Neuropsychiatric Problems in the Elderly

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7.1. Introduction

The number of persons 65 years and older has increased steadily in the twentieth century and is now approximately 26 million (almost 12% of the population); before 2035, 20% of the population of the United States, approximately 56 million people,1 will be over 65; indeed, the most rapidly growing portion of the population is the group of individuals over age 75.

The elderly are at considerable risk for a varied multitude of physical and psychiatric problems. Although they represent 12% of the population, they account for more than 14% of the outpatient visits to health care facilities. Also, they are admitted to general hospitals at a rate more than double that of younger patients and remain in the hospital longer. Elderly persons occupy 85% of the 1.4 million nursing home and extended-care facility beds in the United States.2

Psychiatric diseases among the elderly seem more prevalent than in their younger counterparts,3 even accounting for the observation that there is a societal reluctance to identify disorders in the elderly as psychiatric and also to tolerate deviant behavior in this group for longer periods of time.4 Because of this, it is difficult to assess accurately the true prevalence of psychiatric disorders in this...
population. The number ranges from 20 to 45% in that portion of the elderly population (95%) residing in the community and is much higher, approaching 90%, among those residing in institutions.\textsuperscript{5,6}

To expand on the difficulty of accurately assessing the prevalence of psychiatric disorders in the elderly, it is common practice to categorize disturbed behavior, regardless of age, into “organic” and “functional” groups. Organic implies that the etiology is strictly biologic, while functional implies a vague etiology somehow combining environmental and biologic factors. Someone with a functional problem is considered to have a psychiatric problem, whereas an individual suffering from an organic problem is categorized as having a medical or neurologic problem. This artificial separation is particularly confusing in elderly patients, owing to the added problem of considering many patients in this age group who exhibit disturbed behavior described as “senile.”\textsuperscript{7} This label suggests still another vague category, somehow neither totally organic nor totally functional. The only thing clear about this nosology is that it tends to be completely confusing and certainly not very helpful.

Individuals with disturbed central nervous system (CNS) function have only a limited number of ways to express this dysfunction, regardless of whether the etiology is functional or organic. This concept of a limited capability of expression, regardless of etiology, is called the “final common pathway” of CNS function. Thus, similar problems with attention, perception, memory, orientation, or thinking; speech dysfunction; and emotional lability may be seen in an elderly patient with a dementing illness (an organic problem), as well as in a patient suffering from a psychotic depression or schizophrenia (functional problems). The concept that a patient with a functional psychosis will have a concomitant clear sensorium is much more valid in younger patients than in older ones. Conversely, patients with dementing illnesses frequently exhibit thought disorders in the form of delusions and a loss of reality testing in the form of hallucinations or illusions along with their sensorium deficits. These “mixed” presentations of both organic and functional problems in the same elderly patient are a common finding. Thus the idea of neuropsychiatric disorders comes a little closer to reality when discussing unusual behavior in an elderly patient.

Physiologic changes occur in various organ systems with aging that affect the CNS, both directly and indirectly (Table I); there are also morphologic changes in the CNS at the system, organ, tissue, cellular, and subcellular levels with aging that are directly associated with functional changes in cognition and behavior.\textsuperscript{8,9,10}

Moreover, the relationship between environmental stresses and strains (primarily involving uncontrolled and inexorable losses) and the physiologic response of a compromised older host is much more complex than in younger individuals (Fig. 1) also making separation into effective diagnostic categories much more difficult and not very useful.\textsuperscript{8} This is an example of the biopsychosocial model of Engel.\textsuperscript{11} For a more comprehensive treatment of this subject, the reader is directed elsewhere.\textsuperscript{12}