
Background Context

- 1. An 18-year-old single white man was admitted to the hospital for an open-heart procedure. He was a thin young man who appeared anxious and sickly. At an early age, he had been diagnosed as having a congenital heart defect (tetralogy of Fallot). His mother was observed by the staff to be hovering over him always and generally overprotective. The patient was considered by the staff to be immature and impulsive.*
- 2. A 19-year-old single white man, John, has just graduated from high school with honors. This was a source of deep satisfaction for his family physician, because John has superior intelligence despite phenylketonuria, a hereditary disease that can cause severe mental deficiency if it is not diagnosed and treated early. In John's case, the condition was diagnosed at birth and treated with a specific (phenylalanine-free) diet. His family, with the help of the doctor, has successfully prevented the mental deficiency.*
- 3. If certain birds, such as mallard ducks, are first exposed to a human after hatching, they will follow that person and for the rest of their lives behave toward him as if he were their mother. This phenomenon, called "imprinting," occurs only during a limited period in early life, roughly between 16 and 32 hours after hatching.*
- 4. A 43-year-old married black man was admitted to the hospital with bronchial pneumonia. On admission, he was considered by the staff to be guarded and suspicious. History revealed that he had grown up in the South and as a child had spent an entire year in the hospital. The prolonged stay was due to chronic recurrent complications following surgery, and the child and his family had felt somewhat mistreated.*

Constitution (genetic plus early experiential factors); congenital conditions; perinatal, infantile, and early childhood environment; physical and personality development and familial influences; and broad cultural

factors constitute the background context of help-seeking behavior. Some of the factors are biologically programmed, for example, genetic factors and possibly imprinting phenomena similar to those observed in animals (vignette 3). Generally, traits reflecting background-context factors are relatively stable and not easily modified by the time the patient seeks help. Certain congenital anomalies, however, may be amenable to curative intervention at any time in one's life, as in vignette 1.

The physician should recognize that alleviation of a long-standing disability may require major psychological adaptation by the patient and the family. For example, some patients who have been blind for a long time due to cataracts may paradoxically become psychotically depressed or paranoid after an operation that is successful in restoring vision.

BACKGROUND CONTEXT IN THE BIOLOGICAL DIMENSION

The background-context factors in the biological dimension include the genetic endowment and other constitutional factors of the patient. The latter include nonhereditary congenital anomalies, such as the sequelae of rubella infection of the mother during the first trimester of pregnancy.

A genetic abnormality does not necessarily result in phenotypic expression. For example, in phenylketonuria, proper diet can completely prevent the mental retardation (vignette 2).

Certain physical and laboratory findings may serve as "genetic markers" of an abnormality or a predisposition to a disease. For example, long fingers and toes in conjunction with high arched palate indicate Marfan's syndrome. Persons with Marfan's syndrome are particularly predisposed to develop serious vascular disease (dissecting aneurysm) due to connective-tissue abnormality. Elevated serum pepsinogen level (which is a genetic trait) is a marker of those who are at risk for developing duodenal peptic ulcer disease. Interestingly, elevated serum pepsinogen is associated with certain psychological characteristics common in duodenal peptic ulcer patients (Weiner *et al.*, 1957). This suggests that the psychological characteristics may result from complex interactions among the effects of infant behavior, the genes that cause elevated serum pepsinogen, and the behavior of the mother during the child's development. For example, Mirsky (1958) postulated that infants with this genetic trait may have a higher than normal need for nurturance and loving contact, thus setting the stage for frustration of these needs if extra

amounts of care are not provided. This may lead to development of the psychological characteristics that result from conflict over dependency wishes. Background-context data at the biological level should include family history of diseases and illnesses, including alcoholism, substance abuse, psychiatric illnesses, and suicide.

BACKGROUND CONTEXT IN THE PERSONAL DIMENSION

The relatively stable (trait) characteristics of the patient as a whole constitute the background context in this dimension. They include the personality type, intelligence, general outlook and tendencies, attitudes, habits, and habitual psychological defense mechanisms and coping styles in the face of illness. The patient's personality type and his habitual defense mechanisms are important in his adaptation to the sick role (see also Chapters 5 and 18). The background-context personality factors generally represent *stable "givens"* that the physician and the health-care system must respect and work with, rather than "problems" to be treated. This is especially true in short-term treatment situations such as brief hospitalizations.

Information concerning the patient's *habits* may be helpful both in shedding light on the diagnostic process and in suggesting management approaches. Personal habits include drinking and smoking, drugs, personal hygiene, exercise, sleeping, and diet. Specific questions should be asked about habit patterns. For example, "How much do you drink? Every night?" "How long have you been smoking?" "Have you been smoking more or less recently, say, in the past month?" A history of excessive drinking in a jaundiced man suggests a diagnosis of alcoholic cirrhosis, and hemoptysis in a middle-aged man who is a heavy smoker suggests possible lung cancer. A patient who has a history of heavy drinking is at risk for developing delirium tremens if an acute medical condition prevents him from drinking. It may be necessary to give sedatives such as benzodiazepines prophylactically to such a patient who may be in the hospital for an acute medical condition unrelated to alcoholism.

Attitude toward illness is usually long-standing and determines the patient's illness behavior as well as sick-role performance. It is influenced by many factors, including the patient's socioeconomic status, religion, other cultural expectations, and personality.

The *coping style* in the face of illness is a concept described by Lipowski (1970). The concept is closely related to the patient's personality type (Chapter 18) and defense mechanisms (Chapter 5). In the presence of the specific threatening situation of illness, many patients tend to show one of the following two *cognitive* coping styles: *minimization* and *vigilant focusing*. Patients who minimize tend to use selective inattention—not hearing, not seeing, not understanding, or ignoring the facts or the significance of the illness or its consequences or both. Obviously, this type of cognitive coping tends to occur in conjunction with the psychological defense mechanisms of *denial*, *repression*, and *rationalization*.

Vigilant focusing is characterized by hypervigilance and is often associated with the orderly, exacting personality. The patient copes with the threat by paying sharp attention to the problem and attempting to know everything associated with it. There is often a constriction of awareness so that matters not relevant to the problem at hand may be ignored. *Isolation of affect* and *intellectualization* are defense mechanisms that are frequently used in conjunction with this cognitive coping style.

Personality as a Factor in the Pathogenesis of Disease

Some specific personality types and conflicts have been considered to be especially associated with certain specific medical diseases (Alexander, 1950). For example, peptic ulcer patients were observed to show exaggerated aggressive, ambitious, and independent attitudes as an overcompensation for repressed dependency needs and longing for love. Such a psychological conflict (between dependency needs and inhibition of them because of personal and social expectations) was considered to contribute importantly to the etiology of the "*psychosomatic*" diseases. Although there is often an association between patterns of psychological conflicts and certain medical diseases, such association is no longer considered to be etiological (although "core conflicts" may be related to vulnerability to disease, and their activation may play some role in precipitation of disease states) (Leigh and Reiser, 1977).

More recently, overt behavior patterns such as the *type A behavior* described by Friedman and Rosenman (1974), characterized by ambitiousness, competitiveness, and a sense of time urgency, have been associated with an increased risk of coronary disease, especially in younger individuals, but it is still unclear whether (or, if so, in what way) this behavior pattern may be causally related to the development of coronary artery disease.

A personality trait known as the "repressive or defensive coping style," characterized by a low level of negative emotions such as anxiety,

tension, and anger, has been associated with an increased risk and worsened clinical course of neoplastic disease, increased resting blood pressures, increased pain tolerance, and increased cardiovascular reactivity to stress (Jamner and Schwartz, 1986; Jamner *et al.*, 1988; Jensen, 1987; Leigh *et al.*, 1990). The terms "repression" and "defensive" used in this context are distinct from those used in the context of psychological defense mechanisms (Chapter 5).

Theoretical concepts have been changing rapidly in response to constant accumulation of new research data (for a fuller discussion of this topic, see Reiser, 1975, 1984).

BACKGROUND CONTEXT IN THE ENVIRONMENTAL DIMENSION

Broad cultural influences, including the patient's ethnic origin, socioeconomic status of his family during childhood, the region or country in which he spent his childhood, native language (or bilinguality), religious background, and the size of the family (e.g., number of siblings, presence or absence of extended family), are among the factors that comprise the background context in the environmental dimension.

As already discussed in Chapter 3, *language* is often associated with the patient's socioeconomic status as well as with his early cultural background. Whorf (1956) postulates that language actually shapes the way experiences are perceived and processed. For example, the Hopi Indians do not have words that denote time as an entity. Thus, time is perceived as continuous and flowing, without the familiar sense of the amount of time and *division* of time (such as "two days ago" or "three years from now"). The Indo-European languages (which includes most of the Western languages, including English) have a tendency to divide events into nouns, adjectives, verbs, and adverbs. This analytic mode of thinking is also the basis of scientific thought. However, there is a tendency to equate the word with an entity; that is, if a word exists, there is a tendency for us to assume that it also has a body and substance (*reification*). Creating a word for a condition or disease also gives a sense of control over it—thus, the desire of patients to know the name of the disease.

The Whorfian hypothesis of language determining thought is controversial; for example, Chomsky (1972) has shown that the "deep structures" of language, which are ultimately reflected in thought processes, may be universal across cultures, while the "surface structure," the actual syntactical arrangement and use of words, may be culture-bound.

Religion plays a role in personality development and in the patient's relationship to illness. Durkheim, in his classic book, *Le Suicide* (1897/1966), postulated that the higher suicide rate among Protestants in Europe in comparison to Catholics was related to the spirit of free inquiry, desire for knowledge, and weakening of the communal bond in Protestantism. This was called egoistic suicide—suicide due to exaggerated individualism in which life becomes empty and loses its meaning. The other types of suicide described by Durkheim are "anomic suicide," due to the lack of regulation in activity, as in achievement and times of financial well-being, and altruistic suicide, in which the social bonding is so strong that cultural goals are found beyond individual existence (see Chapter 6). Members of certain fundamentalist sects and of some Catholic households may see illness as an act of God and take a fatalistic attitude toward it and, consequently, may be less likely to seek medical help. Some medical procedures may come into conflict with the patient's religious background, such as abortion in Catholics and blood transfusion in Jehovah's Witnesses.

It is important to recognize that patients have *varying degrees* of religiosity and also that the childhood religion or parental religion is *not* necessarily identical to the patient's. Thus, some patients derive great comfort from seeing a minister or priest in the hospital, while others feel upset or angry when visited by the clergy. It is necessary to *ask* the patient about religious matters and the desirability of involvement with the clergy. Some patients assume that the involvement of the clergy necessarily means that their illness is terminal.

Early family environment is probably the single most important factor in the background context in the environmental dimension. This includes physical aspects, such as nurturance, dietary provisions, and contact behavior. For example, in the treatment of phenylketonuria (vignette 2), it is essential to provide the child with a phenylalanine-free diet. Parental cooperation is obviously essential, and in turn, is determined by their involvement with the child, whether the child was planned and wanted or not, and the quality of the marital relationship. Experiments with monkeys by Harlow and his associates show that *tactile sensation* is an important element of attachment behavior (Harlow and Harlow, 1966a, b). They showed that if infant monkeys were given inanimate dummies with apparatus for the provision of milk as mother surrogates, they invariably chose the soft terrycloth-clad surrogates ("terrycloth mothers") as opposed to "wire mothers." In fact, even if the terrycloth mothers did not provide nurturance, the infants clung to them rather than to the tactilely unsatisfying wire mothers. The monkeys who were reared by such artificial mothers had difficulties in social

and sexual behavior in adulthood, but some of the adverse effects were neutralized by exposure to peers in childhood.

In mice, early isolation results in relatively lower blood pressure in adulthood, but if the isolated mice are exposed to intense psychosocial stimuli through situations of dominance challenge, their blood pressure rises to a significantly greater extent than that of nonisolated controls (Henry *et al.*, 1975). Thus, early experiences of a social interactional nature may determine the reactivity to situations in later life.

Family interactions play an important role in generating predisposition to psychiatric illness. For example, Lidz *et al.* (1965) found that the families of adolescent schizophrenic patients were often characterized by marital schism or marital skew. In the *schismatic families*, each spouse was caught up in his or her own personality difficulties with a chronic failure to achieve complementarity of purpose or role reciprocity. In the *skewed families*, the psychopathology of one marital partner dominated the home so that often very bizarre and distorted ideas and behaviors were taken as the norm in the families.

INTERSYSTEMS INTERACTION IN THE BACKGROUND CONTEXT—DEVELOPMENT

The process of the patient's ontogeny (*development*) occurs through time by the interaction of the three systems—biological, personal, and environmental. The process of physical maturation itself is genetically programmed, including the development of secondary sexual characteristics. The development of the person, including the personality characteristics and assumption of social roles, is a result of complex interactions of factors at all levels of organization.

Development of the personal system can be conveniently conceptualized within a psychoanalytic/psychodynamic perspective. Freud's first model of the mind (1965/1900) visualized the mental apparatus to be arranged topographically—that is, mental contents were defined by their relation to consciousness. In this *topographic* model, whatever was in consciousness occupied the uppermost or most superficial layer—"perception-consciousness." Mental contents not in consciousness (out of mind) but available to recall (capable of being called to mind on demand, e.g., a telephone number or address) were regarded as belonging in the system "*preconscious*." Contents that were not in or available (even with concentrated) effort to consciousness were regarded as "*unconscious*." These contents were considered to be mental derivatives.

of *instincts*—biological life processes in body tissues—that were psychologically manifested as conflictual/dangerous wishes, motives, or drives held out of consciousness by an active mental process of *repression*. Later, in order to account for many other aspects of mental *function* (e.g., defenses) that could operate outside of awareness, Freud formulated a different hypothetical model in which the mind was divided into three groups of functions arranged or structured according to what they did (*the structural model*):

- The *id*, the collection of functions having to do with instincts/libido.
- The *ego*, the collection of functions having to do with negotiating relations between demands of the *id* and the constraints of social reality and conscience. The *ego* was considered to be the locus of cognitive, executive, and synthetic functions, and of the *ego* defenses (Chapter 5).
- The *superego*, the collection of functions having to do with conscience: moral/ethical attitudes and standards.

Each of the three groups of functions (institutions) could include both conscious and unconscious processes; unconscious considerations predominating in the *id*; roughly equivalent amounts of conscious and unconscious matters in the *ego*; unconscious considerations tending to predominate in the *superego*.

A detailed discussion of development is beyond the scope of this book, so the reader is referred to a standard textbook of child development (e.g., Lewis and Volkmar, 1990).

In this section, we will briefly and schematically review some important concepts of development; first, the stages of libido development as originally described and conceptualized by Freud, followed by those of later psychoanalytic observers and theorists, and last by the cognitive developmental studies and scheme developed by Piaget. All of them are epigenetic theories; later developmental stages are considered to be built on the foundations of the preceding stage, so that difficulties in any stage may result in difficulties in the next stage. On the other hand, successful overcoming of a difficulty in a later stage can help to resolve difficulties carried over from a previous stage.

Freud

Freud's earliest and major developmental theory is based on the *libido theory*, e.g., the vicissitudes of the sexual drive. He postulated that the primary erogenous zones of the sexual libido were concentrated in

the mouth during the first year of life—the *oral stage*. In other words, the mouth is the organ predominantly involved in the experience of pleasure during this period. The pleasure may be in sucking and, later, in biting. Initially, during this stage, the object of attachment or love is considered to be the self (autoerotic); that is, pleasure is derived from the self in the act of sensual sucking. Later in the same stage, the infant comes to recognize that the mother provides him with the food, the breast, and comfort. Thus, his mother becomes the love object. Passive longings and dependency are thought to be associated with this stage.

The second stage of development according to Freud is the *anal stage*, which occurs during the second year of life simultaneously with toilet training. During this stage, the child's major bodily concern shifts to the anus and its control—which provides a sense of mastery. The act of excretion itself, as well as retention of feces, can be pleasurable. Sadistic impulses and concerns over control and mastery are associated with this stage. The oral and anal stages are considered to be *pregenital* stages as compared to the next stage of development, the phallic or oedipal stage.

The *phallic* or *oedipal stage* takes place between the ages of approximately 3 and 6 and is ushered in with the discovery of the genitals by the child. In this stage, erotic sensation concentrates in the genital organs, and the child experiences strong love directed toward a parent. Freud postulated that boys and girls differ in experiencing this stage. For both boys and girls, the mother is the initial object of love. During this stage, the boy feels an intense desire to possess his mother and replace his father as her primary lover. This incestuous wish, however, results in the fear of retaliation by the father in the form of castration (*castration anxiety*). The boy gradually relinquishes his incestuous wishes and, instead, identifies with his father—to become like him, so that in the distant future, he would possess a woman like his mother. Thus, the boy's interest, for the time being, turns away from love and sex, and a period called "latency" sets in. Freud thought that the discovery by the boy that girls do not have a penis was a major factor confirming the fear that castration could actually occur.

In the case of a girl, Freud postulated, the discovery that she does not have a penis results in a serious disappointment in her mother, her initial love object. Thus, according to Freud, she feels defective and becomes envious for a penis (*penis envy*). Because of this feeling of having been castrated, the girl turns her love from the mother toward the father, the person who, unlike the mother, has a penis. Freud postulated that the girl thus has the fantasy of obtaining a penis from her father, which becomes transformed into a wish to have a baby, a penis substitute. In

the girl, too, latency occurs because of the fear of complete loss of love from her mother—which produces an identification with the mother.

The phenomenon of little boys and girls experiencing an intense love toward the parent of the opposite sex is called the *oedipus complex*, after the Sophocles tragedy *Oedipus Rex*. Psychoanalytic theory postulates that unsuccessful resolution of the oedipus complex is the cornerstone of the development of certain types of neurosis.

If the child has difficulties in progressing from one stage to another because of severe frustrations or excessive gratification, psychoanalytic theory postulates that there may be a *fixation* at that developmental stage; that is, the characteristics of the stage may persist throughout life. Thus, conflicts over dependency or over control and mastery may be the result of fixation at the oral or anal stage, respectively. Problems with sexuality and love often arise as a result of difficulties in resolving the oedipal situation successfully. When a person encounters difficulties, there may be a tendency for him to return to the behavioral and psychological patterns of an earlier developmental stage in which more gratifications were experienced or a sense of mastery occurred. This phenomenon is called *regression* and is considered to be an important mechanism in psychopathology. Regression may be responsible for secondary enuresis in a child who feels jealous of a newly arrived sibling. (Regression may also be adaptive [see Chapter 5].)

The period of *latency* lasts from about age 7 until adolescence. During this period, children relinquish intense sexual interest and tend to play with playmates of the same sex.

With the onset of adolescence, there is a resurgence of heterosexual interest. The true *genital stage* sets in as the person finds a spouse and is involved in a mature love relationship.

Although the phenomena of infantile sexuality and the importance of the oedipal complex are well recognized and accepted, it is now recognized that the development of adult sexuality and function (including gender identity; erotic orientation, fantasies, orientation preferences, and practices) is also influenced by powerful constitutional and social factors that may—in incompletely understood but important ways—combine with intrinsic libidinal ones in influencing the final outcome. For example, it is now recognized that past cultural expectations, attitudes, and values—manifested as stereotyped differential social roles for the two sexes—may have played more of a role than the anatomical difference between the sexes in the development of “penis envy.” (The term itself may have more metaphorical than literal validity.) In boys, a wish to identify with the mother and to be able to bear children may also have

important consequences in personality development and social adjustment in socially stereotyped roles.

Erikson

Erik Erikson (1963) described eight developmental stages in humans on the basis of *developmental tasks*. Erikson, who is himself a psychoanalyst, has paid special attention to the relationship of the developing individual to the demands of society and culture. His stages are as follows:

1. *Basic trust vs. basic mistrust*. This stage is essentially identical to the Freudian oral stage, in which the infant, through the experience of a trusting relationship with the society (family) in the form of feeding, comfort, and other aspects, learns to develop a sense of basic trust and confidence. Unsuccessful outcome results in a basic sense of mistrust.

2. *Autonomy vs. shame and doubt*. This stage roughly parallels the Freudian anal stage, in which a sense of regulation or control develops. “Holding” and “letting go” are the two social modalities the child *experiments* with. Successful outcome results in a sense of autonomy, a sense of self-control without loss of self-esteem. Difficulties with the developmental task result in a pervading sense of shame and doubt.

3. *Initiative vs. guilt*. This stage is parallel to the Freudian stage of the oedipus complex (phallic stage). During this stage, the child is more energetic, more loving, brighter in his judgment, and, at the same time, more relaxed. There is a quality of planning and “attacking” a task. During this stage, as a result of regulation between inner drives and internalized inhibitions (due to a developing conscience), the child gradually develops a sense of moral responsibility and unconflicted initiative. Difficulties in this period result in complete repression of initiative or in overcompensatory “showing off.”

4. *Industry vs. inferiority*. Paralleling the Freudian latency period, the child learns to win recognition by learning and producing things. Children receive systematic instruction during this stage and acquire the basic skills (such as the three Rs—reading, ‘riting, and ‘rithmetic) required for work. Unsuccessful outcome results in a sense of inadequacy and inferiority.

5. *Identity vs. role confusion*. Erikson considers the period of adolescence to be of great importance in the development of the sense of identity. This is the period in which the person develops a sense of inner sameness and continuity, a sense of direction and self. Career choices are also made during this stage. The danger in this stage is “role confusion.”

6. *Intimacy vs. isolation.* This covers the period of young adulthood, in which the person is ready and eager to fuse his identity with those of others. This involves commitment to concrete affiliations and partnerships with others. Mature love relationships, colleagueships, and friendships develop. Difficulty in achieving this developmental task results in a sense of isolation and self-absorption.

7. *Generativity vs. stagnation.* This is the stage of middle adulthood, in which the primary concern is the establishment and guidance of the next generation. Generativity includes the concepts of creativity and productivity. Childbearing and childrearing are common generative activities. Failure to participate in generative tasks often results in a sense of stagnation and personal impoverishment. Erikson states that such individuals may regress to an obsessive need for pseudointimacy and indulge themselves as though they were their own or one another's only child. Early invalidism may become a vehicle of self-concern.

8. *Ego integrity vs. despair.* In old age, acceptance of the individual's life with satisfaction is reflected in "ego integrity," a sense of assurance of order and meaning for humankind. The lack of this integrity is signified, according to Erikson, by fear of death and despair that the time is now too short to attempt to "start another life or try out alternative roads to integrity."

It will be noted further that the Eriksonian developmental stages are comparable to the Freudian ones except that the Freudian stages are based on sexual drives, while the Eriksonian stages are based on "ego tasks," and that Erikson's stages span the whole life cycle, while Freud's stages stop with the development of mature genitality.

Later Psychoanalytic/Psychodynamic Views

The accumulation of new and broader clinical experiences over the years and data derived from experimental observations of developing young children and infants have resulted in progressive additive modifications and elaborations of earlier concepts; sometimes even (controversial) suggestions for discarding and replacing certain ones of them. Some of these developments have led to suggestions for modification of clinical treatment techniques as well.

The newer perspectives assign less exclusive or primary importance to the libidinal line of development and place more emphasis on evolving relationships with important people during infancy and childhood. It is the combined influence of these relationships along with/and upon intrinsic biological maturation that is now considered to shape development of:

1. Cognitive ego structures; mechanisms of defense and coping (ego psychology).
2. Mechanisms for modulating affective and empathic communication (interpersonal psychology).
3. Enduring internal psychic representations of the influential people (objects) of infancy and childhood, and the effects of those internalized object representations on patterning of relationships in real life (object relations).
4. Development of a sense of self as an integrated dependably competent and strong person (self psychology) (see Kohut, 1984a, b).

Piaget

Jean Piaget, a Swiss psychologist, studied the development of intelligence in children. Piaget's developmental stages, then, are based on the structure of intelligent thinking, rather than on love relationships, as in Freud, or on social tasks, as in Erikson. According to Piaget, one can distinguish three periods of intellectual development: (1) the sensorimotor period (birth to 2 years), (2) the period of representative intelligence and concrete operations (2 to 11 years), and (3) the period of formal operations (past 12 years through adulthood).

1. *Sensorimotor period.* During the first 18 months to 2 years of life, the infant learns through repetition—initially, from blind imitative repetition to repetitions in anticipation of results and invention of new methods through combinations of previous experiences. Response-feedback loops called "circular reactions" form an important part of the experience.

2. *Period of representative intelligence and concrete operations.* This stage may be subdivided into the preoperational phase (ages 2 to 7 years) and the phase of concrete operations (ages 7 to 11 years).

- a. Preoperational phase (2 to 7 years). During the period of 2 to 4 years of age, the child begins to use symbols; that is, he begins to use a word or an object to stand for or represent something else that is not immediately present. Symbolic play (e.g., making believe that a piece of cloth is a pillow) and language soon develop.
- b. Phase of concrete operations (7 to 11 years). When the child develops the notion of conservation (of volume or weight), he is in the period of concrete operations. Now the child knows that the same amount of clay can look as though there were more clay if divided into a number of smaller balls. The child also has a clear notion of hierarchical classifications, especially if concrete objects are involved. For example, he can answer

correctly the question "Which would make a bigger bunch, one of all the primulas or one of all the yellow primulas?" (Ginsburg and Opper, 1969).

3. *Period of formal operations.* As the child reaches adolescence, his thought processes move from concrete operations to a more flexible, abstract mode. The thought transcends here and now. With adolescence, the person begins formal, propositional thinking, in which logical thinking and hypothesis-testing are prominent features.

Piaget's developmental stages are based primarily on normal children, and his theory does not form the basis of psychopathological understanding. However, it emphasizes the process of "discovery learning"—derivation of a higher level of intellectual functioning by the incorporation of experience.

SUMMARY

The background context includes hereditary, constitutional, personality, and early environmental factors such as language, religion, and family interactions. Early physical environment may also play a major role in the present state of the patient.

At the personal level, personal habits, including drinking and smoking, personality and coping styles, and behavior patterns should be evaluated. Genetic givens and laboratory findings often provide clues to constitutional vulnerabilities to illness.

Development is a complex intersystems event. Freud formulated developmental stages on the basis of sexual drives, with emphasis on the love relationships in children. Erikson formulated developmental stages on the basis of social tasks, and the whole life cycle is seen as having period-specific tasks. Piaget studied the intellectual development of children.

IMPLICATIONS

For the Patient

The factors in the background context determine the patient's stable expectations of himself, the environment, and the health-care system. They also determine his skills, talents, and limitations. Often, patients are not aware of the specific ways in which the background-context factors determine their current attitudes and feelings.

For the Physician

Understanding the patient's background-context factors in all three dimensions is essential in arriving at rational management plans. The physician should also consider what background factors tend to reinforce, and what factors tend to conflict with, the patient's recent- and current-context factors. For example, a Catholic patient whose depression followed a therapeutic abortion may be influenced by the background-context factor of childhood religion, although she may no longer profess Catholicism. In this instance, recognition of the source of guilt feelings in childhood may aid in alleviating present depression. Early experience of mistreatment may determine present perception of the health-care system, as in vignette 4. The physician should ask specific questions concerning early family environment, socioeconomic status, and residence, parents' occupations, ethnicity, religion, and other background factors when obtaining a family history and past history.

For the Community and the Health-Care System

Medical education should include an understanding of the role of background environment and habits in the pathogenesis of illness. Educational programs concerning smoking and excessive drinking can have major preventive effects. More research is needed in order to understand optimal environment and childrearing techniques.

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- See also References, Chapter 20

RECOMMENDED READING

- Brenner C: *An Elementary Textbook of Psychoanalysis*. New York, International Universities Press, 1955. An exceptionally lucid and concise introduction to the psychoanalytic theory.
- Erikson EH: *Identity, Youth and Crisis*. New York, WW Norton & Co, 1968. This contains discussion on the identity problem of adolescence and a review of Erikson's ideas concerning the developmental stages throughout the life cycle. This work and Erikson's *Childhood and Society* are very important in understanding the social-cultural influences in the personality system.
- Freud S: *The Complete Introductory Lectures on Psychoanalysis*, Strachey T (ed). New York, Norton, 1966. A lucid and easy-to-read exposition of Freud's basic ideas. Highly recommended for an understanding of Freud's early developmental theory and psychoanalysis.
- Ginsburg H, Opper S: *Piaget's Theory of Intellectual Development: An Introduction*. Englewood Cliffs, New Jersey, Prentice-Hall, 1969. This is a very readable and substantive review of Piaget's contributions in understanding intellectual development in children. It describes the major experiments done by Piaget with good discussions of the implications.
- Lewis M, Volkmar F: *Clinical Aspects of Child and Adolescent Development*, ed 3. Philadelphia, Lea and Febiger, 1990. This is a concise and readable textbook on child development. It is an overview of development from the prenatal period to early adolescence. Highly recommended.
- Meissner WW: Theories of personality and psychopathology: Classical psychoanalysis, in Kaplan HI, Sadock BJ (eds): *Comprehensive Textbook of Psychiatry*, ed 4. Baltimore, William and Wilkins, 1985, vol 1, pp 337-418. An up-to-date and comprehensive review of the psychoanalytic theory.
- Reiser MF: Changing theoretical concepts in psychosomatic medicine, in Reiser MF (ed): *American Handbook of Psychiatry*, ed 2. New York, Basic Books, 1975, vol 4, pp 477-500. A comprehensive and historically oriented review of theoretical concepts in psychosomatic medicine.
- Reiser MF: *Mind, Brain, Body: Toward a Convergence of Psychoanalysis and Neurobiology*. New York, Basic Books, 1984. Contains more detailed conceptualizations concerning the role of psychological factors in disease.
- Shapiro D: *Neurotic Styles*. New York, Basic Books, 1965. For a very vivid description of some personality styles.