CARE FOR ELDERS

Successful Aging

•Pre-reading•
Acknowledgments:
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Successful Aging (2004)
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## Other:

- Case (first page only)

- Evaluation form
Welcome to the COE Modules!

The Care for Elders modules have been written for and by interdisciplinary teams. These modules are unique in that they are interactive and participatory. The goal is for you to learn about elders and also about you – exploring your role and attitudes; other disciplines; your team and how to work as a team caring for elders.

The Care for Elders learning experience is comprised of two parts:

1) Pre-reading - this is a general comprehensive overview of one topic
2) a 2 to 3 hour small group session with case study discussion.

- To get the most out of this module it is strongly recommended that you read the pre-reading package. Information in the pre-reading is reviewed during the small group discussions.
- Small groups will be 6-10 participants from various disciplines, and a facilitator.
- The facilitator will not ‘teach’, rather your small group will discuss one fictional case using the information you possess, and the information you picked up in the pre-reading. The learning is accomplished if your team fully discuss the questions asked in the case study.
- The facilitator’s role is to guide discussion and ensure all learning points are covered during the session. Your facilitator is NOT expected to provide information!

We hope this experience will be a rewarding one for you!
Successful Aging
Goal and Learning Objectives

At the end of the Successful Aging module, you will be able to:

🌟 Develop a realistic and sustainable plan to help Mrs. Butcher achieve her personal goals for successful living. These include:

1. Identification of the expertise necessary to help Mrs. Butcher pursue these goals, and who is available in her community to provide this expertise.

2. Specific determinants of health that are most relevant to Mrs. Butcher’s capacity for successful living.

3. Ways in which Mrs. Butcher would be treated differently according to an illness model versus a successful living model.

4. Discuss your beliefs and values about ageing and how these values and goals influence your practice.

5. Explain the concept of successful living in your own words.

6. Discuss individual and cultural differences in how people define successful living.

7. Describe how taking a successful living approach implies changes in your own practice.
PROMOTING SUCCESSFUL LIVING FOR OLDER PEOPLE

We grow neither better nor worse as we get old, but more like ourselves.
~May L. Becker~

What is Successful Living for Older People?

The biomedical model has focused on aging as a process of loss and decline. This narrow view, while important for treating illness, misses a great deal of the richness and vitality of older lives. Research and personal experience show us time and again that most older people, even those living with chronic illness and disability, tend to feel healthy and satisfied with their lives. And yet, in our clinical practice we often overlook that fact. The concept of successful living is expanding a vision of growing older to include multiple possibilities, and supporting holistic care that meets the diverse needs of older people.

Of course, successful living is something that will mean different things to different people. If you read books, newspapers, journal articles, and web sites you will find a variety of terms – successful aging, aging well, optimal aging, positive aging, aging gracefully, healthy aging. And just as there is no single term, there is no single well-accepted definition. For example, successful living may be reflected in:

- **effective functioning** (e.g. people are able to adjust to the changes in their lives and can look after themselves; living successfully is about being adaptable and independent)
- **life satisfaction and well-being** (e.g. people are satisfied with their life situation and are hopeful for the future; living successfully is about being happy and optimistic)
- **good health and longevity** (e.g. people are at low risk for disease and disability; living successfully is living a long life in good physical, mental and cognitive health)
- **personal meaning and integrity** (e.g. people rely on inner and spiritual resources to create and discover personal meaning; living successfully is having a clear sense of meaning and purpose in life)

Each of these definitions by itself is probably insufficient. More realistic for clinical practice is a definition of successful living that includes multiple factors. For example, the well known MacArthur Studies on Aging identified three critical components: (1) low risk for disease and disability; (2) high level of cognitive and physical function; and (3) high degree of engagement in social relationships and productive activity (Rowe and Kahn, 1998).

Despite their apparent diversity, what these definitions have in common is the fact that they are all based largely on the perspective of the health care provider. It is the nurse...
or the social worker or the doctor who determines what is successful living and what is not. This module takes a rather different stance to define successful living as:

*Older people making informed choices and having the skills to live as healthy and satisfying a life as possible; healthy and satisfying are defined subjectively in terms of the older person’s personal, family, and cultural values.*

**How can health care practitioners promote successful living?**

The older person is front and center in this definition. Successful living is not defined according to specified criteria, nor is it defined from the perspective of the health care practitioner. Successful living is something that older people can, and should do themselves. But if that is the case, what is the role of the health care practitioner?

The role of the health care practitioner is to promote successful living

1. with a knowledge base that can be shared with the person so they make informed choices
2. with communication skills to explore with the person the range of possibilities for different ways in which they might reach their goals
3. with practical expertise that can help people develop the necessary skills to live a healthy and satisfying life.

**Scope of the module**

As health care practitioners, our attitudes and usual modes of practice do not fit easily in this definition of successful living for older people. We are far more accustomed to thinking of older people as riddled with problems that only we can fix. This module seeks to expose these attitudes and encourage practitioners to consider alternatives, and to explore how an interdisciplinary perspective can promote successful living for older adults.

In the reading that follows, information will be provided to expose and challenge some common myths about aging, and to examine the most significant factors that influence older adults’ health and life satisfaction. The reading will then go on to focus on three of these:

- **physical health** (what changes are typical of the ageing process, as opposed to changes that are disease-related and/or preventable?)
- **lifestyle factors** (how can diet and physical activity promote successful living?)
- **social factors** (how can economic and environmental factors, social networks, and involvement in activity promote successful living?)

Finally, information will be provided about how older adults themselves define successful living, highlighting similarities and differences with the theories put forth by practitioners and theorists.
**Debunking Myths about Ageing**

The idea of successful living for older people stands in marked contrast to the negative stereotypes of older people that are so pervasive in our society. Too often older people are portrayed in our minds and in our media as unhealthy and unproductive, increasingly frail and vulnerable, dependent on others, and set in their ways. But how do these kinds of beliefs compare to the best evidence?

<table>
<thead>
<tr>
<th>MYTH</th>
<th>BEST EVIDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most seniors are the same</td>
<td>Accumulation of life experiences make seniors a more diverse group than any other age cohort. There is no such thing as a “typical senior”. (Markson, 2003)</td>
</tr>
<tr>
<td>Most seniors suffer deteriorating health</td>
<td>80% of seniors rate their health as good, very good, or excellent. (Statistics Canada, 1996)</td>
</tr>
<tr>
<td>Most seniors are functionally impaired</td>
<td>Three-quarters of those age 75-84 report no disability at all. (Statistics Canada, 1996)</td>
</tr>
<tr>
<td>Most seniors are confused and forgetful</td>
<td>Only 8% of those over 65 suffer cognitive impairment (CSHA Working Group, 1994)</td>
</tr>
<tr>
<td>Most seniors are depressed</td>
<td>Prevalence of depression is lowest (&lt;5%) amongst the elderly (Blazer, 1993).</td>
</tr>
<tr>
<td>Most seniors need someone to look after them</td>
<td>60% of those over age 80 need no help at all; less than 7% of seniors live in nursing homes (Statistics Canada, 1996)</td>
</tr>
<tr>
<td>Most seniors are unable or uninterested in learning new things</td>
<td>Many older adults welcome opportunities for personal growth and lifelong learning (Manheimer, 1996)</td>
</tr>
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When you encounter these kinds of beliefs about older people, stop and ask yourself:

1) Is the reasoning sound? (just because most people with memory loss are older does not mean that most older people have memory loss)
2) Is the risk overestimated? (just because people are more likely to develop a disability as they grow older does not mean that disability is inevitable)
3) Does this belief reflect an ageist attitude?

Ageism can be seen as a process of systematic stereotyping of and discrimination against people because they are old, just as racism and sexism accomplish this for skin colour and gender... Ageism allows the younger generations to see older people as different from themselves, thus they subtly cease to identify with their elders as human beings.

To truly take on successful living as a focus of practice, as practitioners we must address underlying attitudes about older people – both those that we hold collectively as a society, and those we harbour as individuals. It is important that we question our assumptions about aging, to see it not so much as a matter of getting “better or worse”, but to be open to learning from seniors themselves about what matters to them most, and to work with them collaboratively to help them achieve their goals.

Determination of Health

In every stage of life, health is determined by a complex interplay of factors. The Ottawa Charter for Health Promotion in 1986 outlined twelve key determinants of health1. Several of these are of particular importance in determining the health of older adults.

Socioeconomic status

Higher socioeconomic status is associated with better health; evidence suggests that income and social status are the two most important determinants of health across the life span.

Social networks

Support from families, friends and communities is associated with better health. Evidence suggests that support networks help people solve problems and cope with difficult life circumstances and being involved in meaningful social relationships leads to feelings of satisfaction and well-being.

Physical and social environments

Both physical and social environments are important determinants of health for older adults. The built environment, including housing, and the design of communities and transportation systems can significantly influence physical and psychological well-being. A social environment that is safe and stable, that recognizes diversity, and that is characterized by effective and cohesive relationships can serve as a valuable resource to support individuals' health practices and coping skills.

Personal health practices and coping skills

Personal health practices and coping skills can help seniors prevent disease and promote self-care, cope with challenges and develop self-reliance, solve problems and make choices that enhance health. Evidence suggests that personal life "choices" are greatly influenced by the environments in which people live, learn, work and play. Interventions that support the creation of supportive environments will enhance the capacity of individuals to make healthy lifestyle choices.

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1 This section is based on material from Health Canada’s website. For further details see www.hc-sc.gc.ca/hppb/phdd/determinants/index.html
Education
Education, including lifelong learning through adulthood, results in improved health status by providing people with knowledge and skills for problem solving, and improving their ability to access and understand health-related information.

Employment
Employment has a significant effect on health not only by providing income, but also by providing a sense of identity and purpose, social contacts and opportunities for personal growth. The loss of employment (as through forced retirement for example) can be devastating to the health of the individual and his or her family.

Health services
Access to appropriate health services is an important determinant of health. Many low- and moderate-income Canadians, including very many seniors, have limited or no access to health services such as eye care, dentistry, mental health counselling and prescription drugs.

Healthy child development
There is a growing consensus that early child development is a powerful determinant of health across the life span.

Biology and genetic development
The biology of the human body is a basic determinant of health, and in some circumstances genetic endowment appears to predispose certain individuals to particular health problems. However, evidence suggests that genetic predisposition is less a factor in the health of seniors than in younger people.

Gender and culture
Both gender and culture are significant determinants of health in their own right. Men and women often face very different health issues through their lives, and members of some cultural groups may face health risks that are specifically a result of marginalization, stigmatization, loss or devaluation of language and culture, and lack of access to culturally appropriate health care and services.

Physical Changes in Ageing

Where did the age of 65 years as the start of old age originate? On what scientific evidence is this arbitrary value based? Does this finite number determine the difference between a "productive, vital adult" and a "declining, decrepit older adult"?

Kaiser Wilheim in the late 19th century chose the age of "three score and five" to identify Prussians who qualified for "old age" benefits (Ham et al, 2002, pg.4). In the Western populations, Wilheim’s value requires considerable alteration to around the age of 80 years. The relatively healthy elders who are comparable to middle aged adults and make up the majority of the older adult demographics, are between the ages of 65-80 years. The frail elders who are less healthy are seen within the 75 years plus age range. Despite perceptions that the majority of older adults are in nursing homes and requiring care, only 6-7% are actually living in residential care facilities.

The need to increase knowledge around what are age-related biopsychosocial changes is essential to improving the care of elders. Furthermore, it is imperative that elders are
assessed in relation to their functional levels rather than primarily on their "medical diagnosis". Treatment and care must focus on ability enhancement and support rather than excess disability and dependency.

When assessing and caring for elders, consider the following "Iceberg" paradigm.

Ageing:
- Ageing is a gradual process that begins early in adulthood whereby there is noticeable changes in a many body systems (Ham et al, 2002, pg. 17).
- It happens to everyone and occurs at different rates dependent upon multiple factors including genetics, gender, life stressors, socio-economics.
- The base of the iceberg can be compared to the ageing process as size and stability of this foundation affects the rate of dissolution of the whole iceberg.

Chronic Illness/Conditions/Disorders:
- Chronic illness/conditions/disorders are present and co-existing along with the ageing process.
- They fluctuate with periods of stability and periods of exacerbation.
- On the iceberg's analogy, their fluctuation is demonstrated by sitting just above where the iceberg sits in the water. As the iceberg rocks and shifts, so do chronic illnesses.

Acute, Episodic Illness:
- Acute, episodic illness impacts upon the elder by challenging the body's ability to regain balance once insulted. These include the iatrogenic causes that acute illness rains down upon the elder who is already "tilting" in the water because of the acute illness.
- They can erode away the top of the iceberg to the point where total dissolution occurs (death).
- They will affect the stability of the iceberg and thus cause it to rock. This rocking will directly impact upon the balanced chronic illness and ageing process.
The Tip of the Iceberg

Iatrogenic Contributors

Acute Episodic Event/Illness
- Causes multiple waves that tips the independent/functional balance

Chronic Disease
- Stability
- Exacerbations can cause waves that tip the balance

Ageing Process
- Foundation
- Progressive; however stable

Effects of Illness on Normal Age
**Age-Related Physiological Changes**

The difficulty with determining what is viewed as age-related changes verses underlying disease-related changes often is somewhat of a "chicken or the egg" phenomenon. The "rule of thirds" is useful when assessing an elder for function. About one third of overall functional decline is due to disease, one third due to inactivity (disuse), and one third resulting from actual ageing process. (Ham et al, 2002, pg. 19)

Listed below are common changes experienced by older adults that are thought to be due to age-related processes. For more detail, see appendix.

**Respiratory /Pulmonary:** Decreased efficiency of gas exchange; diminished cough reflex and gag reflexes; diminished respiratory efficiency; increase of residual volume and decrease in vital capacity; decreased efficiency of self-cleaning mechanism.

**Cardiovascular:** Mild increase in blood pressure; increased risk for orthostatic hypostention; increased susceptibility to arrhythmias; decreased maximal cardiac output and stroke volume; stenosis or regurgitation of the aortic and/or mitral valves.

**Genitourinary/Renal:** Diminished bladder capacity; nocturia; impaired micturition; increased risk for incontinence; decreased filtration rate; decline in creatinine clearance rate; alteration in the renal excretion of drugs.

**Gastrointestinal/Nutritional:** Reduced taste buds and olfactory receptors leading to diminished appetite; possible decreased absorption of iron, folic acid, B12, Vit D, calcium; resting metabolic rate decreased by 20% in men and 13% in women; overall tendency to weight loss; protein malnutrition risk increases.

**Nervous/Ophthalmic/Auditory:** Impaired thermoregulation; few sleep changes other than greater proportion of time in light sleep, often resulting in poor sleep hygiene; slowed reaction times; increased risk of syncope; minor non-progressive changes in short term memory storage and retrieval; increased risk for delirium, depression, dementia; normal vision changes include diminished ability to focus on nearby objects, need for 3 to 5 times more light than previously, slowed responses to changes in illumination, poor night vision, increased sensitivity to glare. Normal hearing changes include losses in sound conduction, ability to hear high pitched sounds and speech discrimination.

**Musculoskeletal:** Gradual loss of bone density; decreased muscle mass, tone and strength; diminished flexibility, range of motion and mobility; diminished balance and reaction time; curvature of spine and gait changes.

**Laboratory Results: Potential Age-Related Changes and Normal Range Values**

Multiple confounding factors make interpretation and appropriate use of laboratory results in the older adults difficult. Factors affecting laboratory values include:

- physiologic changes of aging
- high prevalence of chronic conditions
- changes in fluid and nutrition status
- prescription and over-the-counter drug use

For further detailed information, see tables in the appendix.
Maintaining a Healthy Lifestyle

The World Health Organization (WHO) has proclaimed that the primary causes of morbidity and mortality in Western industrialized countries are largely preventable. These include heart disease, cancers, hypertension and stroke, and diabetes. The relationship of these conditions to lifestyle factors has been well established for younger as well as old adults. For example, heart disease has been reported to be reversible with varying degrees of lifestyle changes including dietary modification and exercise. The incidence of cancer may be on the rise given the ageing of the population. However, there is a considerable lifestyle component to many cancers that need to be addressed both through research and practice.

Health care providers have a responsibility to support the wellness and health promotion of their older patients. Part of this is being well-informed about the impact of lifestyle factors such as physical activity and diet on the health of older adults.

Physical Activity

Regular physical activity can bring significant health benefits to people of all ages and abilities. There is a considerable body of evidence (Singh, 2002) showing that moderate levels of aerobic exercise and weight training by older adults:

1) minimizes normal aging changes
   Aerobic exercise improves heart and lung function in older adults, while weight training is the only effective way to counteract the normal loss of muscle mass that occurs with aging (and has been shown to increase muscle strength by 40-150%).

2) enhances psychological health and well-being
   Aerobic and resistance training are also associated with positive psychological outcomes, especially by decreasing depressive symptoms in those with chronic illness.

3) increases longevity
   Exercise that expends 1000 kcal/week reduces mortality by 30%, even if taken up by sedentary older adults.

4) contributes to the prevention and treatment of chronic illness and disability
   Physical activity, even when taken up by those who have previously led a sedentary lifestyle, can decrease the risk of chronic illness by as much as 40-60% (e.g. stroke, diabetes, heart disease). Exercise may also target the “syndrome of disuse” associated with chronic. Physically active adults have half the risk of dying with a disability as compared to sedentary adults. Regular physical activity contributes to physical and cognitive capacity, and facilitates activities of everyday life thereby contributing to autonomy and independence.

While there is strong research to show how physical activity is most beneficial to older adults, there is little knowledge about what kind of interventions work in “real-life”

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settings. It is thought that between 30-65% of older Canadians are not sufficiently active to achieve optimal health benefits. As health care practitioners, we need to learn how to enable and motivate people to become active and stay active over the long term.

To begin with, there is strong research evidence arguing that it is not necessary to engage in high levels of exercise to achieve most of these health benefits. The WHO has stated that it is beneficial to help sedentary older adults to become involved in moderate levels of activity (e.g. walking, gardening). To accomplish this: (1) health professionals need to encourage older adults to be physically active; (2) partnerships need to be developed within communities and institutional settings to support active lifestyles for older people; (3) older persons must have the means and opportunities to become moderately active.

But promoting physical activity among older adults is probably not so simple as creating opportunities, educating people as to the benefits, and encouraging them to be more active. There are certain barriers that need to be considered. A study of over 200 frail older men found that physical limitations (e.g. pain, fatigue, mobility and sensory impairment) prevented them from walking for exercise (Cooper et al., 2001). Other barriers may include holding certain beliefs that exercise is not safe, or that old age is a time for rest and slowing down (Grant, 2001). Viewing exercise as a commodity, or as a means to an end may also prevent people from making it a part of their life. While focusing on the potential outcomes might get people started, they are rarely able to sustain physical activity over the long term unless the activity is personally meaningful and valued (Grant, 2001).

Healthy Eating
Healthy eating is a necessary element of successful living for older people. Good nutritional status promotes the capacity of seniors to remain independent, to maintain their quality of life, and to avoid risk for and exacerbation of chronic conditions.

While best evidence strongly suggests that energy and nutritional needs change across the adult life span, there are currently no specific dietary, body weight, or biochemical standards with respect to optimal nutrition for older people. Moreover, there is limited research to determine what are effective interventions to promote healthy eating in this age group.

Older persons generally experience a number of age-related changes in absorption, utilization, and excretion of vital nutrients. As a result, it is thought that those over age 65 have different energy and nutritional needs than younger adults, although specific dietary recommendations are yet to be determined.

Changes to the gastrointestinal tract may result in impaired absorption of certain nutrients, including vitamins C, D, B12 and B6, folic acid and calcium. It has been suggested that protein requirements for older adults are higher than for younger adults.

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For reasons that remain poorly understood, energy needs decline with age. It is thought that there is a 10% reduction in caloric needs between the ages of 51 and 75, with a further decrease of 10-15% after age 75 depending on physical activity level.

Appetite is an important factor in food consumption. Among older adults, appetite may be diminished as a result of medication side effects (e.g. digoxin, OTC cold and sleep medications), presence of disease (e.g. chronic illness, depression), or sensory alternations (e.g. smell, taste). Chewing and swallowing difficulties and oral discomfort (e.g. ill-fitting dentures, dry mouth) may also contribute to inadequate food intake. Functional difficulties (e.g. immobility, visual impairment, arthritis) may contribute to problems obtaining, preparing and eating food.

Food beliefs are another important factor in determining dietary habits of older adults, although there is little research to guide clinical practice. A recent study of community-dwelling seniors in Ontario found that dietary quality was best amongst those who perceived themselves to be healthy and who believed that nutrition and health were closely related. It has also been suggested that traditional, culturally appropriate foods are important to older adults.

Social factors also contribute to healthy eating. Older people who are from a high socioeconomic background (e.g. education, income), who have many social contacts, and live with at least one other person are most likely to have a better diet, both in terms of quantity and quality.

Malnutrition in the elderly may be indicated by chronically low dietary intake, low body weight, weight loss, or below normal biochemical indicators. Among independent, ambulatory seniors, prevalence of malnutrition is low. However, as health and functional capacities deteriorate, the prevalence of malnutrition increases dramatically; in nursing homes and hospitals, it has been documented to be as high as 60-80%. Consequences are serious. Inadequate body weight and weight loss have been associated with hip fractures, reduced autonomy, institutionalization, and mortality.

But what is optimal body weight for older adults? While this is a question of considerable debate, the best evidence to date suggests that elevated body mass index (BMI = weight in kg / (height in m)²) is not associated with increased mortality for older adults. In fact, in this age group, lowest mortality risk is associated with surprisingly high body weight. For example, a recent study showed excess mortality in seniors who were thin (BMI < 20), while reduced mortality was observed amongst those who were obese (BMI > 28.5). Weight loss, even in older adults who are obese, tends to be accompanied by loss of muscle mass, which increases risk for disability and subsequent mortality.

A general nutritional screening for community-dwelling older adults should include the following:

- Recent significant weight gain or loss
• Any conditions that might increase metabolic needs, such as fever, trauma, burns, infection, or hyperthyroidism
• Chronic diseases, such as diabetes, hypertension, or coronary artery disease
• Recent major surgery or illness
• GI tract diseases
• Social history: inadequate income, inability to buy own food, lives alone, eats meals alone, handicapped, drug addiction, alcoholism, inadequate refrigeration or cooking facilities, smoking
• Diet history: meals inadequate for needs, poor appetite, ill-fitting dentures, limited diet, lack of meal appeal, impaired sense of taste, impaired sense of smell, anorexia, problems chewing or swallowing, cultural or religious limitations on diet, frequent meals away from home

Social Factors in Successful Living

Income
Research evidence has confirmed again and again that improved health is closely linked to higher socioeconomic status (SES), a fact that remains true across the life span. A study conducted in Canada of community-dwelling older adults found that having an adequate income is the most consistent predictor of good health status. Other indicators of SES, such as education and occupation, play a less important role in influencing the health status of older adults (Cairney & Arnold, 1996). This finding is validated by a 1996 Health Canada survey result showing that having an inadequate income ranks as one of the three greatest fears facing seniors, immediately behind poor health and loss of independence.

Community
Successful living for older people is not just an individual endeavor. It takes a whole community to provide a safe and stable living environment with effective support networks in place and services that are easily accessible. People need to be able to “get out and about” in their communities, and to feel secure and comfortable doing so.

Communities are important for successful living not only to the extent that they provide supports for older adults. There also needs to be opportunities for seniors to remain involved and contributing to their communities. In the MacArthur Study on Aging, one of the strongest predictors of successful aging was attendance at meetings of organizations. A recent project in California to promote successful aging is focusing on healthy lifestyles, part of which includes the opportunity for elders to be involved in community service projects.

Interpersonal relationships
Research over the past thirty years has confirmed that people who are socially isolated are at increased risk of mortality and experience more mental health problems than those who have numerous social ties. There is less consistent evidence that involvement in interpersonal relationships affects the incidence of disease, although it is almost certainly the case that it improves people’s ability to cope with disease and
hence improves prognosis. It has also been shown that greater emotional support protects against future cognitive decline. To provide these kinds of benefits, relationships need to be caring, respectful, and supportive, and need to provide a sense of belonging and intimacy.

There are likely gender differences in terms of how social involvement improves health outcomes, with men and women finding different meaning and value in social relationships. Patterns of gender difference are unclear although recent findings suggest that in terms of their physical functioning, men receive more health benefit from increased numbers of social ties than do women.

**Meaningful activity**

Continued involvement in activity allows older adults to feel a sense of mastery and control in their lives, and moreover, provides a way to “connect and contribute to family and society” (Piskur et al., 2002). The types of activities older people are involved in are as varied and diverse as older people themselves. People may enjoy leisure activities such as watching television, traveling, playing games with friends, gardening, fishing, reading, etc. They may also be involved in household tasks, self-care and family role activities, volunteer activities, and paid employment. People may prefer life long interests, or they may develop new interests and learn new skills.

Participating in activity allows people to maintain a sense of identity, and to fulfill personal goals, or alternatively, it can be an adaptive strategy to compensate for social and physical deficits in later life. Being involved in physically demanding leisure activities (e.g. walking or gardening) is associated with improved physical functional health while low demand activities (e.g. reading or sewing) improves mental functional health.

**How do Older People Define Successful Living?**

Most of the background material presented so far has been based on observations made by researchers of factors that seem to be objectively related to successful living. These provide guiding principles for practitioners to help seniors make informed choices and develop skills for living a healthy and satisfying life. But since our definition states that it is older people themselves who define what it means to be healthy and satisfied, we will want to know something about what older adults themselves say about the matter.

Strawbridge et al. (2002) asked over 900 community dwelling elders if they thought they were aging successfully. Half of these participants agreed strongly that they were aging successfully as compared to only 19% who could be classified as aging successfully according to the MacArthur Study on Aging criteria (low risk of disease, high level of cognitive and physical functioning and engagement in life). While absence of chronic conditions and maintaining function were positively associated with subjective successful aging, many participants with chronic conditions and functional impairment
still considered themselves to be aging well. Subjective successful aging was strongly associated with well-being.

Bryant et al (2001) interviewed 22 older individuals to ask them about their perceptions of health. For these individuals, good health had little to do with physical or mental functioning, but rather meant “doing something meaningful”. This included activities that were personally valued such as “social activities, travel, reading, housework, fishing, swimming, and creative activities”. Both external and internal resources were necessary to support people in their ability to do these kinds of activities, with social support, available health care, and positive attitudes all being important contributors.

In open-ended interviews with 27 elders over the age of 85, Dutch researchers found that these older adults defined successful aging as a process of adaptation rather than a state of being. Overall, they valued well-being and social functioning more than they did physical and cognitive functioning (Von Faber et al, 2001)

Seniors are a diverse group, making it almost impossible to develop a single objective definition of successful living. These kinds of findings serve as a reminder that what counts as “success” will be different for different people with different life experiences living in different circumstances. Unfortunately, research in this area is limited. There is simply not enough evidence to help practitioners truly appreciate the diversity in how older people interpret what it means to live “a healthy and satisfying life”. This leaves it to members of the health care team to undertake a careful assessment of each individual to determine as best as possible the person’s values and goals in order to understand and work with them in the context of what is it that makes their life meaningful and enjoyable.
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Successful Aging


Debunking Myths


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**Physical Activity**


**Social Factors**


**Older Adults' Views of Successful Aging**


## Respiratory/Pulmonary

<table>
<thead>
<tr>
<th><strong>Age-related change</strong></th>
<th><strong>Potential Functional Consequences</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Atrophy and thinning of the interalveolar walls; decreased number of capillaries</td>
<td>Decreased efficiency of gas exchange</td>
</tr>
<tr>
<td>Ossification of cartilage in trachea and large bronchi</td>
<td>Diminished cough reflex; decrease in gag reflex; increased dead space in the bronchi</td>
</tr>
<tr>
<td>Degeneration of bronchial epithelial glands</td>
<td>Decrease sensitivity and efficiency of self-cleaning mechanism</td>
</tr>
<tr>
<td>Increased stiffness of the chest wall and atrophy of muscles of respiration</td>
<td>Diminished respiratory efficiency</td>
</tr>
<tr>
<td>Loss of elasticity and alveoli’s ability to expand and contract</td>
<td>Increase of residual volume and decrease in vital capacity</td>
</tr>
</tbody>
</table>

## Cardiovascular

<table>
<thead>
<tr>
<th><strong>Age-related change</strong></th>
<th><strong>Potential Functional Consequences</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Stiffening of cardiovascular structures due to calcification and increased deposits of collagen and lipids</td>
<td>Maximal cardiac output and stroke volume decrease</td>
</tr>
<tr>
<td>Thickening and increased rigidity of the valves</td>
<td>Stenosis or regurgitation of the aortic and/or mitral valves</td>
</tr>
<tr>
<td>Decrease in the number of pacemaker cells in the SA node</td>
<td>Increased susceptibility to arrhythmias</td>
</tr>
<tr>
<td>Blood vessels are less distensible</td>
<td>Mild increase in blood pressure</td>
</tr>
<tr>
<td>Baroreceptors in the arterial tree are less sensitive to pressure</td>
<td>Diminished adaptive response to active exercise or postural changes, which leads to orthostatic hypotension</td>
</tr>
</tbody>
</table>

## Genitourinary/Renal

<table>
<thead>
<tr>
<th><strong>Age-related change</strong></th>
<th><strong>Potential Functional Consequences</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease in kidney mass; decline in the number of functioning nephrons; decrease in functioning glomeruli</td>
<td>Kidney is less efficient in the tubular exchange of substances and conservation of water and sodium</td>
</tr>
<tr>
<td>Renal blood flow is decreased, probably secondary to decrease in cardiac output</td>
<td>Decreased filtration rate; decline in creatinine clearance rate; alteration in the renal excretion of drugs</td>
</tr>
<tr>
<td>Hypertrophy of bladder muscle; thickening of bladder wall</td>
<td>Decrease in bladder capacity; nocturia</td>
</tr>
<tr>
<td>Smooth muscle in the bladder and urethra is replaced with connective tissue; alteration in bladder neck muscle</td>
<td>Balance between intravesical and intraurethral pressure is altered; factors contribute to urinary incontinence</td>
</tr>
<tr>
<td>Degenerative changes in cerebral cortex; neuralgic control over bladder emptying is inefficient</td>
<td>Interval between perception of the need to void and actual need to empty bladder is shortened (urgency and frequency); inability to completely empty the bladder</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Decrease in anti-diuretic hormone; nocturnal sodium and fluid excretion</td>
<td>Nocturia</td>
</tr>
<tr>
<td>Decreased exchangeable potassium</td>
<td>Decreased renal blood flow</td>
</tr>
<tr>
<td>Decreased vaginal secretions; atrophy from being de-estrogenated; decreased vaginal pH</td>
<td>Increased susceptibility to urinary tract infection, vaginitis, urethritis</td>
</tr>
<tr>
<td>Decreased bactericidal prostatic secretions; increased chromosomal abnormalities in germ cells; increased prostatic hypertrophy</td>
<td>Impaired micturation</td>
</tr>
</tbody>
</table>

### Gastrointestinal/Nutritional

<table>
<thead>
<tr>
<th>Age-related change</th>
<th>Potential Functional Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body mass increases between ages 20-50, then remains stable until about age 65 with loss of both lean and adipose tissue</td>
<td>Overall weight loss; protein malnutrition risk increases</td>
</tr>
<tr>
<td>Percentage of body fat increases around 40 and then decreases after age 70; intra-abdominal and intramuscular fat increases with aging</td>
<td>Affects storage and elimination rate of drugs and alcohol</td>
</tr>
<tr>
<td>Small decrease in triiodothyronine levels; reduced responsiveness to norepinephrine; reduced Na+K+ATPase activity</td>
<td>Resting metabolic rates decreased by 20% in men and 13% in women</td>
</tr>
<tr>
<td>Myenteric reflexes less effective; capacity of rectum to store more feces increases</td>
<td>Constipation; impaction</td>
</tr>
<tr>
<td>Acid secretions in the stomach decreases; gastrin levels increase; decreased amplitude of esophageal contractions during peristalsis</td>
<td>GERD; “sour stomach”; bloating; flatulence</td>
</tr>
<tr>
<td>Decreased hepatic mass and blood flow</td>
<td>Increased half-life of lipid-soluble drugs</td>
</tr>
<tr>
<td>Gag reflex diminished</td>
<td>Dysphagia; coughing or choking</td>
</tr>
<tr>
<td>Decreased thirst and salivation</td>
<td>Dehydration; dry mouth; increase dental loss (gums and teeth)</td>
</tr>
<tr>
<td>Reduced taste buds and olfactory receptors</td>
<td>Poor nutrition; decreased appetite</td>
</tr>
</tbody>
</table>
### Nervous/Ophthalmic/Auditory

<table>
<thead>
<tr>
<th>Age-related change</th>
<th>Potential Functional Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stages of sleep altered with greater proportion of time in light sleep stages</td>
<td>Complaints of insomnia increase; poor sleep hygiene with high utilization of sedation</td>
</tr>
<tr>
<td>Most profound changes occur after age 75. Within the brain is neuronal loss, dendritic changes, pigment accumulation, decreases in neurotransmitters and modest lowering of brain weight</td>
<td>Slowed reaction times predisposing to falls; increased risk of syncope. Minor non-progressive changes in short term memory storage and retrieval. Increased risk for delirium, depression, dementia.</td>
</tr>
<tr>
<td>Decreased thermo-regulatory response</td>
<td>Hypothermia</td>
</tr>
<tr>
<td>Yellowing and increased opacity of cornea</td>
<td>Diminished passage of light; decreased colour discrimination (especially in blue-green spectrum)</td>
</tr>
<tr>
<td>Loss of orbital fat</td>
<td>Eyes sink deeper into orbit, limiting upward gaze</td>
</tr>
<tr>
<td>Stenosis of lacrimal duct</td>
<td>Decreased tearing; dry cornea</td>
</tr>
<tr>
<td>Atrophy of ciliary muscles</td>
<td>Diminished ability to focus object on the retina (accommodation)</td>
</tr>
<tr>
<td>Decrease in pupil size</td>
<td>Diminished ability to respond to changes in light; difficulty with night vision</td>
</tr>
<tr>
<td>Loss of elasticity and nuclear sclerosis of lens</td>
<td>Diminished acuity and increased sensitivity to glare</td>
</tr>
</tbody>
</table>

| External ear: longer, thicker hair and thinner dry skin                             | Predisposes to build up of cerumen in auditory canals                                               |
| Middle ear: collagenous tissue replaces elastic tissue of tympanic membrane causing it to be thinner and less resilient; three ossicular bones become calcified and hardened | Impaired sound conduction                                                                           |
| Inner ear: diminished neurons, hair cells and blood supply                          | Presbycusis; diminished ability to hear high-pitched sounds                                          |
| Inner ear: degeneration of nerve fibres                                             | Diminished speech discrimination (especially sounds like s,z,sh,ch)                                |
### Musculoskeletal System

<table>
<thead>
<tr>
<th>Age-related change</th>
<th>Potential Functional Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gradual net loss of bone density after age 30 years</td>
<td></td>
</tr>
<tr>
<td>Most rapid bone demineralization occurs during the 5 years following menopause</td>
<td>Osteopenia; osteoporosis</td>
</tr>
<tr>
<td>Decreased GI absorption of calcium, Vit.D</td>
<td>Osteopenia; osteoporosis</td>
</tr>
<tr>
<td>Decreased muscle fibres, capillary circulation and innervation</td>
<td>Decrease in muscle mass, tone and strength; diminished flexibility, range of motion and mobility; diminished balance and reaction time</td>
</tr>
<tr>
<td>Decreased intervertebral disk space; decreased joint space in trunk and extremities; flattening of arch in feet</td>
<td>Curvature of spine; gait and balance impairments</td>
</tr>
</tbody>
</table>

### Integumentary

<table>
<thead>
<tr>
<th>Age-related change</th>
<th>Potential Functional Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased - vascularity of dermis; epidermal turnover time; melanocytes; function of eccrine sweat glands; dermis density</td>
<td>Dry, thin skin; decreased sweating response affects thermoregulation; prolonged wound healing; poor insulation; uneven tanning; graying of hair; increased blistering; increase in basal cell carcinoma</td>
</tr>
</tbody>
</table>

### Immune System

<table>
<thead>
<tr>
<th>Age-related change</th>
<th>Potential Functional Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helper T cells decrease B cell response and antibody production is substantially reduced</td>
<td>Increased susceptibility to infection and delayed response to treatment</td>
</tr>
</tbody>
</table>

### Endocrine System

<table>
<thead>
<tr>
<th>Age-related change</th>
<th>Potential Functional Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSH response to thyroid releasing hormone is reduced in men</td>
<td>Atypical presentation of hypo and hyperthyroidism</td>
</tr>
<tr>
<td>Decrease estrogen</td>
<td>Decrease in height due to kyphosis</td>
</tr>
</tbody>
</table>
### Laboratory Values Unchanged with Age

| Hepatic function tests | Serum bilirubin  
| | AST  
| | ALT  
| Coagulation tests | Serum electrolytes  
| | Total protein  
| | Calcium  
| | Phosphorus  
| | Serum folate  
| Biochemical tests | Arterial blood tests | PH  
| | PaCO2  
| | Renal function tests | Serum creatinine  
| | Thyroid function tests | T4  
| Complete blood count | Hematocrit  
| | Hemoglobin  
| | RBC indices  
| | Platelet count  

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### Laboratory Values that Change with Age

<table>
<thead>
<tr>
<th>Value</th>
<th>Degree of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkaline phosphatase</td>
<td>Increases by 20% between third and eighth decade</td>
</tr>
</tbody>
</table>
| Biochemical tests | Slight decline  
| Serum albumin | Slight increase  
| Uric acid | Increases by 30 to 40 mg/dl by age 55 in women and age 60 in men  
| Total cholesterol | Increase by 30% in men & decreased 30% in women  
| HDL cholesterol | Increases by 30% in men & 50% in women  
| Triglycerdies | Slight decrease  
| Serum B₁₂ | Decreases by 15% between third and eight decade  
| Serum magnesium |  
| PaO₂ | Decreased by 25% between third and eight decade  
| Creatinine clearance | Decreases by 10ml/min/1.73sp m per  

Successful Aging – pre-reading
<table>
<thead>
<tr>
<th>Value</th>
<th>Degree of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thyroid function tests</strong></td>
<td>decade</td>
</tr>
<tr>
<td>T3</td>
<td></td>
</tr>
<tr>
<td>TSH</td>
<td></td>
</tr>
<tr>
<td>• Possible slight decrease</td>
<td></td>
</tr>
<tr>
<td>• Possible slight increase</td>
<td></td>
</tr>
<tr>
<td><strong>Glucose tolerance tests</strong></td>
<td></td>
</tr>
<tr>
<td>Fasting blood sugar</td>
<td></td>
</tr>
<tr>
<td>Random blood glucose</td>
<td></td>
</tr>
<tr>
<td>• Minimal increase (within normal range)</td>
<td></td>
</tr>
<tr>
<td>• Steady increase after fifth decade</td>
<td></td>
</tr>
<tr>
<td><strong>White blood cell count</strong></td>
<td>Decreases</td>
</tr>
</tbody>
</table>

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## Blood Chemistry

<table>
<thead>
<tr>
<th>Lab Value</th>
<th>Age-related Change</th>
<th>Significance of Deviations</th>
<th>*Cautions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Albumin</strong></td>
<td>Slight decrease</td>
<td>Ulcerative colitis, renal disease, malabsorption, malnutrition</td>
<td>Low serum albumin produces edema. If there is no liver dysfunction, teach the elder to increase protein intake by eating fish, meat, nuts, grains, peanut butter, vegetable eggs, and milk products. Elders need more protein per kilogram of body weight than does a younger person.</td>
</tr>
<tr>
<td><strong>BUN</strong></td>
<td>Slight increase</td>
<td>Cirrhosis, Liver disease, Low-protein intake, Malnutrition</td>
<td>A slightly elevated BUN causes no problems unless such stressors as infection or surgery are added.</td>
</tr>
<tr>
<td><strong>Calcium</strong></td>
<td>Slight decrease</td>
<td>Renal failure, Malabsorption pancreatitis</td>
<td>Paget’s disease, metastatic disease</td>
</tr>
<tr>
<td><strong>Creatinine</strong></td>
<td>Slight increase</td>
<td>Anemia, Renal failures, Muscular atrophy,</td>
<td>Renal dysfunction, Chronic glomerulonephritis, Consider the creatinine and the creatinine clearance levels to prevent toxicity when giving drugs excreted via the urinary system.</td>
</tr>
<tr>
<td><strong>Fasting Glucose</strong></td>
<td>Increases</td>
<td>Hyper- Insulinim, N Hypothyroidism</td>
<td>Diabetes mellitus, Hyperthyroidism, Infections, Emotional stress, Drugs such as alcohol, MAO inhibitors, and beta blockers can contribute to a rapid fall in glucose. A rise in glucose can quickly precipitate nonketotic hyperosmolar acidosis.</td>
</tr>
<tr>
<td>Lab Value</td>
<td>Age-related Change</td>
<td>Significance of Deviations</td>
<td>*Cautions</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
<td>-----------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Iron</td>
<td>Slight decrease</td>
<td>Iron-deficiency anemia</td>
<td>Pernicious anemia, Hemolytic anemia, Hepatitis</td>
</tr>
<tr>
<td>Sodium</td>
<td>Unchanged with aging</td>
<td>Diarrhea, vomiting or nasogastric suctioning, excessive oral water intake, CHF peripheral edema, ascites</td>
<td>Increased intake, Cushing’s syndrome</td>
</tr>
<tr>
<td>Potassium</td>
<td>Slight increase</td>
<td>Vomiting, diarrhea, laxative abuse, dehydration, stress, trauma, surgery starvation</td>
<td>Renal failure, metabolic acidosis, hyperadrenalism</td>
</tr>
</tbody>
</table>


### Hematology

<table>
<thead>
<tr>
<th>Lab Test</th>
<th>Age-related Change</th>
<th>Significance of Deviations</th>
<th>*Cautions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Hemoglobin</td>
<td>Unchanged with aging</td>
<td>Anemia, hemorrhage, kidney disease, fluid overload</td>
<td>COPD, CHF, dehydration</td>
</tr>
<tr>
<td>Hematocrit</td>
<td>Unchanged with aging</td>
<td>Anemia, malnutrition, rheumatoid arthritis</td>
<td>Dehydration, severe diarrhea</td>
</tr>
<tr>
<td>WBC</td>
<td>Slight decreases</td>
<td>Viral infections, dietary deficiency,</td>
<td>Acute infections, inflammatory diseases, trauma, stress, tissue necrosis</td>
</tr>
</tbody>
</table>

Successful Aging – pre-reading
<table>
<thead>
<tr>
<th>Lab Test</th>
<th>Age-related Change</th>
<th>Significance of Deviations</th>
<th>*Cautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lymphocytes</td>
<td>Unchanged with aging</td>
<td>Leukemia, sepsis, chemotherapy, radiation</td>
<td>Protect elders from infection since they have fewer and weaker lymphocytes with which to fight invading organisms. Immune system changes diminish antibody-antigen response. Encourage elders to have pneumococcal, tetanus, and influenza vaccines.</td>
</tr>
</tbody>
</table>


Urine Chemistry

<table>
<thead>
<tr>
<th>Lab Value</th>
<th>Age-related change</th>
<th>Decrease related to:</th>
<th>Cautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein</td>
<td>Slight increase or no change</td>
<td>Positive: diabetes mellitus, CHF</td>
<td>Proteinuria is more common in elders than younger adults. 1+ (30mg/100ml) may be of no clinical significance, but renal pathology or a urinary tract infection should be ruled out</td>
</tr>
<tr>
<td>Glucose</td>
<td>No change</td>
<td>Positive: Uncontrolled Diabetes mellitus; pituitary disorders</td>
<td>Glycosuria may not occur until the plasma glucose exceeds 300mg/100ml. Urine glucose checks in diabetic elders are highly unreliable</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Slight increase</td>
<td>Overhydration, renal failure, diuresis</td>
<td>Dehydration, decrease fluid intake, vomiting, diarrhea</td>
</tr>
<tr>
<td>Lab Value</td>
<td>Age-related change</td>
<td>Decrease related to:</td>
<td>Cautions</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------</td>
<td>---------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>pH</td>
<td>No change</td>
<td><strong>Acidic Urine:</strong> diarrhea, metabolic acidosis, diabetes mellitus, respiratory acidosis, emphysema, pyrexia</td>
<td><strong>Alkaline urine:</strong> respiratory alkalosis, metabolic acidosis, vomiting, diuretic therapy, UTI</td>
</tr>
<tr>
<td>Ketones</td>
<td>No change</td>
<td><strong>Positive:</strong> uncontrolled diabetes mellitus, starvation, high-protein diet, dehydration</td>
<td></td>
</tr>
<tr>
<td>White blood cells</td>
<td>No change</td>
<td><strong>Bacteria infection</strong> – not always a reliable indicator of infection in the older adult; if clinically asymptomatic, is not significant</td>
<td></td>
</tr>
<tr>
<td>Blood</td>
<td>No change</td>
<td><strong>Positive:</strong> renal trauma, renal stones, cystitis, glomerulonephritis, prostatitis</td>
<td></td>
</tr>
</tbody>
</table>


**Arterial Blood Gases**

<table>
<thead>
<tr>
<th>Lab Test</th>
<th>Age-related Change</th>
<th>Significance of Deviations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>PH</td>
<td>Unchanged with aging</td>
<td>Respiratory or metabolic acidosis</td>
</tr>
<tr>
<td>PaO2</td>
<td>Decreased by 25% between the</td>
<td>Cardiac or respiratory</td>
</tr>
<tr>
<td>Lab Test</td>
<td>Age-related Change</td>
<td>Significance of Deviations</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------------------------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>third &amp; eighth decades of life</td>
<td>disease</td>
<td></td>
</tr>
<tr>
<td>PaCO2</td>
<td>Unchanged or slightly increased with age</td>
<td>Respiratory alkalosis</td>
</tr>
<tr>
<td>O2 saturation</td>
<td>Slight decrease</td>
<td>Impaired respiratory function &amp;/or abnormal gas exchange</td>
</tr>
<tr>
<td>HCO2</td>
<td>Unchanged with aging</td>
<td>Metabolic acidosis</td>
</tr>
</tbody>
</table>

Maintaining a Healthy Life-Long Lifestyle: “Food for Thought”

What every health care provider should know

We all can talk the healthy lifestyle “talk”, but more importantly can we “walk the walk”? There seems to be a gap in our knowing and doing. Let’s “walk the walk” as well as “talk the talk” in order to be more effective promoters of life long health.

The World Health Organization has proclaimed that the primary causes of morbidity and mortality in Western industrialized countries are “largely preventable” (see WHO Annual Health Reports). These include heart disease, smoking-related lung disease, cancers, hypertension and stroke, and diabetes. The relationship of these conditions to lifestyle factors has been well established. Health care providers have a responsibility to support the wellness and health promotion of their patients. Heart disease now has been reported to be reversible with lifestyle to varying degrees with changes including dietary modification and exercise. Based on epidemiological studies, smoking cessation is now the single most important preventive health care behavior, and only 30 minutes of exercise daily has been shown to result in considerable health benefit.

Formerly known as type 2 diabetes, this condition is now prevalent in children as well as adults and is considered epidemic in the Canada and the United States. The triad of diabetes, obesity and hypertension is an increasingly prevalent health care concern contributing to significant illness, human suffering, and societal cost.

The incidence of cancer may be on the rise given the ageing of the population. However, there is a considerable lifestyle component to many cancers that need to be addressed.

Physical Activity/Exercise and Health

The average person today would tell you that being physically active and exercising regularly are essential to health throughout the life cycle. Knowing this however is far different from being committed to a healthy lifestyle with regular physical activity. The question is “Why is it that intellectually we know what is undeniably in our best interest, and yet we often fall short?” This is a complex question and one that may be best addressed through introspection. This is a question that social scientists have mulled over for several decades.

Focus on your own life. Think about the ideal level of physical activity and exercise that you believe would be in your best interest health-wise. Now think about the reality of your level of physical activity and exercise. How do these differ? Explain the difference. Consider the factors that can explain this difference, and categorize them into those that you perceive as being easily modifiable, and those that are less so. Also, consider, what other factors would facilitate your engaging in more physical activity and exercise?

Think about your current health risk factors such as age, gender, weight, smoking status, hydrogenated fat consumption, alcohol consumption, and stress levels. Now consider your family history in terms of morbidity and mortality. What have your relatives died from? Think about family and other close personal relationships that you have, that add value to your living a long healthy life. How might you use this
Successful Aging – pre-reading

information to reset your priorities regarding the maintenance of your health, and thinking of regular exercise as one of the best investments?

The lack of exercise has been implicated in all the major illnesses of our day including heart disease, lung disease, cancers, hypertension and stroke and diabetes. Thus, the prevention of these life threatening conditions can be readily prevented in many cases. Further, exercise contributes to good circulation, good cognitive and emotional health, strong bones, and improved concentration and sleep. No medication in the world for any condition, can rival the health benefits of physical activity and exercise.

Nutrition and Health

Everyone would agree that food is essential to life, and that it is the focus of many social, cultural and religious occasions. Today, we have a dizzying array of choices with respect to foods and nutrition. Canadians are estimated to eat 40% of their meals outside the home. Studies show that are our eating patterns and habits have changed dramatically over the past 50 years or so. This in combination with reduced activity and lack of exercise has been deleterious to epidemic proportions.

Focus for a moment on your personal food choices. If you had to plan a nutritious food plan for the day, describe in detail what would this look like in terms of food types and amount. Now compare this plan with your food intake on an average day. How do they compare? If they are not similar, why is this so? What factors can you think of that interfere with your not eating as healthily as you might? Do you feel there is need to change your food choices or do you feel that your current choices are consistent with a high level of health in the long term?

Think for a moment about long term nutrition, from womb to tomb. Food is more than providing energy. What other roles does food ingestion fill? Expand on the phrase “food is our medicine”. How might this work?

Physical Activity/Exercise AND Nutrition for Health

We have now considered physical activity/exercise and nutrition separately in terms of long term health, morbidity and mortality. It is conceivable that people with good eating habits who don’t exercise, have good health. Or alternatively, people who eat poorly yet exercise regularly, may appear also to have good health. Consider for a moment, the interaction of these major lifestyle factors on life-long health. To what extent would you hypothesize that health is improved over the life cycle with optimal exercise and nutrition, vs. one of these factors alone being optimal?

Is Education Enough?

You are probably human and recognized that we could all do more to exercise more for our health, and eat more nutritious foods on a daily basis. Having reflected on these ideas, consider ways in which you might consider educating people effectively in a public health program and on a personal level, to adopt a lifestyle with regular exercise and well balanced, low fat, low added sugar, high fiber diet. What factors did you come up with did you come up with in each situation?
Bibliography
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http://www.americandiabetesassociation.com
http://www.lungusa.org/
http://www.ash-us.org/
http://www.heartcenteronline.com/
http://www.post-gazette.com/ (web site to support lifestyle changes)
http://www.cancer.org/
Part I. Getting situated

You are a health professional in the Fraser Valley an hour or two from the urban sprawl of the Lower Mainland. It’s Saturday afternoon, and you have just attended an interdisciplinary educational forum on Successful Living for Older People. The forum was very well attended by a variety of health professionals, several volunteers from the senior center, and a few older adults from the community.

It’s late in the afternoon, and you have dropped into the café across the street to grab a coffee before going home. You find there are several people from the forum who have done the same thing, and before you know it, you are all seated around a small table, engaged in a lively discussion.

The pharmacist speaks up:

“I figure I am going to leave this life like my Dad did before me – he got cancer and just decided that was it. He had lived a full life and he let himself go. He died just a few months later. I can’t bear the thought of being sick. I want to stay active until I drop dead.”

A community nurse across the table chuckles and says:

“I can’t imagine wanting to stay busy when I retire. I mean, enough already! I just want to sit back and enjoy doing nothing!”

“That’s fine” someone added, “as long as you don’t have aches and pains”. You can’t deny that things start to fall apart the older you get.”

Questions:

1. Take a few minutes to continue with this discussion of what you personally expect to experience in your old age.

2. Go on to discuss how your views on ageing influence your practice as a health professional.
# Care for Elders Module Evaluation

**Module Title:**

**Date:**

**Location:**

Please rate the following statements (✓):

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<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
<th>N/A</th>
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</thead>
<tbody>
<tr>
<td>1. The organization, room, and timing of the session was adequate</td>
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<td>2. The pre-reading package covered information that was new to me</td>
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<td>3. The pre-reading package was well organized and easy to read</td>
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<td>4. Today’s session DID improve my knowledge of interdisciplinary roles, responsibilities and team dynamics</td>
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<td>5. The facilitator was effective in keeping discussion moving forward</td>
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<td>6. The facilitator provided new, critical information as needed</td>
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<td>7. The case complexity or difficulty was appropriate for my level</td>
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<td>8. The discussion in my group was helpful for my learning</td>
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1. Please name two changes in your own practice that you will implement as a result of what you learned today.

1. ____________________________________________________________

2. ____________________________________________________________

2. Name two ways in which this session could be improved.

1. ____________________________________________________________

2. ____________________________________________________________

Please return evaluation forms to: Division of Community Geriatrics, Department of Family Practice, UBC
c/o GPOT-CP5D, 855 West 12th Ave., Vancouver, B.C. V5Z 1M9