

## ПРОБЛЕМИ СТАРІННЯ: ЕТИЧНІ, ПСИХОЛОГІЧНІ І СОЦІАЛЬНІ АСПЕКТИ

Завданням цієї статті є з'ясування того, як ми повинні ставитися до старших людей, а також усвідомлення найбільш істотних аспектів старіння. Питання постає наступним чином: Що ми як суспільство сьогодні робимо для забезпечення здорового способу життя з метою запобігання небажаних наслідків переходу до старості? Це питання пов'язане з іншою серйозним занепокоєнням: які вимоги постають у зв'язку зі зростанням відмінностей (расових та етнічних) у середовищі старіючого населення.

*Ключові слова:* антропология, геронтология, гуманність, здоров'я суспільства, процес старіння, психология, соціальна робота, соціология.

*Aging should not be regarded as an affliction. It is a stage in life, like all others, that deserves to be celebrated and documented in all its natural grace and beauty»*

*Chester Higgins, Jr., Elder Grace*

The resilience of the elderly provides an opportunity for many to learn of (and from) this cohort of adults, and to do what is necessary to ensure that we understand all that is involved in the aging process. As a society, we should ask how one can dismiss the struggles of such an amazing generation of adults. Becoming older (aging) is inevitable, but it is also something that should be revered.

Some aspects of aging research in following works: C. Higgins [3]; T.A. Baker [11]; A.A. Mangoni, S.H. Jackson [6]; S.K. Baker [1]; B.B. Dreher [4]; H. Osborne [10]; S.L. Breisch [2]; J.F. Nussbaum, L.L. Pecchioni, J.V. Robinson, T. Thompson [9]; S. Meryn [7]; P. Ley [5] and others. But ethical and psychological problems of aging throw light in these texts is not enough.

The **purpose** of the paper is to define the main ethical, psychological points concerning aging and create some proposition for the adaptation adults in the social reality.

The topic of the paper has further perspectives of theoretical research and practical realization in the sphere of social works with adults.

**Methodology:** Comparative anatomy and psychology of Age-Related Change.

**Practical value:** To fully understand the contributions of older adults and to appreciate the subject of aging studies/gerontology in general, there must be a commitment to create a multidisciplinary overview for all to understand the aging process across diverse groups of individuals (taking into account race, ethnicity, socio-economic status, gender, etc.). Recognizing the enormity of this challenge, leaders in the field of gerontology are now contributing to our knowledge and insight on matters most pertinent to understanding the changing demographic structure of the older adult population.

It is critical that we now focus on paramount public health, social, behavioral, and biological concerns as they relate to the needs of older adults. We must also distill the most important advances in the science of aging and incorporate the evidence of scholars in gerontology, anthropology, humanities, psychology, public health, sociology, social work, biology, medicine, and other, similarly related disciplines. It is time that our attention centers on areas pertinent to the well-being of the adult population such as work and retirement, social networks, context and neighborhood, discrimination, health disparities, long-term care, physical functioning, care giving, housing, and end-of-life care. Bringing our knowledge of this understudied group in line with their needs and the impact they will have on society will be an “achievable” challenge of current and future generations of scholars.

That’s why we have to begin with our knowledge of what age-related changes are.

## 8 Areas of Age-Related Change

### 1. **Brain:**

#### **Memory and Alzheimer's Disease**

As adults age, many worry that they are becoming more forgetful. They think forgetfulness is the first sign of Alzheimer's Disease (AD). In the past, memory loss and confusion were accepted as just part of growing older. However, scientists now know that people can remain both alert and able as they age, although it may take them longer to remember things.

#### **What's New?**

- During the past several years, scientists have begun to focus on a type of cognitive change called MILD COGNITIVE IMPAIRMENT (MCI), which is different from age-related cognitive change and often, over years, may progress to AD. People with amnesic MCI (having a specific memory difficulty) do have ongoing memory problems, but they do not have other losses typical of AD, such as confusion, attention problems, and difficulty with language.

- The AD NEUROIMAGING INITIATIVE (ADNI) is a large study that will determine whether magnetic resonance imaging (MRI) and positron emission tomography (PET) scans, or other imaging or biological markers, best reveal early AD changes or measure disease progression in persons with AD. ADNI is seeking participants who (1) are in good general health and age 70-90 with no memory problems, OR (2) are in good general health but with memory problems, OR have a diagnosis of mild cognitive impairment or early Alzheimer's disease, and (3) minority participants.

- The AD GENETICS STUDY seeks to learn more about risk factor genes for late onset AD.

### 2. **Bones and Joints**

The weight-bearing bones and the movable joints take much wear and tear as the body ages. The most common age-related conditions are:

**Osteoporosis:** OSTEOPOROSIS is a disease that weakens bones to the point where they break easily—most often bones in the hip, backbone (spine), and wrist—and most often in women. As people enter their 40s and 50s, bones begin to weaken. The outer shell of the bones also gets thinner.

**Arthritis:** There are different kinds of ARTHRITIS, each with different symptoms and treatments. Arthritis can attack joints in almost any part of the body. Millions of adults and half of all people age 65 and older are troubled by this disease. Osteoarthritis (OA) is the most common type of arthritis in older people. OA starts when cartilage begins to become ragged and wears away. At OA's worst, all of the cartilage in a joint wears away, leaving bones that rub against each other. Rheumatoid Arthritis (RA) is an AUTOIMMUNE disease. In RA, that means your body attacks the lining of a joint just as it would if it were trying to protect you from injury or disease. RA leads to inflammation in your joints. This inflammation causes pain, swelling, and stiffness that can last for hours.

#### **What's New?**

- To prevent weakened bones, it is important to consume enough calcium and vitamin D. It is also important to include regular weight-bearing exercise in your lifestyle. Getting enough calcium all through your life helps to build and keep strong bones.

- For RA, drug therapy that modifies the immune system response and lessens joint damage continues to be the most effective course of action. For OA, research now shows that lifestyle changes—weight loss and light resistance and flexibility exercises—can reduce the symptoms and provide better quality of life as we age.

### **3. Eyes and Ears**

About the age of 40, eyesight weakens, and at around 60, cataracts and macular degeneration may develop. Hearing also declines with age.

#### **Sight:**

**Presbyopia** (prez-bee-OH-pee-uh) is a slow loss of ability to see close objects or small print. It is a normal process that happens as you get older. Holding the newspaper at arm's length is a sign of presbyopia. Reading glasses usually fix the problem.

**Cataracts** are cloudy areas in the eye's lens causing loss of eyesight. Cataracts often form slowly without any symptoms. Some stay small and don't change eyesight very much. Others may become large or dense and harm vision. Cataract surgery can help. Cataract surgery is safe and is one of the most common surgeries done in the United States.

**Glaucoma** comes from too much pressure from fluid inside the eye. Over time, the pressure can hurt the optic nerve. This leads to vision loss and blindness. Most people with glaucoma have no early symptoms or pain from the extra pressure. You can protect yourself by having annual eye exams that include dilation of the pupils.

#### **More Information:**

**Retinal disorders** are a leading cause of blindness in the United States. The most common is age-related MACULAR DEGENERATION (AMD). AMD affects the part of the retina (the macula) that gives you sharp central vision. PHOTODYNAMIC THERAPY uses a drug and strong light to slow the progress of AMD. Another treatment uses injections. Ask your eye care professional if you have signs of AMD. Approximately 4.1 million Canadian adults 40 years and older have DIABETIC RETINOPATHY, a degenerative disease affecting vision. Proper medical care, lifestyle changes, and frequent follow-ups can help reduce this alarming statistic.

#### **What's New?**

- Two new drugs, ranibizumab (Lucentis) and bevacizumab (Avastin) are being used to treat neovascular macular degeneration. The former has approval from the Food and Drug Administration (FDA) for that use, but the latter is approved only for treatment of metastatic cancer. However, some ophthalmologists are using bevacizumab for macular degeneration. A nationwide study sponsored by the Canadian Eye Institute (CEI) is evaluating the impact of nutrition on AMD. Nearly 100 clinical centers are now seeking 4,000 study participants ages 50 to 85 who have AMD.

**Hearing:** About one-third of Canadians between the ages of 65 and 74 have hearing problems. About half the people who are 85 and older have hearing loss.

**Presbycusis** (prez-bee-KYOO-sis) is age-related hearing loss. It becomes more common in people as they get older. The decline is slow.

**Tinnitus** (tih-NIE-tuhs) accompanies many forms of hearing loss, including those that sometimes come with aging. People with tinnitus may hear a ringing, roaring, or some other noise inside their ears. Tinnitus may be caused by loud noise, hearing loss, certain medicines, and other health problems, such as allergies and problems in the heart and blood vessels.

#### **What's New?**

For a fifth consecutive year, the National Institute on Deafness and Other Communication Disorders (NIDCD) has taken part in the world's largest annual gathering of twins, this time to learn more about the genetics behind age-related hearing loss. The study is the first to address definitively an observation that most hearing health professionals and researchers have made but have yet to prove: that people tend to lose their hearing as they age and that this type of hearing loss seems to run in families.

#### **4. Digestive and Metabolic**

As we grow older, the prevalence of gastrointestinal problems increases. Gastro esophageal reflux disease, or GERD, occurs when the lower esophageal sphincter (LES) does not close properly and stomach contents leak back, or reflux, into the esophagus. Heartburn that occurs more than twice a week may be considered GERD, and it can eventually lead to more serious health problems. About 40 percent of adults ages 40 to 74 - have pre-diabetes, a condition that raises a person's risk for developing type 2 diabetes, heart disease, and stroke.

#### **What's New?**

- Researchers involved in a large clinical trial with adults at increased risk for developing type 2 diabetes have confirmed that a variant in a specific gene appears to confer susceptibility to type 2 diabetes.

- In one study, lifestyle interventions such as losing a small amount of weight and increasing physical activity reduced the development of diabetes by 71 percent in people over 60 years.

#### **5. Urogenital**

**Incontinence:** Loss of bladder control is called urinary INCONTINENCE. It can happen to anyone, but is very common in older people. At least 1 in 10 people age 65 or older has this problem. Symptoms can range from mild leaking to uncontrollable wetting. Women are more likely than men to have incontinence. Aging alone does not cause incontinence. It can occur for many reasons: Urinary tract infections, vaginal infection or irritation, constipation, and certain medicines can

cause bladder control problems that last a short time. In most cases urinary incontinence can be treated and controlled, if not cured. If you are having bladder control problems, don't suffer in silence. Talk to your doctor.

**Benign Prostate Hypertrophy (BPH):** The PROSTATE GLAND surrounds the tube (URETHRA) that passes urine. This can be a source of problems as a man ages because the prostate tends to grow bigger with age and may squeeze the urethra. A tumor can also make the prostate bigger. These changes, or an infection, can cause problems passing urine. Sometimes men in their 30s and 40s may begin to have these urinary symptoms and need medical attention. For others, symptoms aren't noticed until much later in life.

**Prostate Cancer:** Prostate cancer is the second most common type of cancer among men in our country. Only skin cancer is more common. Out of every three men who are diagnosed with cancer each year, one is diagnosed with prostate cancer.

#### **What's New?**

- Researchers from 12 institutions, including the NIH's National Human Genome Research Institute (NHGRI), recently announced the results of the first genome-wide linkage study of prostate cancer in African Americans. Using genetic markers, researchers identified several regions of the human genome that likely contain genes that, when altered, increase the risk of developing prostate cancer.

- The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) are conducting a clinical trial on the effectiveness and safety of three minimally invasive surgical therapies to treat benign prostate enlargement, which is common in men as they age.

#### **6. Dental: gingivitis, periodontitis, loss of teeth**

Tooth decay is not just a problem for children. It can happen as long as you have natural teeth in your mouth. Tooth decay ruins the enamel that covers and protects your teeth. When you don't take good care of your mouth, bacteria can cling to your teeth and form a sticky, colorless film called dental PLAQUE. This plaque can lead to tooth decay and cavities. Gum disease can also cause your teeth to decay. FLUORIDE is just as helpful for adults as it is for children. Using a fluoride toothpaste and mouth rinse can help protect your teeth.

**Gum diseases** (sometimes called PERIODONTAL or GINGIVAL DISEASES) are infections that harm the gum and bone that hold teeth in place. When plaque stays on your teeth too long, it forms a hard, harmful covering, called TARTAR, that brushing doesn't clean. The longer the plaque and tartar stay on your teeth, the more damage they cause. This is called GINGIVITIS. If gingivitis is not treated, over time it can make your gums pull away from your teeth and form pockets that can get infected. This is called PERIODONTITIS. If not treated, this infection can ruin the bones, gums, and tissue that support your teeth. In time, it can cause loose teeth that your dentist may have to remove.

#### **What's New?**

In late 2006, researchers funded by the National Institute of Dental and Craniofacial Research reported early success using stem cells to engineer a replacement root/periodontal complex that appeared capable of supporting a porcelain crown and provide normal tooth function. The findings suggest the feasibility of using a combination of these cells in conjunction with artificial dental

crowns for functional tooth regeneration. The research is still in the preliminary stages.

## 7. Skin

The simplest and cheapest way to keep your skin healthy and young looking is to stay out of the sun. Sunlight is a major cause of the skin changes we think of as aging - changes such as wrinkles, dryness, and age spots. Your skin does change with age. For example, you sweat less, leading to increased dryness. As your skin ages, it becomes thinner and loses fat, so it looks less plump and smooth. It's never too late to protect yourself from the harmful effects of the sun. People who smoke tend to have more wrinkles than nonsmokers of the same age, complexion, and history of sun exposure. It may be because smoking also plays a role in damaging ELASTIN proteins. Facial wrinkling increases with the amount of cigarettes and number of years a person has smoked.

- **Dry Skin** affects many older people, particularly on their lower legs, elbows, and forearms. The skin feels rough and scaly and often is accompanied by a distressing, intense itchiness. Low humidity - caused by overheating during the winter and air conditioning during the summer - contributes to dryness and itching. The loss of sweat and oil glands as you age also may worsen dry skin. Anything that further dries your skin - such as overuse of soaps, antiperspirants, perfumes, or hot baths - will make the problem worse. Dehydration, sun exposure, smoking, and stress also may cause dry skin.

- **Skin cancer** is the most common type of cancer in the United States. According to current estimates, 40 to 50 percent of Canadians who live to age 65 will have skin cancer at least once. There are three common types of skin cancers. Basal cell carcinomas are the most common, accounting for more than 90 percent of all skin cancers in the Canada. They are slow-growing cancers that seldom spread to other parts of the body. Squamous cell carcinomas also rarely spread, but they do so more often than basal cell carcinomas. The most dangerous of all cancers that occur in the skin is melanoma. Melanoma can spread to other organs, and when it does, it often is fatal.

- **Shingles** is a disease that affects nerves and causes pain and blisters in adults. It is caused by the same varicella-zoster virus that causes chickenpox. After you recover from chickenpox, the virus does not leave your body, but continues to live in some nerve cells. For reasons that aren't totally understood, the virus can become active instead of remaining inactive. When it's activated, it produces shingles.

- Just like chickenpox, people with shingles will feel sick and have a rash on their body or face. The major difference is that chickenpox is a childhood illness, while shingles targets older people. Most adults live with the virus in their body and never get shingles. But about one in five people who have had chickenpox will get shingles later in life—usually after the age of 50.

### What's New?

- **Shingles vaccine.** A new vaccine is available to reduce the risk of shingles (herpes zoster) in people ages 60 and older. This new live virus vaccine, has been shown to boost immunity against varicella-zoster virus. This is thought to be the mechanism by which the vaccine protects against zoster and its complications. The vaccine is given as a single injection under the skin, preferably in the upper arm.

• At this time, the only products that have been studied for safety and effectiveness and approved by the Food and Drug Administration (FDA) to treat signs of sun-damaged or aging skin are TRETINOIN cream and carbon dioxide (CO<sub>2</sub>) and erbium (Er:YAG) lasers.

## **8. Functional Abilities**

As we age, falls become an increasingly common reason for injuries. Just ask any of the thousands of older men and women who fall each year and break a bone. Falls can come as a result of other changes in the body: Sight, hearing, muscle strength, coordination, and reflexes aren't what they once were as we age. Balance can be affected by diabetes and heart disease, or by problems with your circulation or nervous system. Some medicines can cause dizziness. Any of these things can make a fall more likely.

The more you take care of your overall health and well-being, the more likely you'll be to lower your chances of falling. Ask your doctor about a special test—called a bone mineral density test—that tells how strong your bones are. If need be, your doctor can prescribe new medications that will help make your bones stronger and harder to break.

### **What's New?**

Comprehensive approaches to reduce multiple fall risk factors in older persons have been shown in clinical trials to reduce risk of falling by up to 30 percent. Chronic disability among older Canadians has dropped dramatically, and the rate of decline has accelerated during the past two decades, according to a new analysis of data from the National Long-Term Care Survey (NLTC). The study found that the prevalence of chronic disability among people 65 and older fell from 26.5 percent in 1982 to 19 percent in 2009/2013.

### **To conclude:**

Everyone, from ordinary people to scientist have reasons to study the process of aging.

1. The first reason to study aging is to know what to expect and how to prepare for our own aging.

2. The second reason for studying aging is to be prepared to help those who are close to us who are increasingly frail and ill.

3. Third, people study aging because scientists are learning a great deal about what happens normally with age and what is disease related.

4. Fourth, gerontological knowledge is increasingly needed and used by professionals and paraprofessionals who work with older people. Education in aging is a way to prepare them to adapt their professional skills to help other people with age specific issues.

### **Bibliography:**

1. Baker S.K. *Thirty ways to make your practice more patient friendly*. In: Woods D, ed. *Communication for Doctors: How to Improve Patient Care and Minimize Legal Risk* / S.K. Baker. – Oxford: Radcliffe, 2004; 2. Breisch S.L. *Elderly patients need special connection* / Breisch S.L. // *Am Acad Orthop Surg Bull*. – February 2001. – 49 (1); 3. Chester Higgins, Jr. *Elder Grace: The Nobility of Aging* / Chester Higgins, Jr. – Boston. Bulfinch, 2000; 4. Dreher B.B. *Communication Skills for Working with Elders* / Dreher B.B. – New York: Springer, 1987; 5. Ley P. *Towards better doctor-patient communications*. In: Bennett AE, ed. *Communication Between Doctors and*

*Patients* / Ley P. – London: Oxford University Press, 1976. – P. 77–98;

6. Mangoni AA. Age-related changes in pharmacokinetics and pharmacodynamics: basic principles and practical applications / Mangoni A.A, Jackson S.H. // *Br. J Clin Pharmacol.* – 2014 Jan. – 57 (1);

7. Meryn S. Improving doctor-patient communication: not an option but a necessity / Meryn S. – *BMJ*: 1998, 316(7149):1922;

8. National Council on Patient Information and Education. Eight easy ways to make the medicine go down. In: Woods D, ed. *Communication for Doctors: How to Improve Patient Care and Minimize Legal Risk.* – Oxford: Radcliffe, 2004. – P. 6–7;

9. Nussbaum J.F. *Communication and Aging* / Nussbaum J.F., Pecchioni L.L, Robinson J.D, Thompson T. – Mahwah, NJ: Lawrence Erlbaum Assoc; 2000;

10. Osborne H. *Communicating with clients in person and over the phone* / Osborne H. – *Issue Brief Cent Medicare Educ*, 2003. – 4(8): 1–8;

11. Tamara A. Baker. *Category: Credos, Manifestos, Reflections* / Tamara A. Baker. – Issue 1, 2014.