

THE AGEING WORKER IN THE EUROPEAN AND ROMANIAN ECONOMY

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occupational health, ageing worker, early retirement

Abstract: Objective: this is a study of the situation of the labour force of over 50 years of age in Europe, from the perspective of increase of the employability of the aging worker's necessity. Methods: the analyse of the studies made in the last 30 years in Europe, regarding the causes of early retirement of the elder labour force, an analysis of the work- ability of the ageing worker (physical- mental- neuro-sensitive abilities/empairments), possibilities and suggestions on the payed work acceptance of the over 50 years old workers. Conclusion: it is necessary that the state, the employer, the occupational health practitioner, the ergonomist and the occupational psychologist coordinate their efforts in order to adapt the working conditions to the existing abilities of the ageing worker, up-gradeing and using his skills, with the respect of the health and security in work limitations.

Cuvinte cheie: Medicina Muncii, lucrătorul vârstnic, retragere profesională prematură

Rezumat: Obiective: studiul situației forței de muncă din grupa de vârstă peste 50 ani în Europa, din perspectiva necesității creșterii gradului de "angajabilitate" a lucrătorilor vârstnici. Metode: analiza studiilor efectuate în ultimii 30 ani în Europa, despre cauzele retragerii profesionale premature a lucrătorilor vârstnici, analiza capacității de muncă a acestei grupe de vârstă (abilități și limitări fizice, psihice și neurosenzoriale), posibilități și propuneri de creștere a gradului de ocupare profesională a persoanelor cu vârsta peste 50 ani. Concluzii: este necesară coroborarea eforturilor statului, angajatorului, medicului de Medicina Muncii, expertului ergonomist și psihologului pentru a adapta condițiile de muncă la capacitățile lucrătorului vârstnic, utilizând și îmbunătățind, de asemenea, capacitățile lui, în condiții de sănătate și securitate în muncă.

SCIENTIFIC ARTICLE OF A THEORETICAL PREDOMINANCE

Definitions of the professional ageing

Getting older is the normal evolution of the human being: from the birth moment on, we are, as a matter of fact, ageing. In Occupational Health (OH), the term ageing, is accorded to the idea that some people, working in some professions, reach their professionally "old" age in their 30es (airplane pilots, air-traffic controllers, ballet- dancers, athletes), while for others, the same age is the professional debut age at full qualification (doctors, architects). For this reason, we find as the best definition (1) the one that considers the ageing worker (AW), the worker to whom the physiological changes start to interfere with the necessities imposed by the job in a negative way.

This definition allows us to study the person versus profession. The limitations start with the physical activities, after the age of 30 and they become critical after 15-20 years, but mental work is no exception either. On the other side, the workers appreciate their own professional best at about 50 years of age. About 15-20% of these workers, 5 years later, describe their work ability as being reduced.

These considerations determined the decision that, from the OH specialists point of view, the age of 45-50 should be considered the time line for AW definition, the main reason being that this early age limit for AW could be a benefit for the early OH intervention. The need for early action was intensely emphasized by OH specialists all around the world, due to the fact that, national and transnational studies have proved early

retirement, right after 55 years, being a massive phenomenon, specific national data being very similar.

In Romania

From the admission of our country in the European Union Community in 2007, a massive migration of the labor force into western EU member countries, from Romania, appeared. The amplitude of this phenomenon has surprised the Romanian employers, both from the state and from the private companies. Almost overnight, the balance of the job offer on the labor market reversed, the need for working force exceeding the offer. The deficit of working force has a hugely negative impact on most companies, especially because the first workers that left were those belonging to the age-group of 25-40, those being the qualified, young, financially motivated to work as they were the providers for young families, also being at their professional peak as abilities.

The actual demographic trend, acutely present, represented by discrepancies in the age balance, shows that 27% of the population is of 50-64 years old, while 18% is aged 15-24, making a total of 455 (1). This leads to huge financial national problems, as these age groups are the financially supported persons: schooling, treating diseases both acute and chronic, or as main source of personal income. The migration of the East-European labor force to West-European countries will improve with few the altered balance of the working force in the receiving countries.

In Europe

The perspective of having an estimate percentage of 32% of the population aged over 55 in 2025, as well as the early

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retirement trend, before the age of 60 (60% active workers at 55-59 years of age and only 20% aged 60 and over), will lead to a quatum of 60 financially supported persons for 100 supporters, as a European medium value. Longer periods spent in school by the youngsters also take a toe from the working force's age balance. An estimation for Finland, Sweden, France, Greece, Denmark and Belgium indicates a 90 to 100 fraction on the supported/supporter issue, by 2015 (2). A first general conclusion is that there are very necessary, all possible measures for maintaining the working force aged over 55.

In order to understand the challenges that the AW faces, it is necessary a short description of the anatomy and physiology changes of the AW, although they are well known both in OH and in gerontology.

Physical work capacity

It is generally quantified by the maximal oxygen consumption or VO₂max, in l/min or ml/min/kg. The decrease of this index by ageing, both in men and women, after reaching a maximum around the age of 30, shows the lowering of the individual physical effort capacity (3). International regulations limit the physical effort to maximum of 50% of the VO₂max. For the women the work at home and for both genders the work in agriculture must be considered as adding up to the professional effort. The conclusion is that the physical effort must be reduced during the years and the regular physical training during leisure time, must be performed in order to maintain the effort capacity at least at the normal level according to one's age.

After 45-50 years of age, every decade decreases with 20-25%, both isometric extension and the flexion ability of the body (4). The worst decline belongs to the workers performing intense physical effort at work if they don't constantly train at home to maintain their good effort ability. This necessity is proved by the fact that adults aged 45-65 can benefit of a constantly good physical shape, while it is possible for a 45 years old to be in a worst shape than a 65 years well trained one.

Mental functional capacity

Cognitive functions (perception, memory, learning, thinking and the use of language) have been the primary targets of the research. Later, other mental functions were added: the relation with the outside world, the self-value, the self-concept, perceived competency and control of life and later, the metacognition was added, which involves the evaluation of a person's own cognitive functions (5). The weakening of the three mental functions (sensory-perception, cognitive and neural-motor), with consequences on the precision and speed of perception, have always been seen a standard of evolution. Newest data from the research have shown that information processing changes very little during life time, while the control of use of language or the ability to process complex information in insecure situations, improves with age. The conclusion was that the weakening of the physical capacities does not involve the same pattern for the mental capacity, by the contrary, it seems ageing enhances mind performance, this underlining the importance of the experience (6-8).

The benefits of the experience and knowledge of the AW, are (2): wisdom; better life control; sharp wittedness; stronger commitment to work; ability to deliberate; more faithful to employer; ability to reason; less absence from work; ability to comprehend the hole; greater work experience; better verbal command; higher motivation to learn

We understand, from these studies, that the "work capacity" is, in fact, the name given to a phenomenon, not to a situation, because it is continuously changing, the age of the worker being one of the components of the work capacity (9). If we add the technological progress, the new trends regarding professional, family, social life, we understand that the

professional issues regarding the AW, have everything to do with our adjustment to work and society. In fact we seem to be equally unable to manage the professional life problems of the young worker, the women, the physically/ mentally impaired worker, of all those that are in anyway different from the usual. In fact, fundamentally, the concept of promoting and preserving health at the work places refers to the changes and adaptations necessary to be made in order to allow the employer to hire disabled persons or to allow the AW to stay/become employable and then employed.

The workforce deficit all around the world and the need to extend the professional life, make the old attitude of the employers ("the employed is to be blamed for his disability") totally harming and unproductive. The new word introduced in OH, "employability", describes a person that, no matter of the nature of its disability, is still able to have a paid activity, either in its own qualification, or in another, or he has the potential to be trained/qualified for work. The main points of a protocol regarding the attitude towards the AW, are (10):

- Training of supervisor for age management
- Implementation of age ergonomics
- Worksite exercise programs
- Tailored training in new technology

It is obvious that, in order to solve the acute problem of changing the percentage of supported persons/ employed in the favor of the sustainer, the way to solve supposes an algorithm used at all levels of society, as the individual is the base of the professional group, that is the base of an economic society. The algorithm, used for coping with the problem of keeping AW in work life, has three steps (1) (table 1):

- A) Recognizing the problems and analysing the possibilities
- B) Setting goals, finding means and solutions
- C) Setting aims and results to reach

At individual level (the AW as focused unit);

- A) -health, functional capacity, work ability
 - competence, work motivation
 - work exhaustion
 - unemployment
- B) -improving health, promotion of physical, mental and social resources
 - developing competence, coping with changes
 - participating
- C) -better: health, functional capacities, work ability, competence
 - less exhaustion, lower unemployment risk
 - better quality of life

At enterprise level:

- A) -productivity, competitiveness, tolerance for change
 - recruitment, sickness absence
 - work organization and environment
- B) -age management, cooperation between age groups, individual solutions
 - age ergonomics
 - tailored competence- training
 - work-related schedules, flexible working time, part time work
- C) -better productivity, competitiveness, image
 - fewer sick leaves, lower work disability costs, competent manpower
 - better management

At society level:

- A) -age discrimination, early retirement, attitudes towards retirement
 - work disability costs, retirement costs, health care costs
 - dependency ratio
- B) -changing attitudes, preventing age discrimination
 - improving age work policy
 - changing age exit policy
- C) -less age discrimination
 - later retirement
 - lower costs for unemployment and for health care
 - better national economy, higher welfare

All over EU the early retirement problem benefits of the same kind of attitude, is dealt almost the same and the same results are obtained. There are needed well scientifically evaluated social, psychological and medical practices.(11). These practices should evaluate the significance of the chronic diseases, of the physical/mental limitations on the work ability, the evaluation of the best intervention moment, reinforcing the policies of adapting the work place and environment to the AW capabilities. It is also important the early start of the policy of tailored competence- training, applied to workers even 45 years old, when learning and adapting abilities are still good.

Both today and for the future, the OH specialist's place is crucial: he is the one knowing the work place, the person working there with all its problems, both personal and financial and he also knows the general company policies.

The actual legislation offers to the OH physician, in Romania, all the details and support for a good, constant and generally available practice, but it also intensely limits his abilities of adapting the medical judgement to particular situations and persons. That often leads to the early recommendation of retiring a worker from the work place, this worker being often older, disabled or chronically ill, even if, at the actual medical knowledge level, the only attitude needed should have been a constant monitoring by the OH and GP physicians. Such a worker is often skilled, qualified and willing to work and he would certainly respect these medical recommendations. Keeping illnesses like: high blood pressure, gastric/duodenal ulcer, neurosis as diseases imposing retirement from a working place, like the ones with exposure to warm climate or noise, as long as the actual knowledge and treatment possibilities enable the doctors to perfectly control the risk of the disease, will only lead to the loss of a worker, that will probably choose a ill health retirement benefit, or will expose the OH physician to not respecting the law; we shouldn't forget the risk that the worker could try to hide illness from the doctors in order to keep his job and the consequences can be dramatic.

These are the reasons why we consider that both the OH specialist's activity and the state attitude about dealing with persons not with numbers or standards, with the goal to maintain the workers active and healthy as much and as safe as possible.

Health, ministry of Social Affairs and Health, Ministry of Labour, 1999:274 pages. This book consists of statistics on aging in Europe as well as various modern aspects of aging workers: health, functional capacities, education and training, work environment, work demands, and the new work ability concept. A comparison of the 15 EU member states is given. The second part of the book introduces the promotion of aging workers' work ability and employability (www.occupahealth.fi/julkaisu/eng/order.htm).

4. Birren JE, ed. Handbooks of aging. New York: Academic press, 1990.
5. Shwartz E, Reibold RC. Aerobic fitness norms for males and females aged 6 to 75 years: a review. *Aviation, Space Environmental Med* 1990;61:1990:3-11.
6. Nygard CH, Pohjonen T, Ilmarinen J. Muscular strength of ageing employees over an 11-year period. In: Ilmarinen J, Louhevaara V, eds. *FinnAge-Respect for the ageing. People and work, Research reports 26*. Helsinki: Finnish Institute of Occupational Health, 1999, 240-9.
7. Baltes PB, Smith J. Toward a psychology of wisdom. In: Stenberg RJ, ed. *Wisdom: its nature, origin and development*. New York: Cambridge university Press, 1990:87-120.
8. Schaie KW. The course of adult intellectual development. *American Psychologist* 1994;38:239-313.
9. Salthouse TA. Implications of adult age differences in cognition for work performance. In: Kilbom A, Westerholm P, Hallster L, eds. *Work after 45? Volume 1, Arbete och Hals*. Arbetslivsinstitutet, Solna 1997:15-28. This article introduces a variety of experimental studies on cognitive aging and work performance. It discusses critically the conflicting results of laboratory and field studies and emphasises the role of work experience both on cognitive functions and work performance.
10. Spirduso WW. Job performance of the older worker. In: Spirduso WW, ed. *Physical dimensions of aging. Chapter 13*. Champaign, Illinois: Human Kinetics, 1995:367-87.

BIBLIOGRAPHY

1. Ilmarinen JE. Aging workers. *Occup Environ Med* 2001;58:546-52.
2. Ilmarinen J, Tuomi K, Klockars M. Changes in the work ability of active employees over an 11-year period. *Scand J Work Environ Health* 1997;23 (suppl 1):49-57.
3. Ilmarinen J. Ageing workers in the European Union- status and promotion of work ability, employability and employment. Helsinki: Finnish institute of Occupational