The Different Domains of the Comprehensive Geriatric Assessment

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2.1 Introduction

Identification of older individuals who are frail or at risk of poor health outcomes, followed by appropriate subsequent evaluation and intervention, constitutes a cornerstone of geriatric medicine and quality of care for the ever-growing elderly population. However, in the geriatric population, clinical decision making, including diagnosis, treatment, and outcomes selection, may be particularly challenging. Indeed, older patients are often frail and complex because of the interplay of the multisystemic effects of the aging process with multimorbidity and polytherapy and because of the important contribution of psychological, social, economic, and environmental factors as key determinants of older people's health status (Fig. 2.1). Therefore, the conventional disease-oriented approach may not be suitable; for example, in the presence of multimorbidity, the relationship between a particular disease and the clinical manifestations is often cloudy, and it may be particularly difficult to assess the severity of a specific disease and to assess its impact in terms of functional status and health status. Furthermore, many distressing symptoms, including but not limited to pain, fatigue, sleep disorders and dizziness, may not be attributable to a single specific clinical entity as they are often the consequence of multiple conditions. Finally, compared to younger patients, older patients may have different and heterogeneous preferences and priorities on potential and competing health outcomes and goals such as relief from distressing symptoms, comfort, physical or cognitive function, and increased survival.

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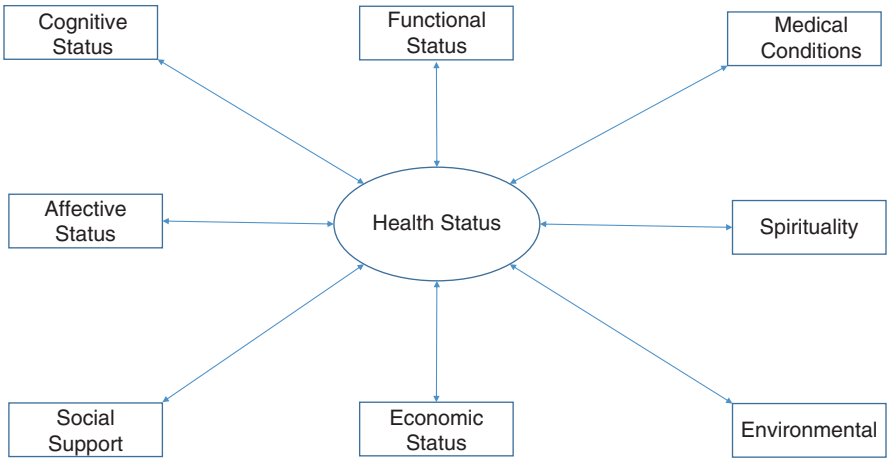

Fig. 2.1 Main determinants of health status of older people

For these reasons, in addition to the traditional medical evaluation, a different multidisciplinary and more holistic approach has been developed. Comprehensive geriatric assessment (CGA) is a multidimensional, diagnostic method elaborated to identify patient's needs, develop a personalized care plan, and improve outcomes of frail older people. Besides detailed data on clinical, functional, and cognitive domains of older patients, CGA provides valuable information on nonmedical domains including economic and socioenvironmental parameters and conditions [1].

Although many different models of care and multiple instruments have been developed and validated over the last 40 years, the majority of CGA tools include similar measurable dimensions, usually grouped into the four domains of *physical health* (including the traditional history, physical examination, laboratory data and problem list, disease-specific severity indicators, and preventive health practices), *functional status* (including basic and instrumental activities of daily living and other functional scales such as mobility or balance and fall risk assessment), *psychological health* (including mainly cognitive and affective status), and *socioenvironmental status* (such as social networks and supports, and environmental safety, adequacy, and needs) [2, 3].

2.2 Physical Health

Comprehensive geriatric assessment does not substitute the traditional clinical workup based on patient's medical history and physical examination, but clinicians need to extend beyond standard evaluation, focusing on a systematic search for specific conditions that are common among older people and might have considerable impact on health status. Indeed, problems like visual and hearing impairment or frequent falling are often overlooked because geriatric patients fail to report these conditions unless specifically inquired about (Table 2.1).

Table 2.1 Selected multidimensional screening instruments according to CGA domain

		Screening instruments	
Domains	Dimensions	Self-report	Performance-based
Physical health	Vision		Snellen chart
	Hearing	Self-reported screening questions	Whispered-voice test
		Hearing handicap inventory for the elderly	Audioscope test
	Multimorbidity		Cumulative illness rating scale
			Charlson comorbidity index
	Polypharmacy	Medication list	Updated Beers criteria
			STOPP and START criteria
	Nutrition	Subjective global assessment	Mini-nutritional assessment
	Balance		SPPB – balance test
			Up and go test
			Performance-oriented mobility assessment
Functional status	Basic activities of daily living	Katz index	
	Instrumental activities of daily living	Barthel index	
	Mobility	Rosow-Breslau scale	Gait speed over 2–6 m
		Mob-H scale	Physical performance test
			Short physical performance battery
			400-m walking test
			6-min walking test
Cognitive status	Cognition		Mini-mental state examination
			Montreal cognitive assessment
			Short portable mental status questionnaire
			Hodkinson abbreviated mental test
			Mini-Cog
	Delirium	Confusion assessment method	
		4-AT	
	Mood	Geriatric depression scale	
		Hamilton rating scale for depression	
		Geriatric anxiety inventory	
		Geriatric anxiety scale	

2.2.1 Vision

One in three adults over the age of 65 years has some form of vision-reducing eye disease, because presbyopia, cataracts, macular degeneration, glaucoma, and diabetic retinopathy all become more prevalent with increasing age [4]. However, many patients do not report symptoms of visual loss, assuming it is a normal part of aging or that nothing can be done about it. Geriatricians can minimize elderly patients' visual loss by screening for age-related eye disease. Intact vision is important to maintain functional independence; for instance, visual acuity is vital to driving and important to properly managing medications and finances. It is important to initially screen for vision problems by asking patients if they wear glasses and whether they have visual problems that interfere with their daily activities. For instance, providers may consider asking patients questions such as: "Do you have trouble recognizing faces? Do you have problems reading a book or the newspaper? Do you have problems watching television? Does your eyesight interfere with any other activities?" A positive response should prompt further assessment of vision [5]. The standard method of screening for visual acuity problems is the Snellen chart. The patient should stand 4.5 m from the chart and read the letters with each eye independently and then both eyes, with eyeglasses if needed. An impairment of 20/50 or worse or a difference of one line or more between eyes should prompt referral to an eye care specialist. However, given the frequency of vision-reducing eye diseases in the aging population, many of which are irreversible if left untreated, it may be prudent to encourage even asymptomatic patients to have annual eye examinations by optometrists or ophthalmologists to screen for these conditions.

2.2.2 Hearing

Presbycusis is the third most common chronic condition in older people, after hypertension and arthritis [6]. Like vision loss, hearing loss can significantly impact functional abilities as well as participation in social activities; furthermore, patients with hearing impairment are at higher risk for cognitive decline [7]. Older patients often do not complain of hearing loss during a usual medical evaluation; thus, healthcare providers must screen patients for hearing loss. Patients should be asked if they feel they have hearing deficit. A positive answer to this simple question has positive likelihood ration of 2.5 for presence of hearing impairment, and therefore these patients should be referred for formal audiologic assessment. Those who reply no should be further investigated with a whispered-voice test, in which the investigator stands 2 feet behind the patient and gently whispers three random numbers or letters while occluding the patient's contralateral auditory canal [8]. Patients that are not able to repeat all three numbers after two tries should be referred for audiological test as well. Alternatively, validated questionnaires, such as the screening version of the hearing handicap inventory for the elderly, accurately identify persons with hearing impairment [9].

2.2.3 Multimorbidity and Polypharmacy

Multimorbidity is usually defined as when an individual has two or more long-term conditions. Studies show that multimorbidity becomes more common as people age; according to a large UK-based study, two-thirds of people aged 65 years or over had multimorbidity, and 47% had three or more conditions [10]. However, although appropriated for epidemiological and research studies, this definition had been considered too broad to be useful in clinical practice, and it has been suggested that defining multimorbidity by simple counts of any kind of diseases and conditions might be not adequate. Indeed, many people may have multimorbidity defined as two or more chronic conditions, but for many, their multimorbidity will present them few problems in their life (e.g., someone with well-controlled hypertension and localized arthritis). In order to weight and assess the severity of multimorbidity, many measurement tools have appeared in the literature, including complex indexes of severity, complications, treatment, and prognosis, such as the cumulative illness rating scale [11] and the Charlson comorbidity index [12]. There are, however, methodological problems affecting the measurement and operational definition of multimorbidity that still limit their utilization in clinical practice.

For many people, multimorbidity matters because it is associated with disability, reduced quality of life, higher mortality, and much greater health services use, including emergency hospital admissions. Furthermore, multimorbidity is associated with polypharmacy, high treatment burden, and also higher rates of adverse drug events [13]. Older people take more medication than any other age groups [14], but despite their role in decreasing morbidity and mortality, medication and particularly polymedication are not risk free. Indeed, age-related physiological change, including, but not limited to, renal function decline and increased permeability of the blood-brain barrier, as well as medication errors, explain the higher risk of adverse drug events of older patients. Serious adverse drug reactions may lead to hospital admission, functional decline, and, eventually, increased mortality [15]. Management of and correct adherence to medications by older patients is often a demanding task requiring good cognitive performance. Older adults may have multiple barriers to correct medication use including visual impairment, cognitive decline, reduced dexterity, and poor health literacy. Medication assessment, including both medication reconciliation and a comprehensive medication review, is therefore a cornerstone of geriatric assessment and patient safety.

The clinician needs to determine what medications the patient is taking and how he or she takes them. For this process, called "medication reconciliation," multiple pieces of information from the patient, caregiver, and medical record should be gathered. After the medication list is established, the regimen itself must be assessed for safety and appropriateness. Different validated instruments, such as the updated Beers criteria [16] and the STOPP and START criteria [17], may help clinicians to identify both potentially inappropriate medications and the right treatment for a specific patient. Finally, since the likelihood of drug interactions increases with the number of medications taken, complex medication lists should be checked for potential interactions. Many validated software applications are available to help clinicians in this important and difficult task.

2.2.4 Nutritional Status

Maintaining adequate nutrition requires a robust contribution of physical, cognitive, psychological, and social domains. As these domains become impaired with aging, the risk of malnutrition increases in older people. Furthermore, inadequate micronutrient intake is also more common in older persons because several age-related medical conditions may predispose patients to vitamin and mineral deficiencies. Malnutrition can predispose patients to functional decline, falls, fractures, mobility impairments, and several diseases. Thus, the screening and assessment of malnutrition are a crucial part of CGA.

There are four components specific to the geriatric nutritional assessment:

1. Nutritional history performed with a nutritional health checklist
2. A record of a patient's usual food intake based on 24-h dietary recall
3. Physical examination with particular attention to signs associated with inadequate nutrition or overconsumption
4. Select laboratory tests

Many nutrition screening tools are available for malnutrition identification [18]. The subjective global assessment (SGA) [19] is a tool recommended by the American Society for Parenteral and Enteral Nutrition (ASPEN), performed based on patients' medical history and physical examination. It asks participants to record changes in weight, dietary intake, functional capacity, gastrointestinal symptoms, metabolic stress, loss of subcutaneous fat, muscle wasting, and ankle/sacral edema, instead of anthropometric and biochemical tests. A score of C (severely malnourished) is given to patients who have had important fat and muscle loss, a continuous loss of weight, lost 10% of total weight in 6 months, or a significant intake restriction. A score of B (moderately malnourished) is given to patients with loss of 5–10% of total weight in 6 months, with slight loss of fat and muscle and a reduction in mild or moderate intake who may or may not have symptoms. Finally, if there are no symptoms, functional impairment, or weight loss, patients are classified as well nourished (score A). It has the advantage of simple operation, repetitiveness, and no need for any biological assays, but it may be not accurate because the assessment is based on the subjective impression. Furthermore, it may not be suitable for older persons with cognitive impairment and without a reliable caregiver.

The mini-nutritional assessment (MNA) [20] is an elder-specific tool and is extensively validated in nutritional risk screening and nutritional status assessment. It includes 18 questions in four domains: nutritional assessment, subjective assessment, anthropometric assessment, and general assessment. With a total score of 30, scoring $\geq$24 indicates good nourishment, scoring 17–24 indicates risk of malnutrition, and scoring <17 indicates malnutrition. A simpler version of the MNA, the short-form mini-nutritional assessment (MNA-SF) developed by Rubenstein in 2001, to be further revised by Kaiser et al. [21], has a high correlation with the MNA and is widely used to screen nutritional status of the population. Currently, two

versions of MNA-SF are available: MNA-SF-BMI (body mass index) and MNA-SF-CC (calf circumference).

Finally, assessment of alcohol usage should be performed in all patients as part of the nutritional status evaluation. Alcohol intake generally declines in older patients, but older age also changes the ability to metabolize alcohol due to multimorbidity, medications, and changes in liver function and body composition. Thus, older patients may be more sensitive to a negative alcohol effect, particularly in the presence of cognitive decline.

2.2.5 Balance and Falling

Impaired balance in older persons often manifests as falls and fall-related injuries. Approximately one-third of community-living older persons fall at least once per year, with many falling multiple times [22]. Falls are among the leading causes of chronic disability in the elderly which can lead to fractures, soft tissue damage, brain damage, hospitalization, and death. The risk of falling should be assessed by specifically asking the patient about falls and by testing balance, gait, and lower extremity strength. Patients with a history of recurrent falls or fall with injury should receive more detailed assessment beside gait and balance evaluation, including orthostatic blood pressure, vision testing, and medication review [23].

There are many methods and scales for balance and fall risk assessment. Some of them are simple and can be administered also in the physician's office [24]. Balance can be objectively assessed asking the patient to maintain a side-by-side, semi-tandem, and full-tandem position for 10 s [25]. The "up and go" test is a timed assessment of the capability to rise from a chair, walk three meters, turn, walk back, and sit down again on the chair [26]. Patients who need more than 20 s to complete the test are at risk of falling and deserve further investigation. The Tinetti gait and balance instrument is designed to estimate the risk for falls within the following year [27]. This test involves observing as a patient gets up from a chair without using his or her arms, walks 10 ft, turns around, walks back, and returns to a seated position. The patient is asked to complete the gait portion first with the evaluator walking close behind the elder and evaluating gait steppage and drift. The patient is then asked to complete the balance portion with the evaluator again standing close by the patient (toward the right and in front). Nevertheless, it takes about 8–10 min to complete, and it may take too long to be used routinely in a physician's office.

2.3 Functional Status

Measurement of functional status is an essential part of the evaluation of older persons. Patient's capability to perform functional tasks can be considered as a comprehensive measure or the overall impact of age-related impairment and health conditions, including chronic diseases. Furthermore, in older patients, functional status is a powerful prognostic factor and an important indicator of quality of life.

In order to assess functional status in older populations, a variety of tools have been proposed and utilized: some of them belong to self-report measures; others are objective measures. Both self-report and objective measure tools can investigate specific steps of the disablement process; furthermore, there are also more complex tools which combine items related to multiple steps of the disablement process [28]. Self-report measures are based on questionnaires asking how people function in their own environment, in order to evaluate the ability of the individual to remain independent. There are many factors influencing these measures: firstly, the capability of the individual to understand and properly answer the questions of the examiner and properly estimate their own abilities and, secondly, the interaction of the individual with the environment. In fact, different degrees of environmental challenge make it difficult to evaluate the actual physical capabilities of individuals; moreover, a change in the environment over time can modify the reported disability level without any change in the real physical abilities of the individual. Using self-report tools, functional status can be assessed at different levels: basic activities of daily living (BADL), instrumental activities of daily living (IADL), and advanced activities of daily living (AADL). The latter is seldom used in everyday clinical practice.

Basic activities of daily living pertain to self-care tasks including bathing, transferring, dressing, toileting, grooming, and feeding. Conversely, IADL refer to tasks that are needed to live independently in the society such as using the telephone, preparing meals, doing housework, taking medications, shopping, driving and or using public transportation, and handling finances. Advanced activities relate to ability to fulfil societal and community roles.

The Katz index of independence and the Barthel index are the most commonly used for BADL evaluation [29, 30]. The Katz index ranks adequacy of performance in the six functions of bathing, dressing, toileting, transferring, continence, and feeding. Individuals are scored yes/no for independence in each of the six functions. A score of 6 indicates full function, 4 indicates moderate impairment, and 2 or less indicates severe functional impairment. The Barthel index rating scale assesses patient's capability in ten activities (feeding, bathing, grooming, dressing, bowels and bladder continence, toilet use, transferring from bed to chair, mobility, and stairs) assigning a different weight to each activity and a total score ranging from 0 to 100 points, with higher scores indicating better performance.

The Lawton instrumental activities of daily living scale (IADL) is an appropriate instrument to assess independent living skills [31]. These skills are considered more complex than the basic activities of daily living as measured by the Katz and Barthel index of ADLs. The instrument is most useful for identifying how a person is functioning at the present time and to identify improvement or deterioration over time. There are eight domains of function measured with the Lawton IADL scale (using the telephone, shopping, food preparation, housekeeping, laundry, mode of transportation, responsibility for own medications, ability to handle finances). Women are scored on all eight areas of function; historically, for men, the areas of food preparation, housekeeping, and laundering are excluded. Clients are scored according to their highest level of functioning in that category. A summary score ranges

from 0 (low function, dependent) to 8 (high function, independent) for women and 0 through 5 for men.

More recently, it has been an emerging interest in assessment of physical function to directly observe the performance of functional tasks. Objective measures of physical function are instruments in which an individual is asked to perform a specific task and is evaluated in an objective, standardized manner using predetermined criteria, which may include counting of repetitions or timing of the activity as appropriate. These tools were developed in response to concerns about the lack of accuracy of self-report measures. Additionally, self-report cannot generally discriminate different functional levels in non-disabled people with higher levels of functioning because of the presence of a ceiling effect in self-report measures. A variety of objective performance tests have been developed for use in different clinical settings. In general, these tools may be categorized according to the domain of functioning, including upper extremity and lower extremity tests. Most objective measures are indicators of functional limitations, but they may be also linked to impairments, or actual disability, and they are useful to stratify individuals according to level of functioning. Examples of these tools include the 4 or 6 m gait speed assessment, the physical performance test [32], and the short physical performance battery (SPPB) [25]. These measures have good psychometric characteristics and predictive value in a variety of settings. In fact, they are often used in cross-national and cross-cultural studies to detect information difficult to obtain using self-reports of disability.

There are three main factors that influence the choice of using one tool instead of another: firstly, the setting, secondly, the clinical conditions of the subject, and, finally, the aims of the assessment. In general, healthy (non-disabled) people can undergo objective measures of physical function such as the SPPB, gait speed alone, or the 400-m walking test or 6-min walk test. This is the best strategy to detect early and subclinical limitation and better stratify the risk of future health outcomes in persons fully independent or with mild-moderate disability. Vice versa, in severely disabled patients, who cannot perform objective tests, self-report will provide physicians reasonable information for short- and middle-term management, whereas objective measures do not add prognostic value. However, it has been suggested that combining self-report information with performance-based measures can provide more refined prognostic information than either method alone [33].

2.4 Psychological Health

2.4.1 Cognitive Status

Major neurocognitive disorders (dementias) are common causes of morbidity, disability, and death in older people; 50–70% of dementia cases are Alzheimer's disease [34]. Minor neurocognitive disorder (mild cognitive impairment) is a known precursor to Alzheimer's disease and other types of dementia. However, both minor and major neurocognitive disorders are often overlooked and attributed to aging rather than being investigated, hampering potential benefits of appropriate treatment

and management and dramatically affecting the quality of life of patients and their families and increasing cost for the health systems [35]. For these reasons, the yield of screening for cognitive impairment increases with increasing age.

Many tools have been developed and validated in different populations and clinical setting. The mini-mental state examination (MMSE) is the most commonly used; it is administered in 10–15 min, depending on patients' cooperation, and explores different domains of cognitive functions including orientation, memory, registration, attention, calculation, recall, language, and ability to follow simple commands [36]. Scores on the MMSE range from 0 to 30, with a score of 24 and higher generally considered normal. Lower score indicates more severe impairment. The Montreal cognitive assessment (MoCA) assesses several cognitive domains, including visuospatial abilities, multiple aspects of executive functions, attention, concentration, working memory, and language [37]. Unlike the MMSE, the MoCA includes a clock-drawing test and a test of the executive function known as trail making test-B. Both the MMSE and the MoCA are relatively short, simple, and reliable as a screening test for Alzheimer's disease. In addition, the MoCA measures an important component of dementia that's not measured by the MMSE, namely, executive function. However, both tests are usually too long for routine use in most clinical setting, particularly in acute care wards. Several shorter screening instruments have been therefore validated; examples of such tests include the short portable mental status questionnaire (SPMSQ) [38], the Hodkinson abbreviated mental test score (AMTS) [39], and the Mini-Cog [40]. The SPMSQ includes ten questions related to orientation, personal history, remote memory, and calculation. A final score of three or more errors is indicative of cognitive impairment. This instrument is compact, brief, and easy to use and does not require special material or expertise. Similarly, the AMTS, introduced by Hodkinson in 1972 to quickly assess elderly patients for the possibility of dementia, include ten questions dealing with orientation, remote memory, and calculation. Likewise the SPMSQ, the AMTS takes 3–5 min. Maximum score is 10 and a score of less than 7 suggests cognitive impairment. The Mini-Cog is a 3-min instrument that can increase detection of cognitive impairment in older adults. It can be used effectively after brief training in both healthcare and community settings. It consists of two components, a 3-item recall test for memory and a simply scored clock-drawing test.

None of these shorter tests are validated for the diagnosis of delirium. Among hospitalized patients, cognitive status must be therefore evaluated at admission and periodically over hospital stay because older hospitalized acutely ill patients are at high risk of developing delirium. As a consequence, abnormal findings should be interpreted in the context of change from baseline and upon the clinical picture. There are different validated instruments, including but not limited to the Confusion assessment method [41] and the 4AT method [42], that may help the physician detect delirium in patients with concomitant cognitive decline.

2.4.2 Mood

Although major depression is less common in older people than in the younger population, several complex emotional and psychological problems may affect older patients greatly, impacting the occurrence, development, and clinical course

of diseases. Although the presence of depressive symptoms has been associated with functional limitations, cognitive impairment, and increased morbidity, this condition is often overlooked, because older patients might not complain about specific symptoms or because symptoms are interpreted in the context of cognitive impairment or as the consequence of the aging process. The geriatric depression scale (GDS) [43] is a 30-item self-report assessment specially used to identify symptoms of depression in the older population. Two simpler versions of the GDS, GDS-15 and GDS-5 (short versions 15- and 5-item geriatric depression scale), have been developed and validated. The GDS questions are answered "yes" or "no" for depression, reduced activity, irritability, withdrawal, painful thoughts, and negative evaluation of the past, present, and future.

The center for epidemiologic studies depression scale (CES-D) [44] is a short self-report questionnaire with 20 items that reflect depression severity in depressed mood, feelings of guilt and worthlessness, feelings of helplessness and hopelessness, psychomotor retardation, loss of appetite, and sleep disorders, scoring the frequency of occurrence of specific symptoms during the previous week on a four-point scale and scoring ≥16 as CES-D depression. Higher scores indicate more seriousness. The Hamilton rating scale for depression (HRSD) [45] is a multiple-item questionnaire used to provide an indication of depression, which is the most classic and widely used scale to rate the severity and changes of adults' depression by probing mood, feelings of guilt, suicide ideation, insomnia, agitation or retardation, anxiety, weight loss, and somatic symptoms. A score of 0–7 is considered to be normal. Scores of 20 or higher indicate moderate, severe, or very severe depression and are usually required for entry into a clinical trial.

Anxiety, a condition characterized by feelings of tension, worried thoughts, and physical changes, is also often unrecognized and inadequately treated in the elderly. The importance of assessing anxiety is highlighted further by data suggesting that anxiety is common among older disabled adults and is a significant predictor of progressing disability, cognitive decline, and nursing home placement. Several factors complicate recognition and treatment, including concomitant medical illness, cormorbid depression, overlap with cognitive disorders, and ageism. Although available data from controlled clinical trials are limited for anxiety patients in the geriatric age group, some data and clinical experience indicate that pharmacologic treatments are safe and effective for anxious elderly patients. Many tools are available for screening, but the standardized use of instruments specially developed and validated for the elderly, like the geriatric anxiety inventory (GAI) [46] or the geriatric anxiety scale S (GA) [47], might increase the likelihood of anxiety detection and improve diagnostic accuracy. The geriatric anxiety inventory (GAI) consists of 20 "agree/disagree" items designed to assess typical common anxiety symptoms. The measurements of somatic symptoms with the instrument are limited in order to minimize confusion between symptoms common to anxiety and general medical conditions. The GAI developers created a short form of the geriatric anxiety inventory (GAI-SF) in 2011, which was confirmed to have the same validity and reliability as GAI. In addition, the Diagnostic and Statistical Manual of Mental Disorders (DSM), published by the American Psychiatric Association (APA), can also be used to assess anxiety. The geriatric anxiety scale is a 30-item self-report measure used

to assess anxiety symptoms among older adults. Individuals are asked to indicate how often they have experienced each symptom during the last week, answering on a four-point Likert scale ranging from "not at all" (0) to "all the time." Notably, a 10-item short version, called the GAS-10, is available and has strong psychometric properties as a screening instrument in diverse samples of older adults.

2.5 Socioenvironmental Status

While social functioning may not seem to be part of the medical domains, it is a crucial part of the overall health picture in older people. The existence of a strong social support network can frequently be the determining factor of whether the patient can remain at home or needs placement in an institution. In western countries, the social network (spouses, children, and other relatives) provides much of the care for older patients; for example, informal caregiving by family makes up a large portion of the overall costs for patients with cognitive decline [48]. Early identification of problems with social support can help planning and timely development of resource referrals. Assessment of the strength of the social network can provide valuable information about how long the patient will live independently, the needed mechanisms of support to remain independent, and the patient's ability to plan and adapt to environmental challenges. Information on availability of social support and adequate environmental conditions are mandatory to design a personalized plan of care for older patients, particularly for patients with cognitive impairment and/or disability in IADL and BADL. However, even in healthier persons, it is important to know who would be available to help the patients in the case of acute illness.

Ii is important to identify whom the patient would call in an emergency and obtain the contact information. Support networks can be assessed by identifying who the patient believes would provide care for them if they were unable to care for themselves. These questions conveniently follow into a discussion about healthcare proxy decisions and end of life choices, which is crucial for physicians to assess for their patients. Patients should consider these issues during times of stable health when they may have more time to think and discuss them with family members. Ideally, patients should provide written documentation of their choices of healthcare proxy and advanced directives.

Older patients are at risk for home environmental hazards because of impaired mobility, balance, and cognition problems. The CGA team should assess for common home conditions that can be unsafe. Smoke and carbon monoxide detectors can provide advanced warning of life-threatening emergencies and are relatively inexpensive to purchase and operate. Tobacco use in the home can be a risk factor for fires and burns. Simple home environmental changes, including but not limited to grab bars, shower seats, and removal of throw rugs, can prevent falls and the resultant morbidity of falls.

The financial situation of a functionally impaired older adult is important to assess. Older patients may qualify for state benefits, depending upon their social support and income. Older patients occasionally have other benefits such as

long-term care insurance that can help in paying for caregivers or for institution fee. Usually, clinicians feel uncomfortable inquiring about the economic condition of their patients, but as an alternative, nurses and welfare workers may collect this important information.

Conclusions

CGA can be performed in a number of setting, including the physician's office, hospital, home, and nursing home, and with varying program types and levels of intensity (such as hospital GEUs, hospital acute care for elderly [ACE] units, hospital consultation teams, outpatient brief screening assessment programs, or intensive in-home assessment and case management programs). The instruments used to assess the different domains of CGA should be selected on the basis of the clinical setting and programs and should be tailored to patients' characteristics. But wherever it is performed, CGA, being the hub of the geriatric care system and serving as a common language, must always include all its fundamental domains.

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