Comprehensive Psychiatric Evaluation

Characteristics of the Geriatric Psychiatry Assessment

A geriatric psychiatrist must consider the three questions below before the assessment begins:

- 1. Where should the patient be seen? Geriatric assessments may be undertaken in a variety of settings: at the bedside, in an outpatient office, at home, in an institution, in a day hospital, or in a specialized clinic. Where the clinician sees the patient may be critical because it can determine the quantity and quality of the data collected. For example, generally one cannot expect that completing the assessment in an outpatient office will allow a full assessment of the capacity of a patient with dementia to function at home. This assessment often requires observation and monitoring in the home environment. On the other hand, a workup to rule out reversible causes of dementia requires the facilities of a clinic or hospital setting.
- 2. Who should participate in the assessment? A basic tenet in geriatric assessment is that, whenever possible, a patient's spouse, caregiver, and family are seen for corroborative information, with appropriate regard for issues of confidentiality. This is critically important in the assessment of patients with cognitive impairment and may be equally important in patients who are cognitively intact. When mental disorders interfere with insight into the nature and quality of the illness, interviewing family members often will provide a truer picture of the person's mental disorder. Historical events are verified and, in many cases, the diagnosis depends on the family members' ability to relate a coherent history. A family member often is the best person to describe the premorbid personality of the patient. This is valuable information because premorbid personality traits may change or become exaggerated in the context of a variety of geriatric mental illnesses, including dementia, affective disorders, and paranoid disorders.
- 3. How should the interview be conducted? It is important for each assessment to include an opportunity to talk to the patient alone, particularly when suicidal risk is an issue. All psychiatric interviews should allow for a free exchange of information in an atmosphere of mutual trust that leaves patients with the feeling that they are being understood. Particular attention should be paid to the capacity of the patient to tolerate a psychiatric interview. Severely disturbed or cognitively impaired patients do not tolerate long, detailed interviews well. Brief interviews with active engagement and reassurance facilitate the process.

Consideration must be given to the common sensory impairments seen in some geriatric patients. Patients with poor hearing and vision may require special intervention. When dealing with patients with deafness, it may help to turn on the hearing aid, interview in a quiet room, and speak in a slow, steady, low-pitched voice into the "good ear." A sound amplifying device may be necessary; if one is unavailable the "reverse stethoscope" method may be used: put the stethoscope in the ear of the patient and speak into the diaphragm quietly. For the visually impaired, sitting closer to the patient or ensuring that the patient is wearing corrective lenses is helpful. The appropriate use of touch may reassure the

patient and help facilitate the psychiatric interview.

The Organization of the Psychiatric Assessment

A schematic for the geriatric psychiatric assessment is presented in

Table 8–1. Schematic for the geriatric psychiatric assessment

Identifying data Reliability of informant Chief complaint History of presenting illness Past psychiatric history Family history Family psychiatric history Personal history Medical history Current medications Drug and alcohol history Physical examination Functional status Mental status **Etiological formulation** Provisional diagnosis Differential diagnoses **Investigations** Comprehensive management plan

Table 8-1

. It is meant only as a tool to organize the data and not as a checklist for the examiner.

The Psychiatric History

Several detailed guides to the assessment of younger adults are available (Ginsberg 1985; Leff and Isaacs 1978;

Waldinger 1990). The following discussion is meant as a guide to adapting the traditional psychiatric history to the needs of the geriatric population.

Identifying Data

Identifying data can be amended by adding the name of the primary caregiver, whether in or out of the home. If the patient lives in a residential setting, the type of institution is specified.

History of Presenting Illness

The purpose of the history of presenting illness is to document events and arrange them in the order in which they occurred. It is important to record all recent environmental and physical changes in the patient's life. Environmental events and physical illness may precipitate mental illness in elderly patients. For example, recent losses, separations, moves, and changes in support networks may be associated with the onset of affective and paranoid disorders or the exacerbation of cognitive disability. Cognitively impaired, frail elderly patients are particularly predisposed to superimposed delirium when relatively minor toxic, metabolic, or infectious disease intercedes. Certain physical disorders seem to precipitate specific mental disorders. For example, cerebrovascular accidents have been associated with depression and mania (Starkstein and Robinson 1989).

To focus the inquiry, the examiner must be familiar with the natural history and symptomatology of the common mental illnesses in elderly patients. This is important because some mental disorders, particularly affective disorders, may present differently in old age. For example, depression in old age can present in many different ways. Many elderly depressives do not present with the classic sad and tearful demeanor (Post 1962). Common geriatric presentations include the hypochondriacal, agitated depressive who importunes the family in fits of desperation. The patient's frantic pleas for help may look "hysterical" to the observer and feel "manipulative" to the family. Depression may present with negativistic behavior such as a refusal to move, eat, or drink. A suicidal gesture may signal the presence of this disorder. The recent onset in advanced age of phobias, obsessions, or compulsive behavior may signal the beginning of depression.

Vegetative symptoms of depression in elderly patients include sleep, appetite, weight, and energy disturbance; loss of sexual drive; and diurnal variation in mood. The clinician should note abrupt changes in sleep, appetite, and energy because the normal aging process can affect these functions. Weight loss may be quantified by changes in dress or belt size.

Interviewing a family member is essential when a cognitive disorder is suspected. The clinician may have to elicit the entire history of the presenting illness from the family. Cognitive disorders affect memory, language, perception, mood, thinking, personality, and the capacity to function independently in the patient's environment. For example, early in the course of Alzheimer's disease, patients will misplace their belongings, have trouble with the names of familiar people,

have trouble remembering new information, and show word-finding difficulties. Personality traits may become exaggerated. Apathy, depressive symptoms, or stealing delusions may coexist. The patient may give up usual household activities, have trouble handling finances, and rely more on the primary caregiver. Impaired executive cognitive function may occur because of depression or brain disease; patients are unable to organize their instrumental activities of daily living, although they remain independent in gross physical function. The primary caregiver is in the best position to provide the clinician with this information.

Past Psychiatric History

The record of past treatment successes and failures can help develop a management plan for the current illness by providing data on the natural history of a patient's mental illness and prognosis.

Family History

Most geriatric patients have deceased parents and may have deceased siblings. The cause of death, age of death, and the health of siblings may give clues about the patient's current problems. Knowing the mental function and living arrangements of the patient's parents or siblings near the end of their lives may be useful. A family psychiatric history provides valuable clues to the patient's diagnosis and may implicate genetic vulnerability.

The past relationship of patients to their parents often determines the quality of family and interpersonal relationships. Because geriatric patients often rely on support for continuous good functioning, it is helpful to know about the quality of their relationships with their spouse or primary caregiver, adult children, grandchildren, and friends.

Personal History

Sometimes it is difficult to decide which events in an elderly patient's past are relevant to current problems and circumstances. Birth, developmental, childhood, and adolescent data are important and may be difficult to verify and corroborate by others. Knowledge of the patient's past sheds light on the vulnerabilities and strengths of each patient and may explain why some patients develop psychiatric symptomatology at particular points in their lives. A review of the life cycle of an individual establishes the premorbid capacity of each patient to adjust to important life's events. These life cycle events may include starting school, leaving home, establishing a career, getting married, the birth of children, the death of parents, children leaving home, the death of siblings, retirement, and the death of a spouse. It is important to inquire whether the patient has had a history of abuse, neglect, or maltreatment at any time. Patients who have been abused by caregivers may be more likely to show paranoid or agitated behavior in institutional care settings or to mistrust formal caregivers.

The personal history should also include an inquiry into the person's activities, religious affiliation, hobbies, and connections with community resources. This information is useful in assessing each individual's social vulnerabilities and strengths.

Documenting a patient's premorbid personality provides a longitudinal view of the patient's characteristic personality function and helps avoid erroneous diagnostic conclusions based on cross-sectional examination. Although this type of information should be elicited from the patient, corroborative history from family or friends is often necessary.

A sexual history is often omitted in elderly patients. This may be caused by the examiner's lack of knowledge or misconceptions about sexuality in old age. A history of sexual orientation and activities and practices and how the mental disorder has affected these functions is essential. For example, some elderly patients are very troubled by the anorgasmic side effects of many psychotropic drugs. Developing a comfortable atmosphere for patients to raise these concerns during the assessment can be extremely therapeutic.

Medical History, Medication Use, and Drug and Alcohol History

The clinician should document carefully all past and current medical problems, dates of onset, and treatment. The comorbidity of physical and mental illness, especially depression, is common in elderly patients (Post 1969). Several physical illnesses, including Parkinson's disease and cerebrovascular disease, can precipitate a mood disorder or paranoid disorder.

A variety of medications can precipitate psychiatric disorders such as delirium, affective disorders, and paranoid disorders (Johnson 1981). A list of all medications, dosages, and date of onset is essential. Over-the-counter medications need to be included in this survey because many, such as bromides, aspirin, and antihistamines, are neurotoxic even in moderate doses.

Drug and alcohol abuse often are underestimated in elderly patients (Brown 1982). Screening for alcoholism can be assisted by asking questions known by the acronym CAGE (Ewing 1984):

- 1. Have you ever felt you ought to Cut down on your drinking?
- 2. Have people Annoyed you by criticizing your drinking?
- 3. Have you ever felt bad or Guilty about your drinking?
- 4. Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (Eye-opener)?

A careful inquiry into the quantity and frequency of drinking behavior, in addition to the above questions, is helpful.

Functional Assessment

Functional status consists of everyday behaviors that occur in a person's home and community (Rubenstein et al. 1989). The capacity of an elderly person to remain independent often is jeopardized by the coexistence of physical and mental

disability (Lawton 1988). This is especially relevant in patients who are cognitively impaired and medically frail. The functional assessment quantifies how well the patient performs important tasks and maintains independence. This assessment ideally employs careful observation of the patient's functioning in the patient's residence. If this is not possible, an interview with the primary caregiver is essential. Lawton and Brody (1969) and Katz et al. (1970) divided the functional assessment into two kinds of activities: physical activities of daily living (ADL) and instrumental activities of daily living (IADL) (see

Table 8–2. Functional assessment tasks

Activities of daily living	Instrumental activities of daily living
Bathing	Able to use telephone
Ability to transfer	Shopping
Dressing	Food preparation
Going to toilet	Laundry
Grooming	Motor transportation
Ability to feed self	Responsibility for own medication
	Able to handle finances

Table 8-2

). This assessment 1) documents each patient's functional strengths and vulnerabilities so that appropriate in-home supports for the caregiver and patient can be organized and 2) monitors a patient's progress over time. The functional assessment can provide clues to potentially remediable and underdiagnosed medical and psychiatric conditions. Linking a mental disorder to an impairment in instrumental function often is a way to bring about acceptance of treatment by the patient and family.

The Interview With the Informant

Most geriatric psychiatric assessments require taking a history of the patient's problems from a significant other. If this person is the caregiver, specific attention should be given to assessing the caregiver's health, the caregiver's understanding of the patient's illness, a history of the caregiver's relationship with the patient, the stresses in the relationship with the patient, the degree to which the caregiver is providing practical care, and the degree of burden on the caregiver. This information is intended to provide help to the caregiver. The collaborative history may be influenced by the quality of the informant's relationship with the patient, and it may need to be reinterpreted (Oppenheimer and Jacoby 1991).

Mental Status

The mental status examination is a cross-sectional assessment of the mental state of the patient at the time of the psychiatric interview. In an office setting, the examination begins as soon as the clinician meets the patient and family in the waiting room. While greeting the patient, the clinician may note the following: How has the patient greeted the examiner? Does the patient know the reason for the interview? How did the patient arrive for the assessment? Does the patient defer to the family for explanations? These observations often determine whether the clinician sees the patient or the family first. Much of the mental status examination is completed during the history taking. The skilled clinician uses appropriate moments in an interview to explore the phenomenology associated with the mental disorder. One challenge for the clinician examining an impaired elderly patient is to ask about phenomena the patient is experiencing in words the patient can understand. A schematic for the geriatric mental status is presented in

Table 8-3. Schematic for geriatric mental status

Appearance and behavior

Speech

Affect

Subjective

Objective

Suicide potential

Thought perception—process/content

Obsessive-compulsive/phobic/anxiety symptoms

Insight and judgment

Competency

Mental

Financial

Cognitive assessment

Table 8-3

Appearance and Behavior

Geriatric patients' general appearance and behavior often suggest the underlying psychiatric diagnosis. For example, an

elderly patient sitting quietly, looking vacantly into space, dressed in ill-fitting, stained clothes with buttons missing and smelling of urine suggests the possibility of a cognitive disorder. Elderly, depressed patients may lose motivation to take care of their appearance. Meeting a patient who greets the clinician with hesitation and furtive glances and who does not want the clinician to see the family suggests paranoid symptomatology.

Posture, facial appearance, and movement can reflect mood and thinking disturbances and can be affected by a variety of neurological conditions and psychotropic drugs. For example, the shuffling, tremulous elderly man who does not look at the examiner when he speaks and who will not get out of bed may reflect a person with both Parkinson's disease and depression.

Speech

The rate, quantity, and quality of speech and the presence or absence of speech defects may offer clues to the diagnosis. For example, the spontaneity, volume, and quantity of speech often are reduced in geriatric depression. Speech sounds flat and monotonous when depression affects the person's capacity to express emotion (dysprosodia).

Affect

Clinicians should elicit and describe the subjective affective disturbance of the patient. These subjective complaints potentially may mislead the examiner. For example, as many as 20% of elderly people with depression do not complain about being sad or depressed (Post 1972). Instead, these patients may express their subjective distress as "bad nerves," "funny feelings all over my body," or just feeling "sick."

The examiner notes the predominant affect expressed during the interview and the range, appropriateness, and control of affect. Disturbance in each of these functions may signal a different underlying etiology. For example, incongruous, unrestricted affect may be associated with multi-infarct dementia, a "pained" facial expression may be associated with melancholia or chronic pain, and a blank or flat affect may be associated with Parkinson's disease.

Each geriatric patient requires a careful review of suicide ideation and intent. The accuracy and depth of the inquiry is aided by first asking about suicide ideation and passive death wishes and then, if appropriate, asking about specific intent, methods, and plans. Additional risk factors in elderly patients include poor physical health, past history of suicide attempts, family history of suicide attempts and completions, concurrent alcoholism or depression, the presence of command hallucinations, and social isolation.

Thought

The clinician should note the specific preoccupations of the patient and the presence or absence of delusions. For example, preoccupations in depression include somatic and hypochondriacal concerns, especially with the gastrointestinal, musculoskeletal, and nervous systems. Depressed patients may worry that their health is deteriorating, and these worries may replace the subjective complaint of "depression."

Delusions that are present should be described in detail. Mood-congruent delusions in severe geriatric depression

Delusions that are present should be described in detail. Mood-congruent delusions in severe geriatric depression may include delusions of poverty, sin, guilt, nihilism, and hypochondriasis. Hypochondriacal delusions are common and often center on the functions of the bowel and brain. For example, a patient may believe there is a blockage or tumor in the bowel and may subsequently stop eating.

Delusions associated with dementia are common (Drevets and Rubin 1989) and include stealing delusions, delusions of persecution, delusional jealousy (involving the spouse), misidentification syndromes (involving the caregiver or spouse), and reincarnation delusions (involving dead relatives). More complex and systematized delusions of persecution may be present in paranoid patients with apparent intact cognition. Themes seen in these patients include fears about drug dealers, criminals, and prostitutes operating in nearby homes. These patients may fear that they are being monitored and observed constantly. Ideas of reference often are associated.

Thought process abnormalities are less common in elderly patients with intact cognition than in a younger adult psychiatric population (Post 1967). Tangentiality and looseness of associations may be seen in dementias but often are not present in paranoid disorders of old age. Flight of ideas is common in mania of old age. Circumstantiality may be associated with an obsessional personality.

Perception

Perceptual disturbances include illusions, hallucinations, derealization, and depersonalization experiences. Terrifying visual illusions and hallucinations are common to severe delirium in elderly patients. Olfactory and auditory hallucinations are seen in a variety of geriatric disorders including paranoid disorders and affective disorders.

Obsessive-Compulsive, Phobic, or Anxiety Symptoms

There is some evidence that obsessive-compulsive, panic, or phobic symptoms can arise de novo in old age. These symptoms most often appear in the context of a depressive disorder or in the early stages of a dementing disorder. Agoraphobia appears to be the only primary anxiety disorder that appears first in old age to any significant degree (Elint 1994). Posttraumatic stress disorders may occur in later life, particularly in connection with medicosurgical trauma. Patients who present with an apparent late-onset anxiety disorder may have had an unrecognized or an untreated anxiety disorder earlier in life. Such individuals often are described by families as always tense, worried, nervous, or controlling. The significance of anxiety disorders in elderly patients is not well described.

Judgment and Insight

Using information obtained in the history, the clinician determines whether the patient's mental illness interferes with judgment to the extent that it could jeopardize his or her health and safety or that of others. More subtle alterations in judgment include the inability to make and carry out plans and inappropriate behavior in social situations. Traditional tests of judgment that ask the patient what he or she would do in imaginary situations are not very helpful because they are not sensitive to the subtle alterations in judgment seen in many geriatric disorders.

Insight refers to the degree of awareness and understanding the patient has of his or her illness and the need for

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treatment. It is important to inquire whether the patient realizes that certain events may have predisposed, precipitated, or may be perpetuating his or her illness. Elderly patients' judgment and insight often are affected by the dementias, by paranoid disorders, and by affective disorders with delusions.

Competence

Geriatric psychiatrists often are required to assess a patient's capacity to make decisions. This may involve the patient's ability to make or change a will, give power of attorney, or consent to treatment. The assessment of competence in each area should be tested individually. Competence is best viewed as a task-specific assessment. Therefore, a person might be competent to consent to medical treatment but might not be competent to manage financial affairs or vice versa.

One of the more common competence assessments involves the capacity of the patient to give consent for medical treatment (Applebaum and Grisso 1988). The clinician can use the following questions as a guide: Is the patient aware of experiencing a mental illness? Does the patient understand the nature of the proposed treatment? Does the patient understand the need for treatment and the implications of refusing treatment? Does the mental illness sufficiently interfere with judgment and reasoning that it accounts for refusal of treatment?

Geriatric mental illness may interfere with the capacity of a person to manage his or her finances (Lieff et al. 1984). The following questions may be used to complete this assessment: Does the person have knowledge of his or her current assets? Does the person have knowledge of monthly expenses and bills? Does the person know where assets are located and how they are being managed? Can the person complete simple calculations? Does the person experience delusions (such as delusions of poverty) that interfere with the capacity to manage his or her finances? Is the person experiencing memory impairment sufficient to interfere with his or her capacity to remember recent and past financial transactions? Is the person's judgment so affected (in a manic episode or in dementia, for example) that the patient's finances would be jeopardized?

The Cognitive Assessment

Purpose. The assessment of cognitive function is a crucial component of the geriatric mental status examination. The purpose of this portion of the comprehensive examination is to allow the clinician to answer the following questions:

• Is cognitive impairment present or absent? This question traditionally has been phrased, "Is the illness 'functional' or 'organic?" In psychogeriatrics, however, the interplay between these two elements often challenges the validity of this diagnostic dichotomy. For example, the patient with depression who presents with what appears to be pseudodementia might be classified as having a "functional" illness, but the patient may be experiencing the earliest symptoms of a bona fide dementing illness (Kral and Emery 1989). Conversely, a patient whose depression follows a left frontal cerebrovascular accident may be classified as having an "organic" illness, but the affective component may respond well to the same somatic modalities as a "functional" illness (Starkstein and Robinson 1989). Awareness of the presence or absence of cognitive impairment is crucial in determining etiology and formulating a treatment plan.

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- What is the pattern of the cognitive dysfunction? The pattern of cognitive impairment may reveal important clues about the etiology of the illness. The exact location of a lesion may not be elicited by the screening examination, but the examiner should be able to determine whether the lesion is diffuse or multifocal (as in Alzheimer's disease) or localized (as in a right parietal lobe tumor).
- What is the quantity or severity of the cognitive impairment? When cognitive function examinations are performed longitudinally, the answer to this question helps determine the course and prognosis of the illness. A functional assessment and the assessment of the quality and quantity of cognitive impairment are essential to determine how much care or supervision patients require.
- Is a more elaborate neuropsychological examination necessary? Although much can be learned from a relatively brief screening examination, more detailed testing helps establish a more accurate diagnosis when the findings are extremely subtle or when the clinician suspects an underlying dementia or neurological illness. When the diagnosis of dementia is likely, more detailed testing establishes areas of weakness and strengths in the various cognitive domains for organizing a comprehensive rehabilitation program. The examination should help guide the choice of other investigations, such as electroencephalogram and neuroimaging, required for further diagnosis.

Principles. The cognitive examination begins immediately with history taking. The examiner should comment on aspects such as attention, concentration, memory, and language by listening to how the patient relates the details of the history. These "passive" observations can be supplemented by subtle "in-context" questioning throughout the history (e.g., asking patients the exact date of a wedding anniversary while talking about their marriage, asking patients to name all their grandchildren, or asking what day of the week they were admitted to the hospital).

The cognitive assessment should be documented carefully. A clinician seeing a patient with Alzheimer's disease 2 years after initial diagnosis will be able to compare findings more meaningfully if the first examiner recorded "could recall three out of four objects after 5 minutes," rather than "short-term memory fair."

Another important principle is that the examination must be acceptable to both the patient and the examiner. The examiner should be able to administer the tests easily, with minimal equipment, and in a short period of time. The tests must be nonthreatening to the patient and should not be unduly arduous, particularly if they follow a lengthy history.

The formal assessment always should begin with a short explanation to the patient (e.g., "I would now like to ask you some questions to see how well you can concentrate and remember things"). Elaborate explanations and using the word "test" only serve to heighten the patient's anxiety; being apologetic (e.g., "Some of these questions may seem a little silly . . . ") reduces the legitimacy and importance of the exam.

The examination is organized in a hierarchical fashion from basic functions to more complex ones. For example, attention and concentration need to be assessed before any valid testing of memory is done. The examiner will have to demonstrate a degree of flexibility depending on the clinical situation and the degree of impairment demonstrated during the history (e.g., comprehension will need to be tested early in any patient with a suspected aphasia). This hierarchical approach is extended to assess tasks within a given cognitive domain. For example, a patient with suspected concentration impairment might be asked to count backward by 1s from 100 before being asked for serial 7s from 100. The former test is simpler and less threatening; the latter is more likely to demonstrate milder impairment, but it may

overwhelm the patient who did not have the opportunity to warm up for the testing procedures. When recording scores on individual tasks, the examiner should note the quality of the responses. "I don't know" responses, confabulations, lack of effort, and perseveration (the pathological repetition of speech or actions) are qualitative comments that provide useful diagnostic information.

Table 8-4. Format of the cognitive assessment

Attention and concentration

Language

Spontaneous speech

Comprehension

Naming

Orientation

Memory

Recent

Remote

Constructional ability

Praxis

Frontal systems

Table 8-4

outlines an easily administered cognitive assessment that provides the information necessary to answer the questions listed above.

Attention and concentration. Attention traditionally has been tested using the task of repeating a string of digits forward and backward; concentration has been measured with the serial 7s task. Both tests provide useful information, but elderly persons often feel threatened when confronted with tasks involving numbers or arithmetic. The serial 7s subtraction test, in particular, may depend more on a patient's premorbid intellectual capacity and education than on an underlying impairment of concentration. A simple test to assess attention consists of reading a series of random letters to the patient and asking him or her to indicate (tap or say "yes") every time he or she hears the letter "A." This task can be scored for errors of omission, commission, or perseveration. Simple tests of concentration include asking a patient to state the days of the week backward followed by months of the year backward. If these two tasks are performed well, the patient can be asked to do serial 7s from 100.

Language. The exact characterization of an aphasia may be beyond the scope of a screening examination of cognition, but the examiner can assess some aspects of a patient's expressive and receptive language function during screening of cognition. After taking the patient's history, the examiner should be able to comment on many aspects of spontaneous

speech such as articulation (presence of dysarthria), melody (prosody), the presence of word-finding difficulties, and evidence of specific aphasic errors such as paraphasias. Paraphasias include substituting an incorrect word (referred to as verbal or semantic paraphasia; for example, "I cut meat with a 'pen'") or substituting a syllable (called a phonemic or literal paraphasia; for example, "I cut meat with a 'fife").

Comprehension can be tested by asking the patient to point to certain objects in the room. The test can be made more difficult by increasing the number of objects in a single command (e.g., "Point to the ceiling, the wall, and then the door") or by proceeding from the concrete (e.g., "Point to the light") to the more abstract (e.g., "Point to the source of illumination"). Alternatively, the examiner may ask a series of questions to which the patient responds "yes" or "no." To detect perseveration, the yes or no responses should vary randomly. This task is made more complex by varying the complexity of the question (e.g., "Is snow white?" versus "Does a stone float on water?" versus "Do you put on your shoes before your socks?"). Comprehension tests involving asking a patient to perform 1-, 2-, or 3-stage commands may be useful but difficult to interpret if the patient has a motor problem or apraxia.

Naming difficulties (anomia) that occur in aphasic patients may be found in patients with dementia such as Alzheimer's disease, toxic metabolic encephalopathies, and raised intracranial pressure (Cummings 1985). Naming referred to as "confrontation naming" is tested by pointing to a series of objects and asking the patient to name each one. The objects should include different categories (colors, body parts, clothing), high-frequency words (blue, red, mouth, hand, shirt, tie), and low-frequency words (purple, knuckles, watch crystal).

Orientation Orientation is a function of memory and consists of long-term (orientation to person) and short-term (orientation to place and time) components. Orientation to person, place, and time is tested sequentially. Patients are asked their full name, age, and date of birth. Orientation to place is tested by asking where they are and asking which city, state, and country they are in. Patients may be asked their home address and more details of their present location (hospital floor, ward, or room). Orientation to time includes asking the day, date, month, year, and time of day. Patients who respond incorrectly to any of the above can be corrected and retested later in the interview as a test of ability to learn new information.

Memory. Testing memory can be extremely complicated if all its dimensions (immediate, recent, remote, recall, recognition, verbal, and visual) are tested individually. Memory can be assessed quickly and simply for cognitive screen purposes to determine whether more elaborate testing is needed. The examiner begins by telling the patient to remember four words that the patient will be asked to recall in several minutes. Any four unrelated words can be used; the examiner should use the same series of words for every patient to ensure consistency and ease of administration. Immediate recall is tested by asking the patient to repeat the four words immediately after the examiner's first recitation. The patient may require several trials to learn all four words; the number of trials should be recorded. Recent memory is examined by asking the patient to recall the words after 5 minutes. The examiner should record the number of words recalled spontaneously and those recalled with the use of hints. Two kinds of hints or cues are semantic cues (hints related to the category of the object such as "one word was a kind of animal") and phonemic cues (given by progressively reciting the individual sounds or syllables of the word; "B . . . Bl . . . Bla . . . Black," for example).

Remote memory is assessed by noting the patient's knowledge of personal history details and by asking several questions about historical or political facts (names of the president and past president, dates of World War II, what

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questions about historical or political facts (names of the president and past president, dates of World War II, what Sputnik was). The performance on this task depends on the patient's premorbid intelligence and education. This task should be modified to account for sociocultural factors (for example, asking a recent immigrant from England the names of prime ministers instead of presidents).

Constructional ability. Constructional ability is assessed by asking the patient to draw or copy two-dimensional and three-dimensional figures. These tasks involve extensive cortical areas and can be quite sensitive to subtle changes in overall cognition; difficulty on these tests may indicate nondominant parietal lobe impairment (Strub and Black 1985).

For proper evaluation of constructional ability the clinician must ensure that adequate light, optimum vision (glasses are worn if necessary), and appropriate motor ability (no gross evidence of weakness or incoordination) are present. Paper should be unlined so that it does not produce interference and the patient should be given a pencil or a pen that writes easily, even at odd angles.

Constructional ability can be tested by asking the patient to draw freehand and to copy figures. The patient can be asked to draw a circle, cross, and a cube (in order of ascending difficulty). If the patient experiences any difficulty, the examiner draws the figure and asks the patient to copy it.

Another simple, useful test of constructional ability is to hand the patient a sheet of paper with a predrawn circle and ask the patient to write in the numbers to make the circle look like the face of a clock. If this is done correctly the patient can be asked to draw in the hands to make the clock read 3 o'clock (a relatively easy task) or 10 minutes past 11 (a relatively difficult task). Clock drawing is a good screening tool that correlates well with overall cognitive functioning (Shulman et al. 1986). It can be used to demonstrate unilateral neglect and perseveration and is useful in following the progression of an illness (for example, relative improvement in a resolving delirium or worsening of a dementia).

Praxis. Ideomotor praxis involves the ability to perform volitional actions on command, in mime, without props (
Cummings 1985). Testing involves limb, whole-body, and buccal-lingual commands. To assess limb commands, the
patient can be asked "Show me how you would comb your hair with your left hand." Other limb commands may include
brushing teeth, turning a key, or using a saw. Both hands should be tested separately. Common errors include performing
the actions awkwardly, using the hands as the object instead of pretending to hold the object, needing to use both hands,
or verbalizing the task first (Taylor et al. 1987). Whole-body commands include asking the patient to stand like a boxer or
to swing a bat like a baseball player. To demonstrate buccal-lingual commands patients can be asked to pretend to lick
crumbs off their lips, blow out a candle, or suck through a straw. Impairment of this kind of praxis (i.e., ideomotor
apraxia) usually is related to dominant parietal lobe dysfunction.

Frontal systems tasks. Frontal systems tasks are used to screen for dysfunction of the frontal lobes and of their interconnected, subcortical structures. These tests are useful for assessing patients with frontal lobe pathology (such as in Pick's disease) and for assessing the cognitive functioning of patients with extrapyramidal disorders (such as Parkinson's disease). In the latter, dysfunction in the basal ganglia, with its multitude of connections to the frontal lobes, may lead to a pattern of cognitive impairment, referred to as subcortical dementia, that is quantitatively and qualitatively different from cortical dementias (Cummings and Benson 1983). The frontal lobes oversee many cognitive functions, including attention, concentration, verbal fluency, abstraction, insight, and judgment. The following tests have been chosen for use in the cognitive screening because they tend to elicit two important signs associated with frontal lobe dysfunction:

perseveration and concrete thinking. (Assessment of attention, concentration, insight, and judgment were described above.)

Perseveration may be obvious from the history and previous testing; it can be assessed further by showing the patient an alternating-sequence diagram or several multiple loops (see

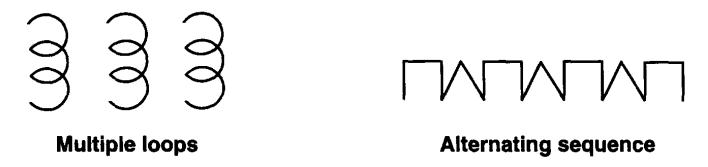


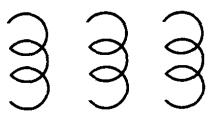
Figure 8–1. Perseveration can be assessed by asking patients to copy the multiple loops drawing or the alternating sequence diagram and continue the pattern across the page.



Figure 8–1. Perseveration can be assessed by asking patients to copy the multiple loops drawing or the alternating sequence diagram and continue the pattern across the page.

Figure 8-1

) and asking the patient to copy the diagrams exactly and continue the pattern across the page. Perseverative errors include drawing consecutive squares or triangles with the former and adding extra loops to the latter. Alternatively, the patient can be asked to tap once when the examiner taps twice and twice when the examiner taps once. The examiner, while tapping randomly once or twice, observes whether the patient can learn the correct response, how many errors are





Multiple loops

Alternating sequence

Figure 8–1. Perseveration can be assessed by asking patients to copy the multiple loops drawing or the alternating sequence diagram and continue the pattern across the page.

Figure 8-1

) and asking the patient to copy the diagrams exactly and continue the pattern across the page. Perseverative errors include drawing consecutive squares or triangles with the former and adding extra loops to the latter. Alternatively, the patient can be asked to tap once when the examiner taps twice and twice when the examiner taps once. The examiner, while tapping randomly once or twice, observes whether the patient can learn the correct response, how many errors are committed, and whether the errors are perseverative (e.g., the patient continues to tap twice every time the examiner taps twice). The task can be made more difficult when the examiner asks the patient to tap twice every time the examiner taps once but not to tap at all if the examiner taps twice. Particular attention is paid to whether the patient perseverates on the first series of instructions by continuing to tap once when the examiner taps twice.

Tests to elicit concrete thinking involve testing a patient's ability to think abstractly. The results of these tests need to be interpreted cautiously because they are highly dependent on educational level and cultural background. The patient can be asked to interpret metaphorical speech such as "he's blue," "she's yellow," "a heart of gold," or "heavy-handed." The patient can be asked to interpret some common proverbs such as "don't cry over spilled milk" (low difficulty) or "a stitch in time saves nine" (higher difficulty).

Concrete thinking can be elicited by using a similarities task. The patient is asked to describe how two objects are alike. The task begins with a simple stimulus such as "How are an apple and an orange alike?" The response "they are both round" may indicate concrete thinking, but the patient should be told the examiner was looking for the response "they are both fruits" before proceeding with the next stimulus. Stimuli are arranged in order of ascending complexity (e.g., orange/apple, shirt/pants, table/chair, airplane/bicycle). Continued responses emphasizing minute individual characteristics (as opposed to the group or category to which the objects belong) are indicative of concrete thinking. This test is less culture-biased than proverbs.

Standardized Assessment Instruments

Standardized assessment instruments are essential tools for clinical investigators, but their utility in every day clinical practice is often underemphasized. These instruments are particularly useful in the circumstances listed below, but they never should take the place of the comprehensive biopsychosocial assessment described above.

For Communicating With Colleagues

Subjective descriptions of symptom severity or degree of impairment can be misleading or unreliable; therefore, scales such as the Mini-Mental State Exam (Folstein et al. 1975) or the Hamilton Depression Rating Scale (Hamilton 1967), which are widely recognized, help standardize communication between physicians.

For Medicolegal and Insurance Purposes

Clinicians may argue the validity and reliability of individual scales or diagnostic tools, but many of these have been embraced by the legal system and insurers because they ostensibly provide systematic standardized descriptions of psychopathology.

To Solve Specific Clinical Problems

Certain rating scales can be used to solve specific clinical problems. For example, the Staff Observation Aggression Scale (Palmstierna and Wistedt 1987) can be used on the ward for documenting antecedents and consequences of aggressive acts. This information is used for designing a behavioral program for aggressive elderly patients.

To Document Change

Recording scores on depression rating scales or cognitive assessment scales effectively can document response to treatment or progression of illness.

For Education Purposes

Standardized assessments often are excellent tools for teaching medical students or allied health professionals. These assessments are taught easily and can elevate awareness of the necessity to consider emotional and cognitive functioning in all elderly patients.

Depression rating scales. Depression rating scales are divided into interviewer-administered and self-report measures. The former generally are more sensitive and specific, whereas the latter generally are easier and quicker to administer (
Thompson et al. 1988). The most widely used interviewer-administered measure is the Hamilton Depression Rating Scale (HAM-D) (Hamilton 1967). Its reliability recently has been improved by the development of a structured interview guide (Williams 1988), but its heavy weighting toward somatic symptoms (9 of 17 items) might be problematic for use in an

elderly population with a high prevalence of physical illness (Thompson et al. 1988). The Montgomery-Åsberg Depression Rating Scale (MADRS) (Montgomery and Åsberg 1979) places less emphasis on somatic symptoms and may be more suitable in an elderly population (Kearns et al. 1982). This scale is easily administered and very helpful for documenting response to therapy. The most commonly used self-report measures in geriatrics are the Geriatric Depression Scale (GDS) (Yesavage et al. 1983), the Zung self-rating depression scale (Zung 1965), and the Beck Depression Inventory (BDI) (Beck et al. 1961). The GDS, designed specifically for use in elderly patients, is sensitive and specific (Norris et al. 1987). It is easily administered, requiring patients to respond yes or no to a series of 30 statements. A short form (10 items) is available (Sheikh and Yesavage 1986). Self-rated scales are not valid when there is significant cognitive impairment, especially when insight is lost.

Cognitive function and dementia rating scales. There has been a recent proliferation of brief, standardized, easily administered screening examinations for cognitive impairment. Such instruments include the Short Portable Mental Status Questionnaire (Pfeiffer 1975), the Blessed Dementia Index (Blessed et al. 1968), and the Clifton Assessment Schedule (Pattie and Gilleard 1976). One of the most widely accepted scales is the Mini-Mental State Exam (MMSE) (Folstein et al. 1975). The MMSE provides a measure of cognition that includes tests of orientation, memory, concentration, language, and constructional ability. This examination requires only about 10 minutes and is easy to administer. It is not without weaknesses, but this tool has been used for more than 27 years, has been extensively investigated, and has stood the test of time with acceptable validity and reliability (Tombaugh and McIntyre 1992). Another group of standardized assessments has been designed to complement the MMSE. This group attempts to rate the stage of dementia or the severity of cognitive and noncognitive behavioral impairment. Two such scales are the Global Deterioration Scale (Reisberg et al. 1982) and the Clinical Dementia Rating Scale (Hughes et al. 1982). Another popular scale, the Alzheimer's Disease Assessment Scale (Rosen et al. 1984), combines a cognitive screen with an inventory of noncognitive behaviors to provide an overall measure of illness severity.

Miscellaneous rating instruments. Scales to measure functional abilities and activities of daily living were discussed above. A number of scales with specific foci can be very useful in clinical practice. The Overt Aggression Scale (OAS) (Yudofsky et al. 1986) and the Staff Observation Aggression Scale (Palmstierna and Wistedt 1987) are useful for evaluating aggressive behavior. The former scale is much more popular. The latter has the advantage of documenting antecedents, aggressive acts, and consequences of aggression; therefore, it aids in developing behavioral management. Simple systematic observation and documentation with this tool has shown a decrease in aggressive behavior in a group of psychogeriatric inpatients (Nilsson et al. 1988). Another useful tool is the Abnormal Involuntary Movement Scale (National Institute of Mental Health 1975). This scale consists of a number of ratings of abnormal movements including a global measure of severity, a rating of incapacity, and a measure of the patient's awareness of the movements. This scale is particularly helpful for monitoring elderly patients on neuroleptic treatment. A popular multidimensional measure of psychopathology is the Brief Psychiatric Rating Scale (Overall and Gorham 1962). This scale consists of 16 measures including anxiety, depression, hostility, hallucinations, and unusual thought content; it has been studied in a psychogeriatric population (Overall and Beller 1984).

Physical and Neurological Examination

Physical and Neurological Examination

All geriatric patients require an appropriate physical examination with special attention directed to the neurological system.

Diagnosis and Formulation

After completing the history and functional, medical, and mental status assessments, the clinician can propose a provisional diagnosis and differential diagnosis, develop an etiological formulation, and establish the capacity of each patient to function independently. The provisional and differential diagnoses will direct the clinician in planning for an orderly series of investigations and tests that will confirm or refute the provisional diagnosis or the specific diagnoses in the differential

By reorganizing the salient features of the assessment into an etiological formulation, the clinician will develop a working hypothesis of the factors that make this patient vulnerable to developing a mental illness at this particular time. Knowledge of the biopsychosocial vulnerability of each patient is necessary for individualizing the case management. Knowledge of the current capacity of patients to function in their environment will aid in determining what specific social supports must be provided to allow a person to continue living there. A comprehensive management plan, including biological, psychological, and social therapies, logically follows from the results of this assessment.

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