 9 (1959), 260-277.

----. "Psychogenic Pain and the Pain-Prone Patient," *Am. J. Med.*, 26 (1959), 899-918.

----. "Is Grief a Disease? A Challenge for Medical Research," *Psychosom. Med.*, 23 (1961), 18-22.

----. *Psychological Development in Health and Disease*. Philadelphia: Saunders, 1962.

----. "A Life Setting Conducive to Illness: The Giving-Up—Given-Up Complex," *Bull. Menninger Clin.*, 32 (1968), .355-365.

- . "A Reconsideration of the Role of Conversion in Somatic Disease," *Compr. Psychiatry*, 9 (1968), 316-326.
- English, O. S. and S. M. Finch. *Introduction to Psychiatry*, 3rd ed. New York: Norton, 1964.
- Erikson, E. H. *Childhood and Society*, 2nd ed. New York: Norton, 1963.
- Fairbairn, W. R. *Psychoanalytic Studies of the Personality*. London: Tavistock, 1952.
- Fenichel, O. H. *The Psychoanalytic Theory of Neurosis*. New York: Norton, 1945.
- Frank, J. D. *Persuasion and Healing: A Comparative Study of Psychotherapy*. Baltimore: The Johns Hopkins Press, 1961.
- . "The Role of Hope in Psychotherapy," *Int. J. Psychiatry*, 5 (1968), 383-412.
- Friedman, M. and R. H. Rosenman. "Association of Specific Overt Behavior Pattern with Blood and Cardiovascular Findings," *JAMA*, 169 (1959), 1286-1296.
- Gill, M. and M. Brenman. *Hypnosis and Related States*. New York: International Universities Press, 1959.
- Goldwyn, R. "Operating for the Aging Face," *Psychiatry Med.*, 3 (1972), 187-195.
- Graham, D. T., R. M. Lundy, L. S. Benjamin et al. "Specific Attitudes in Initial Interviews with Patients Having Different Psychosomatic Diseases," *Psychosom. Med.*, 24 (1962), 257-266.
- Grinker, R. R. *Toward a Unified Theory of Human Behavior*. New York: Basic Books, 1967.
- Hinkle, L. E. and S. Wolf. "A Summary of Experimental Evidence Relating Life Stress to Diabetes Mellitus," *J. Mt. Sinai Hosp.*, 19 (1952), 537-570.
- Hinton, J. *Dying*. Baltimore: Penguin, 1967.
- Holmes, T. H. and R. H. Rahe. "The Social Readjustment Rating Scale," *J. Psychosom. Res.*, 11

(1967), 213-218.

Jacobsen, E. *Progressive Relaxation*. Chicago: University of Chicago Press, 1938.

Kahana, R. and G. Bibring. "Personality Types in Medical Management," in N. E. Zinberg, ed., *Psychiatry and Medical Practice in a General Hospital*, pp. 108-123. New York: International Universities Press, 1964.

Kahn, R. L., A. I. Goldfarb, M. Pollack et al. "Brief Objective Measures for Determination of Mental Status in the Aged," *Am. J. Psychiatry*, 117 (1960), 326-328.

Karush, A., G. E. Daniels, J. F. O'Connor et al. "The Response to Psychotherapy in Chronic Ulcerative Colitis: I. Pretreatment Factors," *Psychosom. Med.*, 30 (1968), 255-276.

----. "The Response to Psychotherapy in Chronic Ulcerative Colitis: II. Factors Arising from the Therapeutic Situation," *Psychosom. Med.*, 31 (1969), 201-226.

Kennedy, J. A. and H. Bakst. "The Influence of Emotions on the Outcome of Cardiac Surgery: A Predictive Study," *Bull. N.Y. Acad. Med.*, 42 (1966), 811-849.

Kimball, C. P. "Psychological Responses to the Experience of Open-Heart Surgery (I)," *Am. J. Psychiatry*, 125 (1969), 348-359-J

----. "Techniques of Interviewing: I. Interviewing and the Meaning of the Symptom," *Ann. Intern. Med.*, 71 (1969), 147-153.

----. "Death and Dying: A Chronological Discussion," *J. Thanatol.*, 1 (1971), 42-52.

----. "The Experience of Open-Heart Surgery: III. Toward a Definition and Understanding of Postcardiotomy Delirium," *Arch. Gen. Psychiatry*, 27 (1972), 57-63.

Klein, D. F. and J. M. Davis. *Diagnosis and Drug Treatment of Psychiatric Disorders*. Baltimore: Williams & Wilkins, 1969.

Kornfeld, D. S., S. Zinberg, and J. R. Malm. "Psychiatric Complications of Open-Heart Surgery," *N. Engl. J. Med.*, 273 (1965). 287-292.

Kubler-Ross, E. *On Death and Dying*. London: Macmillan, 1969.

Lazare, A. "Hidden Conceptual Models in Clinical Psychiatry," *N. Engl. J. Med.*, 288 (1973), 345-351.

LeShan, L. L. and M. L. Gassman. "Some Observations on Psychotherapy with Patients Suffering from Neoplastic Disease," *Am. J. Psychotherapy*, 12 (1958), 723-734.

Lidz, T. *The Person: His Development Throughout the Life Cycle*. New York: Basic Books, 1968.

Lieberman, M. A., I. D. Yalom, and M. B. Miles. *Encounter Groups: First Facts*. New York: Basic Books, 1973.

Lindemann, E. "Symptomatology and Management of Acute Grief," *Am. J. Psychiatry*, 101 (1944), 141-148.

Masters, W. H. and V. E. Johnson. *Sexual Inadequacy*. Boston: Little, Brown, 1970.

Norton, J. "Treatment of a Dying Patient," in *The Psychoanalytic Study of the Child*, Vol. 18, pp. 541-560. New York: International Universities Press, 1963.

Payne, E. C., Jr. "Teaching Medical Psycho-therapy in Special Clinical Settings," in N. E. Zinberg, ed., *Psychiatry and Medical Practice in a General Hospital*, pp. 135-168. New York: International Universities Press, 1964.

Peck, A. "Emotional Reactions to Having Cancer," *Am. J. Roentgenol. Radium Ther. Nucl. Med.*, 114 (1972), 591-599.

Pilowsky, I. and M. R. Bond. "Pain and Its Management in Malignant Disease: Elucidation of Staff-Patient Transactions," *Psychosom. Med.*, 31 (1969), 400-404.

Rahe, R. H. and T. H. Holmes. "Life Crisis and Disease Onset. I. Qualitative and Quantitative Definition of the Life Crisis in Association with Health Change," in preparation.

----. "Life Crisis and Disease Onset. II. A Prospective Study of Life Crisis and Health Changes," in preparation.

- Reiser, M. F., M. Rosenbaum, and E. B. Ferris. "Psychologic Mechanisms in Malignant Hypertension," *Psychosom. Med.*, 13 (1951), 147-159.
- Rogers, C. R. and R. Dymond. *Psychotherapy and Personality Change*. Chicago: University of Chicago Press, 1954.
- Ruesch, J. "The Infantile Personality," *Psychosom. Med.*, 10 (1948), 134-144.
- Shapiro, D. *Neurotic Styles*. New York: Basic Books, 1965.
- Sifneos, P. E. *Short-Term Psychotherapy and Emotional Crisis*. Cambridge: Harvard University Press, 1972.
- Szasz, T. *Pain and Pleasure*. New York: Basic Books, 1957.
- Weiner, H., M. Thaler, M. F. Reiser et al. "Etiology of Duodenal Ulcer," *Psychosom. Med.*, 19 (1957), 1-10.
- Weisman, A. D. and T. P. Hackett. "Psychosis after Eye Surgery: Establishment of a Specific Doctor-Patient Relation in the Prevention and Treatment of "Black-Patch Delirium," *N. Engl. J. Med.*, 258 (1958), 1284-1289.
- Williams, R. B., E. M. Overlan, J. H. Ryzewski et al. "The Use of a Therapeutic Milieu on a Continuing Care Unit in a General Hospital," *Ann. Intern. Med.*, 73 (1970), 957-962.
- Wolberg, L. R. *Medical Hypnosis*, Vol. 1. New York: Grune & Stratton, 1948.
- Wolpe, J. *Psychotherapy by Reciprocal Inhibition*. Stanford, Calif.: Stanford University Press, 1958.