

Functional decline in old age

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Abstract

FUNCTIONAL DECLINE IS A COMMON CONDITION, occurring each year in nearly 12% of Canadians 75 years of age and older. The model of functional health proposed by the World Health Organization (WHO) represents a useful theoretical framework and is the basis for the SMAF (Système de mesure de l'autonomie fonctionnelle or Functional Autonomy Measurement System), an instrument that measures functional autonomy. The functional decline syndrome, in which functional autonomy is diminished or lost, may present as an acute condition, i.e., a medical emergency for which the patient must be admitted to a geriatric assessment unit. The subacute form is a more insidious condition in which the patient requires comprehensive assessment and a rehabilitation program. A preventive approach based on screening of those at risk and early intervention should prevent or delay the appearance of functional decline or diminish its consequences. Effective strategies for the prevention of or rehabilitation from functional decline will help reduce the incidence of disabilities and the period of dependence near the end of life. These strategies are absolute prerequisites for controlling sociohealth expenses and, most importantly, for allowing people to live independently in old age.

Résumé

LE DÉCLIN FONCTIONNEL EST UN PROBLÈME RÉPANDU que connaissent chaque année presque 12 % des Canadiens de 75 ans et plus. Le modèle de la santé fonctionnelle proposé par l'Organisation mondiale de la santé (OMS) représente un cas théorique utile qui sert de base au SMAF (Système de mesure de l'autonomie fonctionnelle), instrument de mesure de l'autonomie fonctionnelle. Le syndrome du déclin fonctionnel, qui entraîne une diminution ou une perte de l'autonomie fonctionnelle, peut se présenter sous forme active, c.-à-d. d'une urgence médicale pour laquelle il faut admettre le patient dans une unité d'évaluation gériatrique. La forme subaiguë est un état plus insidieux à cause duquel le patient doit faire l'objet d'une évaluation détaillée et participer à un programme de réadaptation. Une stratégie de prévention fondée sur le dépistage des sujets à risque et l'intervention rapide devrait prévenir ou retarder l'apparition du déclin fonctionnel ou en atténuer les conséquences. Des stratégies efficaces de prévention du déclin fonctionnel ou de réadaptation aideront à réduire l'incidence d'incapacités et la période de dépendance vers la fin de la vie. Ces stratégies sont absolument essentielles au contrôle des dépenses socio-sanitaires et, ce qui est le plus important, pour permettre aux personnes âgées de vivre en autonomie.

The demographic importance of the elderly population is gradually increasing in Quebec and all of Canada. In 1978 those over 65 years of age represented only 8.2% of the Quebec population, but by 1990 this group had increased to 11% of the population and by the year 2020 it will exceed 18%.^{1,2} In the space of 40 years, Canada will have left the ranks of the countries with young populations to join those with old populations.³ Furthermore, there is also a marked aging within the elderly group itself: the 80-plus age group will increase from its current proportion of 18% of those over 65 to reach 21.5% by the beginning of the 21st century.^{1,2}

One of the reasons for this aging of the population is the decrease in the birth rate. However, another reason is the increase in life expectancy at birth, which is currently 80.8 years for women and 73.7 years for men.⁴ Of those who are now



Body and mind

Corps et esprit

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65 years old, women can expect to live 20.1 more years on average and men 15.5 more years. However, a substantial portion of that period (6.9 years for women and 4.0 years for men) will be characterized by a restricted level of activity.⁴ According to data from the Canadian Health and Activity Limitation Survey, nearly 40% of the entire elderly population and nearly 35% of those living at home have some disability.⁵ The main reason for the admission of elderly people to institutions and for the disproportionate use of health services by the aging population is the functional decline that accompanies aging. In 1991 older people accounted for 40.9% of public health care expenses in the province of Quebec, whereas they represented only 11% of the population.⁶

Projections regarding active (or disability-free) life expectancy and the prevalence of disabilities among older people differ depending on the hypotheses on which they are based. There are 2 opposing viewpoints. One scenario, which predicts a pandemic of disabilities, is based on the hypothesis that total life expectancy will continue to rise faster than active life expectancy, which will increase the period of dependence preceding death.⁷ Two mechanisms support this hypothesis. First, the decrease in mortality associated with the major fatal diseases (specifically, cancer and cardiovascular diseases) is resulting in a corresponding increase in the duration of morbidity and disability associated with these diseases.⁸ Second, as the population ages there is an accompanying change in the relative incidence of fatal and chronic diseases. For example, chronic and disabling syndromes such as arthritis and dementia are becoming more widespread than more lethal conditions such as cancer and cardiovascular diseases. Thus, the acute and fatal conditions that used to occur at a younger age are being replaced by the more disabling diseases of advanced age. As in Goethe's opera *Faust*, it seems that with the progress of medical science, humanity has traded a longer life for a wretched old age.⁹

In contrast, the Fries hypothesis¹⁰ regarding the "compression of morbidity" postulates that, given that the maximum life span of the human species seems to be fixed at approximately 115 years, increased life expectancy should result in a progressive reduction in the number of years lived in poor health. This hypothesis is not supported by epidemiologic data, since increased life expectancy is not necessarily accompanied by an increase in active life expectancy.¹¹⁻¹³ However, certain indicators do support the hypothesis. For example, major US studies on the control of risk factors for cardiovascular diseases (e.g., the MRFIT study) have shown a substantial impact on morbidity without a significant reduction in mortality.¹⁴ In addition, the proportion of active life expectancy is increasing among those in the higher social classes, which implies that the "compression

of morbidity" has already begun in this more advantaged population.¹⁵

In any event, the Fries hypothesis is more likely to be borne out if progress is made in 2 areas: in knowledge of the mechanisms that give rise to the disabilities of old age and in interventions for preventing, delaying or reversing these disabilities. Instead of witnessing compression of morbidity, we might then observe compression of disabilities. The period of dependence that precedes death could thus be reduced by, in effect, squaring off the curve that represents the functional decline related to age. Such a compression of disabilities would not only stabilize health care expenses but would also, and most importantly, improve the quality of life of elderly people by preserving their autonomy.

To address the important issue of compression of disabilities, we need a better understanding of the process of functional decline in the elderly. This article presents the theoretical framework in which functional autonomy is defined, describes the measurement of functional autonomy, reviews the epidemiology and clinical features of functional decline, and summarizes the research on programs that have been designed to prevent it.

Theoretical framework for functional autonomy

Functional autonomy can be conceptualized by using the functional definition of health of the World Health Organization (WHO), which is the theoretical framework presented in the *International Classification of Impairments, Disabilities and Handicaps*.^{16,17} In this classification, "disability" represents the consequences of impairment of an organ or system on the functioning of the individual in terms of limitation of functions or restriction of activities. "Handicap" refers to the gap between the person's disability and the material and social resources available to him or her to offset the disabilities.¹⁸ This gap puts the disabled person at a social disadvantage. On the personal level, autonomy is compromised by disability resulting from impairment of an individual already vulnerable because of the deleterious effects of biological or psychological aging. The aging process in cells and tissues not only makes the organism more vulnerable (primary aging) but also fosters or initiates the occurrence of impairments (secondary aging). On the social level, autonomy is compromised by the handicap, which is based on the balance between, on the one hand, the person's physical and mental disabilities and, on the other, the material and social resources available to him or her. These resources are tempered by the social vulnerability associated with aging, such as income level, living conditions and social network.^{19,20} The provision of resources to maintain the elderly person at home repre-



sents the typical situation of social autonomy in which family and community support services compensate for disabilities. The admission of an elderly person to a long-term care institution results from an imbalance between the individual's disabilities and the resources, especially social resources, available to him or her. At this stage, the resources no longer compensate for the disabilities, and the person is weighed down with a handicap that the institution will try to offset. Most often, this imbalance is the result of a sudden or long-term increase in disabilities, which reach a level exceeding the capacities of the formal and informal support network.²¹ The graphic depiction of this model of health (Fig. 1) represents the theoretical framework of the functional decline process.

A variety of interventions can be undertaken to prevent, delay or offset the process of functional decline. Primary prevention is designed to contain vulnerability through individual or collective efforts that focus on the individual (e.g., nutrition and physical activities) or his or her material and social resources (e.g., preparation for retirement). Secondary prevention involves screening those at risk for functional decline to allow earlier intervention, before the decline starts. This screening process may be opportunistic (e.g., when an elderly person consults a physician, visits an emergency department or receives home care services) or universal, in a public health approach (e.g., by means of a mailed questionnaire). Geriatric

assessment and rehabilitation services act at a tertiary level by reducing the consequences of functional decline. These geriatric interventions focus on the correction of impairments, rehabilitation for the disabilities and mobilization of social and material resources. In this regard, community support services play a key role, not only by providing complementary assistance, but also and especially by intervening within the network of informal caregivers.

Measurement of functional autonomy

For clinical or research purposes, functional autonomy must be measured with an appropriate, reliable and valid instrument. It is crucial to be able to measure the extent of a handicap in clinical settings, but it is very difficult to do so in the context of epidemiologic surveys because a handicap is a very unstable state, one that usually generates a medicosocial crisis and the need for urgent intervention. For epidemiologic studies, disabilities have been measured with various instruments.^{19,20} The number of items included varies, as does the mode of administration (questionnaire, test or rating scale) and the definition of disability. Some instruments assess actual performance, whereas others define disabilities in terms of the potential to accomplish the tasks. Although very few instruments cover all aspects of the WHO classification of disabilities,

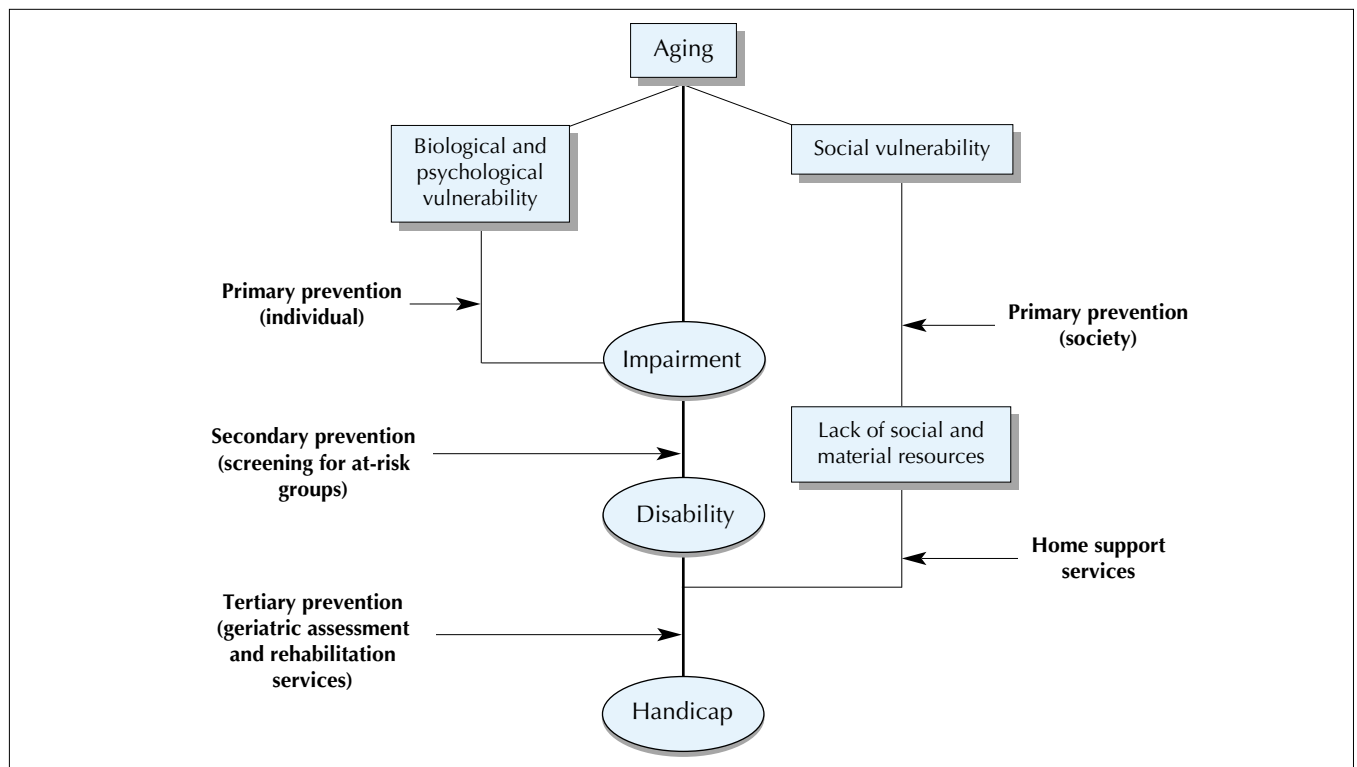


Fig. 1: Theoretical framework of functional autonomy. Ovals indicate the stages of functional health; arrows indicate where steps should be taken to prevent or delay functional decline.



they can all be categorized according to the different subclasses of this classification.

The "personal care and dexterity disabilities" in the WHO classification are usually measured by the so-called activities of daily living (ADL). The first and still widely used scale was proposed by Katz and colleagues.²² This instrument assesses the ability of the individual to perform 6 basic functions: eating, dressing, bathing, using the toilet, continence and transferring. The WHO's "body disposition disabilities" are usually related to the instrumental activities of daily living (IADL) and encompass the following domestic functions: housekeeping, cooking, shopping, washing, using the telephone, using transportation, taking medication and budgeting.²³ Lawton and Brody²³ suggested the need to assess men and women differently with regard to some of these functions because of traditional sex-related roles. In the context of the WHO framework, this differentiation is unjustified. A man who cannot perform domestic tasks, regardless of the reason, is disabled and must rely on his social resources, usually represented by his wife, to compensate for the disabilities. These cultural and social disabilities are real, since with the loss of the resource, the handicaps generated are often sufficient to justify admission to an institution.

The "behaviour disabilities" have been measured by a wide variety of psychiatric scales.²⁴ However, the designers of these scales have often confused assessment of mental impairment (e.g., anxiety, depression and cognition) with mental disabilities (e.g., judgement and behaviour). It is worth mentioning that a mental impairment such as depression or dementia can induce disabilities in mental functions as well as in other functional areas. Likewise, a physical impairment such as stroke may induce disabilities in ADL, IADL, mobility, communication and mental functions.

The "locomotor disabilities" can be assessed by means of the physical functioning scales proposed by Nagi in 1976.²⁵ Many ADL scales also include assessment of locomotor disabilities. Finally, "communication disabilities" are less often assessed as such and may be included in either ADL or IADL scales. The other sections of the WHO classification cover disabilities related to work and are less relevant to the elderly population.

The Functional Autonomy Measurement System (or *Système de mesure de l'autonomie fonctionnelle* [SMAF]²⁶) is a 29-item comprehensive scale developed according to the WHO classification of disabilities.¹⁷ It measures functional ability in 5 areas:

- ADL (eating, washing, dressing, grooming, urinary and bowel function, using the toilet);
- mobility (transfers, walking inside and outside, donning a prosthesis or orthosis, propelling a wheelchair, negotiating stairs);

- communication (vision, hearing, speaking);
- mental functions (memory, orientation, comprehension, judgement, behaviour); and
- IADL (housekeeping, meal preparation, shopping, laundry, telephone, transportation, medication use, budgeting).

Each item is scored on a 4-point disability scale from 0 (independent) to 3 (dependent). A 0.5 score on most items indicates difficulties performing the activity. The maximum score is 87, and subscores can also be calculated for each dimension. For each item, resources available to compensate for the disability are also evaluated, and a handicap score is calculated.

The SMAF is a rating scale that measures the person's actual performance. The test must be administered by a trained health care professional, who rates the person after obtaining information either by questioning both the individual and proxies or by observing or testing the person. Many studies have been carried out on its reliability, validity and responsiveness.²⁷⁻³⁰ A change of 5 points or more should be considered metrically and clinically significant.³¹ The SMAF is used in clinical settings for the assessment and follow-up of elderly disabled patients who are living in institutions or in the community. It has been used in many epidemiologic and clinical studies. A recent study with a representative sample of 1987 elderly people living in different settings (at home or in institutions) linked the SMAF score with the costs associated with their care to quantify the economic benefit of a rehabilitation program in the context of a cost-benefit analysis.³²

Functional decline syndrome

Functional decline is one of the most common clinical syndromes encountered in geriatric medicine. Many labels have been proposed for this syndrome: "going off syndrome," senility, decreased vitality,³³ unexplained decline³⁴ or failure to thrive.³⁵

Few data are available on the epidemiology of functional decline. Our group conducted a longitudinal study on a representative sample of 386 people more than 75 years of age living at home and followed for 2 years.³⁶ Among those whose autonomy was stable during the preceding year, the annual incidence of functional decline was 11.9% ($n = 46$), the annual incidence of functional recovery 6.2% ($n = 24$) and the mortality rate 3.4% ($n = 13$). Among the 115 people who had lost their autonomy during the preceding year, the incidence of functional decline was 15.6% ($n = 18$) and the mortality rate climbed to 9.6% ($n = 11$). Another interesting fact was that in the following year, 37 (32.2%) of these people recovered their lost autonomy. These figures indicate that functional decline is a rapidly evolving, dynamic process and that the



traditional defeatist attitude toward this condition is unjustified.

The functional decline syndrome is the prototype of the disease pattern that often occurs in the elderly population: nonspecific symptoms, atypical presentation, insidious course, and mixing of physical, psychological, social and functional manifestations.³⁷ Physically, the patient may complain of fatigue, weakness, loss of appetite, *adipsia*, weight loss, falls and incontinence. Psychological symptoms related to loss of attention, interest, initiative and motivation are often present. Sometimes, a cognitive decline is noted. Socially, the patient withdraws from his or her usual activities and is more isolated. Neglect in housekeeping and grooming may be observed. The family is frequently exhausted, and a family crisis can lead to violence or consideration of placing the elderly family member in a long-term care institution. This phenomenon has led to so-called “dumping” in emergency rooms, a situation where patients with functional decline are wrongly labelled as presenting with a social problem because of the family exhaustion that frequently accompanies the decline. In 98 of 100 consecutive cases of “dumping,” we found that the cause of the functional decline was physical or psychological and that the social component was a consequence rather than a cause of the syndrome.²¹ The process of functional decline is usually easy to identify since the patient has progressively lost his or her capacity to perform IADL and basic ADL. Mobility and mental functioning are also impaired, but the order in which these disabilities manifest is a function of the cause (physical or mental) of the functional decline syndrome.

The presentation of the syndrome may be acute or subacute. The acute form is more dramatic and develops over a couple of days or a week. It is usually caused by 1 of 3 factors: an intercurrent disease (stroke, infection, infarction), decompensation in a chronic condition (diabetes, hepatic or renal failure), or a psychological or social crisis (death of the spouse, admission to hospital, move to an institution). The acute functional decline syndrome is a medical emergency and usually requires admission to hospital (preferably to a geriatric assessment unit) to identify and correct the cause and get the patient functioning again. The prognosis depends on the underlying condition, but usually the patient recovers if the assessment is performed without delay and if treatment and rehabilitation are undertaken promptly.

The subacute form of the functional decline syndrome is more insidious, developing over many weeks or even months. It often represents the worsening of a known or unknown chronic condition (e.g., Parkinson's disease or chronic renal failure) or the emergence of a new, undetected disease (e.g., hypothyroidism, tuberculosis or cancer). In some cases the subacute form may be iatrogenic,

caused by a long-term medication with unsuspected toxicity (e.g., digitalis or diuretics). Subacute functional decline is frequently the mode of presentation of some psychiatric diseases in elderly patients (e.g., depression, pathological bereavement or psychosis). The subacute form of functional decline may be difficult to identify in patients in long-term care institutions if functional autonomy is not monitored regularly and systematically. The assessment of patients with such a subacute syndrome may be performed in an outpatient facility (preferably a geriatric day hospital) to identify and correct the cause. Although the prognosis is more difficult to establish than in patients with the acute form of the syndrome, rehabilitation should always be attempted in an effort to stop or reverse the process of decline. Table 1 summarizes the differential diagnosis of the acute and subacute forms of the functional decline syndrome.

Interdisciplinary assessment and intervention are essential for diagnosing and treating this condition. Skilled teams are usually found in hospitals or organizations with geriatric services. These teams are designed to manage such cases effectively, taking into account the specific characteristics of these frail patients.

Prevention

Geriatric services teams often intervene only after the process of functional decline has started or even ended. Unfortunately, the effectiveness of such tertiary prevention programs is limited by the irreversibility of the damage already done. Early detection of elderly people at risk of losing their autonomy (secondary prevention) and the implementation of an assessment and surveillance program could prevent or delay the onset of functional decline.

Over the last 20 years, some assessment and screening programs for elderly people have been proposed and evaluated.³⁸⁻⁴⁶ A recent meta-analysis by Stuck and colleagues⁴⁷ of such preventive home assessment programs concluded that they seem to have a significant effect only on mortality and admission to institutions. In general, the impact of these programs on functional autonomy has been rather limited, primarily because the 3 key aspects that make up such a program — adequate identification of the target population, structure of the intervention program and measurement of the outcome — have been flawed.

With regard to the target populations, most of the programs tested targeted all elderly people in a given area, thus diluting the potential beneficial effect for those at higher risk. Pathy and colleagues⁴⁸ showed that a selective, 2-stage approach (screening those at risk and then intervening as appropriate) may be more effective and efficient. This screening can be opportunistic or universal. Opportunistic screening may be implemented in emergency



rooms, home care services or family physicians' offices. However, very few screening instruments have been validated for use in such opportunistic contexts.^{49,50} With a

universal approach, the total population in a catchment area is screened. The method that has received the most attention is the postal questionnaire proposed by Barber

Table 1: Differential diagnosis of the acute and subacute forms of the functional decline syndrome

Category	Acute form	Subacute form
Cancer		Lung, breast, prostate, colon, rectum, stomach, pancreas
Endocrine diseases	Diabetic ketosis Hyperosmolar nonketotic state	Hypothyroidism Apathetic hyperthyroidism Diabetes Adrenocortical insufficiency
Metabolic diseases	Dehydration Hypothermia Acute renal failure Acute bleeding	Uremia Hepatic failure Anemia Hyponatremia (syndrome of inappropriate antidiuretic hormone secretion) Hypokalemia Hypocalcemia Hypovitaminosis
Infections	Pneumonia Septicemia Urinary infection Viral infections	Tuberculosis Subacute arterial endocarditis Pyelonephritis
Neurological diseases	Stroke Subdural hematoma	Parkinson's disease Peripheral neuropathy Pseudobulbar state Dementia Chronic subdural hematoma Cerebral tumour
Pulmonary diseases	Respiratory failure Pulmonary embolism	
Cardiovascular diseases	Hypotension Arrhythmia (atrial fibrillation) Myocardial infarction Cardiac failure	
Musculoskeletal diseases	Hip fracture	Polymyalgia rheumatica Temporal arteritis Rheumatoid arthritis Osteomalacia
Medication	Sedatives and hypnotics Digitalis Neuroleptics	Sedatives and hypnotics Digitalis Neuroleptics Hypotensive agents Hypoglycemic oral agents Anticonvulsive agents Alcohol All other drugs
Psychological problems	Psychosis Bereavement	Depression Anxiety and panic disorders Paranoia Mania
Social problems	Hospitalization Family crisis	Moving Admission to institution Overcaring
Miscellaneous	Recent surgery Acute abdomen	Fecaloma Malabsorption Peptic ulcer Predeath syndrome



and associates.⁵¹ The predictive value of one of these questionnaires (the Sherbrooke Postal Questionnaire [Table 2]) was tested with a representative sample of 842 people over 75 years of age who were living at home and who were followed for 1 year after the questionnaire was mailed.⁵² Not returning the questionnaire or a positive response to more than 1 of the 6 questions identified 56% of the subjects as being "at risk" (sensitivity 75%, specificity 52%). The group identified as being "at risk" presented an annual incidence of functional decline of 38%, whereas the incidence among the group not "at risk" was only 16%, for a relative risk of 2.4 and an attributable risk of 22%. Modifying this risk would have a major impact on the functional decline and health status of elderly people.

In terms of structure, most of the assessment programs are based on a virtually unstructured assessment by a nurse. A structured program would have a greater chance

of success and would involve targeting specific physical, psychological and social aspects using validated clinical assessment instruments (e.g., the program suggested by Rubenstein and colleagues⁵³). In the second phase of our study, such an assessment and surveillance program was designed for the population identified as being at risk by the postal questionnaire. The specific interventions proposed in this program were selected according to the following criteria: widespread prevalence of the condition, proven deleterious impact of the condition on autonomy, evidence that the condition might be modified by an intervention and existence of a simple, effective instrument for evaluating the condition.⁵⁴⁻⁵⁹ The dimensions selected are summarized in Table 3. In this program a nurse evaluates each of the conditions with a standardized instrument. The results of this evaluation are sent to the family physician (with the patient's authorization), together with suggestions for the diagnosis or treatment of the condition. In certain cases, the person is referred directly to an existing service (dietetics, social services, physiotherapy or occupational therapy [to adapt the home]). The nurse then monitors the proposed interventions and periodically monitors each person's progress. This program was pretested in a pilot study that confirmed its feasibility and indicated a significant beneficial effect on the autonomy and well-being of the participants.⁶⁰ A randomized controlled trial is in progress.

Table 2: Sherbrooke Postal Questionnaire for assessing risk of functional decline*

Do you live alone? (No)
Do you take more than 3 different medications per day? (Yes)
Do you regularly use a cane or walker or wheelchair to get around? (Yes)
Do you see well? (No)
Do you hear well? (No)
Do you have memory problems? (Yes)

*The answer in parentheses indicates the presence of risk. The person is at risk of functional decline if he or she indicates more than 1 risk factor or does not return the questionnaire.

Table 3: Components of the evaluation program for elderly people at risk of functional decline

Dimension	Evaluation method	Interventions
Medications	> 3/day Compliance problems Interactions	Multidisciplinary assessment of the medication profile and recommendations to the physician
Cognitive functions	3MS* < 80/100 ^{54,55}	Assessment at the memory clinic
Depression	Geriatric Depression Scale ⁵⁶ > 14	Geriatric psychiatric assessment and treatment
Balance or risk of falling	Tinetti's Gait and Balance Test < 27/40 ⁵⁷	Balance and gait rehabilitation program
Orthostatic hypotension	Difference in systolic BP† > 20 mm Hg	Assessment and treatment by the family physician
Environmental risks	Inventory of risks	Occupational therapy assessment of the home and corrections
Social support	SMAF‡ (handicap score > 0) ²⁷	Social assessment and intervention
Nutrition	Payette's Malnutrition Risk Questionnaire > 5/16 ⁵⁸	Dietary assessment and intervention
Arterial hypertension	BP† > 160/120 mm Hg (2 measures taken lying down)	Assessment and treatment by the family physician
Vision	Visual acuity and fields	Ophthalmologic assessment and treatment
Hearing	Hearing Handicap Inventory for the Elderly ⁵⁹	Audiologic assessment and treatment
Incontinence	SMAF‡ ²⁷	Urodynamic assessment and intervention

*Modified Mini-Mental State.

†Blood pressure.

‡Functional Autonomy Measurement System.



The outcome measure for testing the efficacy of such interventions should be functional autonomy. However, the authors of most published programs have tested efficacy on the basis of questionable indicators (e.g., mortality, health services utilization), by means of a crude proxy for functional decline (e.g., admission to a nursing home) or by a global measure of functional autonomy with limited responsiveness. In addition, given the high probability of functional transitions within 1 year in this population, the outcome should be measured within a short interval; a longer interval increases the risk of measuring confounding factors.

Before recommendations can be formulated about implementing such preventive programs, evidence of their efficacy in reducing or postponing functional decline should be obtained from a randomized controlled trial. A cost-benefit analysis should also be performed to justify the implementation of the programs in the present context of budget restrictions in health care.

Conclusions

Functional decline is common in older people, appearing each year in nearly 12% of those more than 75 years of age. In addition to the tripled risk of mortality within this group, functional decline also reduces quality of life and is responsible for a large portion of health care expenses. Nearly one-third of those affected recover their lost autonomy, which invalidates the traditional defeatist attitude toward this condition and justifies the assessment, treatment and rehabilitation programs which already are or should be available. A preventive approach based on screening those at risk plus early intervention should prevent or delay the appearance of functional decline or reduce its consequences. Effective strategies for the prevention of or rehabilitation from functional decline will help decrease the incidence and severity of disabilities and reduce the period of dependence near the end of life. These are absolute prerequisites to controlling sociohealth expenses and, most importantly, achieving an independent and more healthy old age.

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