

# GERIATRIC PSYCHIATRY\*

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## INTRODUCTION

The mental problems specific to older individuals are defined on the basis of their frequency of occurrence in the later years of life. An arbitrary landmark for senescence in most statistical studies is the age of 65.

Mental illness generally is now the third ranked cause of chronic illness in the country. The evidence seems conclusive that there is a genuine increase in the rate of first admissions of mental patients to hospitals.<sup>1</sup> With specific reference to psychosis with cerebral arteriosclerosis, one of the chief illnesses of older people, there has been a rate of increase five times the amount for mental disease in general. Senile psychosis, another frequent affliction of the elderly, increased at a somewhat lesser rate.

The rates for mental illness are at a maximum in the older age groups, and it has been suggested that one explanation would be that there is currently less selection of people living to middle age and beyond (because of the lesser incidence of disease in early years) and that this allows more people to develop degenerative diseases with accompanying psychiatric disorder. Another factor in the mental illnesses of the older age group is that the organic psychoses predominate, and rates of discharge are very low compared to other mental illnesses. A study by the American Psychiatric Association of patients over 65 in public hospitals would indicate that thirty per cent of state hospital residents are currently over 65, and that twenty-seven per cent of all first admissions are in this age group.<sup>2</sup> A significant proportion of the resident patients over the age of 65 were admitted, of course, for other illnesses and remain in the hospital to grow old there. There is a much higher death rate for organic psychoses relatively soon after admission to the hospital than for any other kind of condition. For this reason, newly admitted patients do not tend to form the majority of residents over 65.

Since more than half of the total hospital beds in the United States are psychiatric beds, there can be no doubt about the sizable proportion of the problem presented by mental illness in this age group. Eighty-two per cent of first admissions over 65 are senile arteriosclerotic brain syndromes. Other chronic and acute brain syndromes form another six per cent of admissions with functional psychotic disorders, and all other mental disorders constitute about twelve per cent of total admissions

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<sup>1</sup> Malzberg, *Important Statistical Data About Mental Illness*, 1 AM. HANDBOOK OF PSYCHIATRY 161 (1959).

<sup>2</sup> AMERICAN PSYCHIATRIC ASS'N, REPORT ON PATIENTS OVER 65 IN PUBLIC MENTAL HOSPITALS 6, 7 (1959).

in this age group.<sup>3</sup> In order to clarify the nature of these serious disturbances, a discussion of brain syndrome is in order.

## I

### BRAIN SYNDROME

"Brain syndrome" is a name given to a group of symptoms which occur in the presence of impairment of brain tissue function. The disorders are all characterized by impairment of orientation, memory, all intellectual functions, judgment, and by liability and shallowness of affect.

Orientation is the ability to recognize one's own location in time, space, and situation. Disorientation is spoken of also as confusion. This is commonly seen in older people.

Memory impairment can affect either recent memory or remote memory. Many elderly people constantly revive memories of long ago but are unable to remember such simple things as where they put their glasses down last or where the bathroom might be. Careful study of such individuals reveals large gaps even in their remote memory, and the areas that stand out clearly in their memory are usually quite meaningful to them emotionally.

Impairment of intellectual functions reduces the person's ability to comprehend any sort of abstract situation, the ability to calculate, the ability to retain previous knowledge, and the ability to learn new things.

Largely because of failure to marshal accurate facts on which to base decisions regarding behavior, a lack of judgment is often quite apparent. Frequently such persons are easily provoked to tears or laughter, and sometimes spontaneously shift as the mood of the moment shifts. Although this may appear to be a quite lively affect, it usually has little consistent effect on their behavior. For example, one moment an elderly person with brain syndrome may be weeping about the loss of a mate but if a joke is told the sadness immediately gives place to laughter. This is what is meant by shallowness of affect.<sup>4</sup>

Brain syndrome disorders are classified into acute and chronic. In the acute brain disorders the disturbance is usually sudden in onset, and recovery is implied in the sense that physiological brain functioning returns relatively to normal. Nevertheless, certain specific defects may remain in the case of people with strokes. The severity of the changes in behavior with brain syndrome is thought to parallel the severity of organic impairment of brain tissue function. However, some studies have shed considerable doubt on this, especially in the more chronic syndromes.

#### A. Acute Brain Disorders

These are usually precipitated suddenly, and inevitably involve various degrees of impairment of the sensorium. The clinical syndrome of delirium is largely

<sup>3</sup> *Id.* at 13.

<sup>4</sup> AMERICAN PSYCHIATRIC ASS'N, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS 14 (1952).

limited to these temporary disturbances of brain function. Confusion appears early. This may be periodic and occur only at night or during other periods when the patient is cut off from external sensory stimuli. There may be restlessness, rambling talk, and marked emotional changes during delirium. Fright, hallucinations and delusions, irritability, and even violence, may occur.

Recent studies at the Langley Porter Clinic indicate that acute brain syndrome frequently ends in death, usually because of the underlying acute disease process. The nature of the syndrome is determined to some extent by the kind of causative agent involved.

Infections in the brain are not specific to older people but sometimes occur. Acute brain syndromes with delirium are often associated with systemic infections. In the elderly person this is a most likely result of pneumonia.

All kinds of intoxicating agents are apt to provoke acute brain syndrome in elderly people. People with cardio-respiratory disorders who are receiving medication (and especially so if they have been confined to bed) are very susceptible. Such reactions to barbiturates and bromide drugs are very common, and alcoholic intoxication must also be considered. Trauma to the head associated with unconsciousness can precipitate delirium in older people as well as younger. Head trauma may also activate an underlying chronic brain syndrome in an elderly person.

In addition to the development of delirium with medication for cardio-respiratory disease, cardio-respiratory failure itself is a common cause of this condition. Localized disturbances in the brain due to strokes are often followed by a short period of coma followed by confusion or a delirious period, and may result in lasting irritability and personality changes with chronic brain syndrome.

It can be seen that in the acute brain syndromes medical problems of an acute nature are often present. Nevertheless, the disturbed behavior of individuals with this disturbance is sometimes a cause of legal commitment to a psychiatric hospital. This is especially the case in areas where adequate psychiatric management is not available locally and the hospital is unable to cope with both the medical illness and the acutely disturbed behavior. Seldom, however, are such acute disturbances the cause for other types of legal action affecting elderly people.

### B. Chronic Brain Syndrome

With these syndromes, delirium may usher in the first appearance of symptoms, but the impairment of memory, intellectual functioning, and judgment are far more characteristic. Acute confusion may occur periodically. Personality changes are frequently seen and may become very marked. In many cases, the accompanying behavioral reaction (personality change), psychotic reaction (hallucinations, delusions, marked paranoid trends, etc.), or accompanying neurotic reactions overshadow the basic symptoms.

Circulatory diseases such as arterial hypertension, cardiorenal disease, and cardiac decompensation sometimes give rise to chronic brain syndrome, as already men-

tioned. Delirium with acute cardiac decompensation is common. However, even in the absence of delirium, disorders of judgment, memory, and orientation are frequently seen. Irritability, moodiness, and emotional instability are common.<sup>5</sup>

Cerebral arteriosclerosis may cause chronic brain syndrome in people as young as 45, but is more frequent after the age of 65. Symptoms are usually reported as having an abrupt onset in spite of the fact that the pathological process is clearly a slowly progressive one. Mental and physical stresses do often precipitate an apparently abrupt appearance of symptoms. Oftentimes the onset is associated with the occlusion of blood vessels cutting off blood supply in a local area, and is then accompanied by localizing neurological signs. It is, of course, rare to find vascular change existing only in the brain; and these changes are usually widespread throughout the body.<sup>6</sup> The initial symptom in these cases again is often a delirium followed by the chronic syndrome.

Senile brain disease is accompanied by other evidence of exaggerated aging affecting the entire body. There is wasting of muscles, shrinking of soft tissue, loss of elasticity of the skin, thinning and graying of hair, and muscular weakness. The gait is unsteady and speech disturbance is quite common. The condition is a chronic one, lasting from a year to eleven or more years. Mild cases may manifest only self-centeredness, difficulty in assimilating new experience, and mild disturbances of emotional equilibrium. Again, accompanying psychotic, neurotic, or behavioral disturbances are not unusual. Eventually severe deterioration of mental faculties occurs. The condition is more common in women by a ratio of two to one. In this condition symptoms usually do not appear until after the age of 60. Fifty per cent of these cases follow a pattern of simple deterioration of mental function. Others show marked symptoms of depression, agitation, paranoia, and schizophrenic-like symptoms. In the latter types of cases, long-standing personality conflicts and difficult patterns of adjustment have often been present. Paranoid reactions are the most common, and constitute from fifteen to twenty-five per cent of the diagnostic category. In milder cases this can lead to suspicions of family, the changing of wills, and so on.

In all cases of chronic brain syndrome legal problems relative to competence of the individual can occur. The eventual decline in these conditions is such that those affected inevitably become dependent upon relatives or upon society for management of all aspects of their daily living. In obviously deteriorated cases it would not be expected that difficult legal problems would arise, but in the earlier stages, when emotional changes may be more prominent than the underlying deterioration, such problems can be quite difficult to settle.

Among the variables influencing the appearance of organic syndromes in the elderly are psychogenic factors. In all cases showing impairment of memory and intellectual function the impairment is worsened by the appearance of anxiety.

<sup>5</sup> ARTHUR P. NOYES, *MODERN CLINICAL PSYCHIATRY* (4th ed. 1953).

<sup>6</sup> Young, Gofman, Malamud, Simon & Waters, *The Interrelationship Between Cerebral and Coronary Atherosclerosis*, 11 *GERIATRICS* 413 (1956).

Depression is felt to underlie some cases of what clinically appears to be simple organic deterioration.<sup>7</sup> Active treatment for depression has produced remission of psychosis in some individuals, with a return to more normal functioning of memory and intellectual capacity.

Some studies indicate that there is a high association between organic psychoses of the elderly and residence in poor neighborhoods.<sup>8</sup> The meaning of these sociological variables in mental illness is not clear.

## II

### PSYCHOLOGICAL ILLNESSES

Another large category of severe psychiatric illness in the elderly is represented by disorders of psychogenic origin without clearly defined physical cause or accompanying structural change in the brain. Among these, the involuntional affective and psychotic depressive reactions are quite common. Many of these conditions resemble each other closely, and all include the symptoms of depression.<sup>9</sup>

In the involuntional psychotic reaction, the depressive reaction is associated with alteration of the endocrine system which determines the capacity and extent of sexual interest and ability to reproduce. This is more common in females during the so-called change of life when a variety of complaints develop including feelings of discomfort, restlessness, fatigability, and other somatic complaints. Transitory crying spells, hot flashes, and irritability are widely accepted as evidence of onset of menopause. There is still considerable debate whether a similar climacterium occurs in the male. The condition is more common in females by a ratio of 8 to 3. Patients with this complaint sometimes become gradually more worried, have greater difficulty in sleeping, and become anxious and agitated. Guilt appears with self-depreciation, and feelings of worthlessness and eventually delusional ideas can develop. Sometimes these patients develop paranoid thinking as a defense against the depression. There are indications of genetic factors being involved, in addition to a high incidence among individuals who have life-long personality traits of meticulousness and compulsiveness.<sup>10</sup> Affective reactions relate specifically to the manic depressive psychoses. There is a definite hereditary factor present in this disease and again it is not specifically related to aging. There is some evidence, however, that those who have an attack after the age of 40 have a poorer prognosis. This may be related to the occurrence of organic changes.

Psychotic depressions are usually related to the presence of environmental precipitating factors that occur in relation to the development of the illness. Elderly

<sup>7</sup> Ehrenthel, *Differential Diagnosis of Organic Dementias and Affective Disorders in Aged Patients*, 12 GERIATRICS 426 (1957); personal communication from Dr. Leslie B. Holman, Duke University Medical Center.

<sup>8</sup> H. W. DUNHAM & ARNOLD ROSE (Eds.), *MENTAL HEALTH AND HEALTH DISORDERS* 170 (1955); Gruenberg, *Community Conditions in Psychoses of the Elderly*, 110 AM. J. PSYCHIATRY 888 (1954).

<sup>9</sup> Clow & Allen, *Study of Depressive States in Aging*, 4 GERIATRICS 11 (1949).

<sup>10</sup> O. FENICHEL, *PSYCHOANALYTIC THEORY OF NEUROSIS* 387 (1945); O. S. ENGLISH & S. M. FINCH, *INTRODUCTION TO PSYCHIATRY* ch. 16. (1954).

persons are particularly vulnerable to this type of psychogenic reaction, as they are in a period of life in which they are likely to have more serious and frequent losses and to suffer injury to their self-esteem. Differentiation between neurotic and psychotic depressive reactions is often difficult and primarily centers about the extent to which an individual withdraws from reality.

The paranoid reactions depend heavily on previous personality patterns of patients, and there is often no loss of intellectual ability in the younger person. In the older person it is not infrequent to see such reactions combined with organic losses. According to some, paranoid disorders in patients over 60 are more likely to occur in women.<sup>11</sup> It has been reported that these are often accompanied with serious defects of hearing or vision. The clinical picture of the aged paranoid person is colored by features rooted in the insecurity, loneliness, fears, and unfulfilled wishes of older people. Their delusions are more apt to be concerned with property, money, hostility of neighbors, and the sexual designs of men. Delusions are often well systematized and are generally associated with hallucinations of hearing. Many of these patients remain quite alert, receptive, and shrewd in conversation in spite of advanced years. With a greater admixture of organic factors delusions usually become vague and loosely connected, and judgment in all spheres is seriously disturbed.

#### A. Psychophysiological Disorders

Psychophysiological disorders represent expression of affect through physiological states. The symptoms are due to a chronic and exaggerated state that would ordinarily be a normal psychophysiological reaction to accompany emotion. The most common of these in older people is the psychophysiological gastrointestinal reaction. With the narrowing of social interests attention centers around basic things in life such as food elimination of body wastes and general body comfort. Preoccupation with the gastrointestinal tract is a common manifestation of this. Busse has reported on a large series of well-adjusted elderly persons and found that twenty-five per cent use laxative either habitually or occasionally.<sup>12</sup> They were frequently aware of the connection between the onset of constipation and specific emotional disturbances, such as differences of opinion with family members and visiting in homes where they were not sure of being completely accepted.

#### B. Psychoneuroses

Psychoneurotic patterns are all based upon the occurrence of anxiety in the individual, and of various psychological mechanisms of dealing with this. Certain symptoms are more apt to evolve at certain periods of life, such as phobias and temper tantrums in childhood and hysterical reactions in adolescence and young adulthood.

<sup>11</sup> W. MAYER-GROSS, E. SLATER & W. ROTH, *CLINICAL PSYCHIATRY* (1955).

<sup>12</sup> Busse, Barnes, Silverman, Thaler & Frost, *Studies in the Processes of Aging X: The Strengths and Weaknesses of Psychic Functioning of the Aged*, III AM. J. PSYCHIATRY 896 (1955).

Obsessive compulsive reactions are common in middle life, and hypochondriacal patterns, in late middle and later years. Depressive symptoms are of very common occurrence in neurotic reactions of late life. Since most people with neurotic symptoms continue to function well in the community in spite of their personal discomfort, one can look at these illnesses as uncomfortable patterns of daily living.

As part of the process of senescence one would expect that normal older people would show signs and symptoms in their daily living indicative of oncoming mental breakdown. One large-scale study of normally functioning members of the community, recently conducted at Duke University, has—among other things—attempted a thorough evaluation of psychiatric factors in these persons' lives.

All of the individuals studied were over 60, and 180 of these subjects (almost two thirds) have been seen twice. In the initial group of 260 persons, six per cent were found to have psychotic symptoms, a little more than half of them having organic or mixed organic and functional symptoms, and the remainder, functional illnesses. Fifty-four per cent of the group were found to be suffering from non-psychotic symptoms and again more than one half of these were symptoms of an organic nature. Forty per cent were without symptoms. These figures compare favorably with studies of several other communities of people of all age groups, which indicate similar high rates of occurrence of psychiatric symptoms in normally functioning populations.<sup>13</sup> Preservation of judgment and intellectual functions are the characteristics that allow this group of persons to remain independent parts of the community in spite of some disability due to psychiatric disorder. Deterioration of intellectual function and judgment in handling daily affairs would appear to be two of the most important factors upon which hospitalization is dependent.

Since symptoms associated with organic brain disease, symptoms of depression, and symptoms of bodily over-concern were the three most prominent groups of problems experienced by the subjects of the first group examination, the second examination focused on a more detailed study of these particular difficulties.

### 1. *Brain Syndrome Symptoms*

In the original Duke study it was found impossible to differentiate satisfactorily degrees of severity of symptoms due to organic brain syndrome by using the standard mental status. A series of scales rating the subject on decrements in personal behavior related to various aspects of brain syndrome were devised, and an over-all rating based on the combined results of these scales was made. Of 180 subjects, only eight were rated as having no signs of behavioral change possibly associated with organic brain syndrome. Ninety of these subjects had symptoms of behavioral change but no disability for ordinary activities of living. This high proportion was a result of frequent admission of memory impairment or intellectual decline. Forty-four of the subjects had signs of behavioral change due to

<sup>13</sup> Busse, Dovenmuehle & Brown, *Psychoneurotic Reactions of the Aged*, 8 GERIATRICS 97 (1960).

organic factors, with twenty per cent or less decline in previous capacity from these symptoms. Thirty were judged to have between twenty and fifty per cent disability, and eight showed very serious disability with up to eighty per cent disablement for previous behavioral function.

In examining the component parts of this over-all rating scale it was found that changes in sensorium were relatively infrequent. One hundred and twenty-five of the subjects had never experienced any "confusion," getting "mixed up," or being "turned around." Only twenty-three persons became confused in unfamiliar neighborhoods or completely unfamiliar circumstances. Six of the subjects had occasional confusion on awaking at night in the dark.

With regard to memory the situation was quite different, only sixteen subjects having no impairment whatsoever. Eighty-four subjects forgot names, dates, places, and articles at times that had given them no problem earlier in life. Sixty-nine subjects had this difficulty severe enough to require corrective action, either by reliance upon other persons or through the use of notes, etc. Only eleven persons were unable to compensate adequately for a memory difficulty by some kind of corrective action on their parts.

Only thirteen subjects had no impairment in intellectual function. Forty-eight of them had very mild declines in previous intellectual activity but no real disablement for daily activity. Seventy-one subjects had *mild* intellectual impairment, exemplified by giving up teaching Sunday School classes because of difficulty in exerting the proper thinking effort required. Forty-seven subjects had sufficient difficulty to make it difficult to read newspapers or magazines with comprehension and meaning, and two had difficulty in dealing with simple concrete tasks.

As expected, very few of the subjects showed impairment of judgment. Fourteen persons no longer made major decisions by themselves without extensive help from others, and only two needed the daily presence of another person in their life to assist them in managing daily affairs. Similar low rates of disability were found in these subjects' affective life.

Preliminary examination of the relationships between these findings and other medical examinations of the same subjects conducted at the same time would indicate a close relationship between the occurrence of these psychiatric problems and the person's physical condition. There was a significant relationship between decrement in behavior due to possible brain syndrome effects and the degree of physical disability which the person had. Interestingly enough, it was specifically the mild deterioration in sensory and other neurologic functions that seemed to be most important in determining this relationship.

## 2. *Depressive Symptoms*

Thirty-four per cent of the subjects examined exhibited depressive symptoms on the second examination. This was somewhat less than reported during the initial examination, but more details were available concerning the nature of the symptoms

in the interviews from the second examination. Thirteen per cent of the subjects had episodes of depression which were brief and non-disabling and occurred less than once a month. Fourteen per cent had episodes as often as each two weeks but these also were brief and, if at all, only slightly disabling for daily activities. Seven per cent of the subjects, however, had episodes of feeling worried, discouraged, troubled, and "blue" oftener than once every two weeks, which lasted more than a day at a time and disabled them for up to half of their usual life activities. In the initial study, it was also found that depressive symptoms occurred most frequently in conjunction with physical illness but were not related to the degree of disability for such illness.

### 3. *Bodily Overconcern*

A total of twenty-nine per cent of the subjects who were seen for the second time experienced some degree of bodily overconcern. Twenty-five per cent of the subjects had a general overconcern with physical health or symptoms without underlying illness sufficient to justify the complaints. Such bodily preoccupation replaced relatively little of their normal daily concerns, and they were easily distracted from their preoccupation with bodily states. Four per cent of the subjects, however, were concerned with their health to such an extent that major daily activities were eliminated by the preoccupation, and all activities interfered with up to fifty per cent. Some had a pattern of visiting doctors and clinics frequently and collecting lengthy medical schedules, diets, and the like.

The majority of these subjects had a general concern with bodily health and focused their preoccupation upon digestibility of foods, bowel function, etc. Smaller numbers were concerned with recounting in detail all uncomfortable body sensations that occurred. Some also had specific "conditions" with which they were preoccupied. These varied, but included such things as "acid condition of the blood."

### CONCLUSION

In summary it may be said that elderly people in the community show no greater incidence of psychiatric symptoms than do all adults. However, many times the symptoms are related to physical problems which are greatly increased in incidence in the elderly. Hospitalization for psychiatric illness shows a major upswing, at least in public hospitals, in elderly people and again with diseases closely related to the occurrence of physical illness, especially those illnesses which interfere with the function of the nervous system.