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HEALTH AND SAFETY ISSUES OF OLDER WORKERS

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SUMMARY: Industrialized nations worldwide are experiencing an “aging” of their population. This phenomenon is caused by an increase in the overall life expectancy of the people and a decline in their fertility rate. As a consequence, the workforce of these nations is getting older also. Although the older employees of today are healthier, better educated, and financially more stable than previous generations, it will be necessary to promote the health and safety of these workers in order to optimize productivity, safety, and job satisfaction. The most common age related changes impacting job performance today are caused by changes in the musculo-skeletal system, eyes, ears, lungs, skin, and the immune system. However, cognitive and adaptive skills acquired from experience and training during the lifetime can often compensate for the negative biological and physiological changes. However, attitudes and values of older workers and how these influence the view and reaction to workplace health and safety issues must also be addressed. Changes in vision and hearing are two factors that deserve special attention because of their immediate impact on the health and well being of the older workers.

Key words: *health and safety issues, older workers*

BACKGROUND

Defining the “Older” Worker

Two persons may share the same birth date, but one may function better physically or mentally than the other. Therefore, age can be described both in terms of “chronological” age and terms in “functional” age. However, the World Health Organization (WHO) uses the chronological age of 45 as the dividing-line between “younger” and “older” workers. Although the physiology and performance of all persons change with age, once these changes are identified and adjustments made to offset their effects, workplaces can become safer, healthier, and more productive for all employees, not just older workers.

While the labor force is aging throughout the industrialized world, employers are seeing a significant increase in the number of workers with chronic health conditions. Although work related accidents do not increase with the age of the employees, they tend to be more severe than those experienced by younger workers and are more costly to treat or compensate when they occur. Therefore, renewed efforts on employee health and safety are now also being directed to the older workers to minimize injuries and to maintain their productivity.

The health and safety needs of older workers reflect not only a person’s work history, but also factors related to socio-economic status, gender, race, ethnic background and the nature of the work being performed. Older workers cannot be regarded as a uniform population. The nature of work may play a significant part in generating social and economic inequalities that impact

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health. A person's job is oftentimes the principal determinant of a person's standard of living, in shaping self-identity, personal growth, and social status. Many older workers have not had adequate education and training, had only limited access to health care, were exposed to discrimination, and found only limited opportunities for job advancement.

Need for Older Workers

Many older workers in industrialized nations stop working well before reaching the retirement age of 65. As a result, industrialized countries face labor shortages that can slow economic growth and impact public finances negatively by reducing the overall tax revenue base. This situation is exacerbated in communities where birth rates are low and many younger, skilled workers emigrate to take advantage of job opportunities in other regions or other countries.

To offset this trend, policy makers must consider approaches that encourage older employees to remain productive and continue working. Included in such policies could be to raise the retirement age, discourage early retirement in general, and to improve the employability of older workers through targeted training programs. However, there are numerous "disincentives" and employment barriers currently facing older persons. Some of these include:

1. Programs such as old-age pensions, attractive disability and unemployment benefits that encourage employees to leave work before their official retirement age. In many countries, it is financially unrewarding to work beyond the age of 65.

2. Negative attitudes toward older workers. Older workers are frequently considered by employers to be less productive and less adaptable to change than their younger counterparts.

3. Working conditions are often not adaptable to the needs and declining capacities of older workers. Inflexible working hours may force older workers to choose between full-time work and full-time retirement.

4. Older workers often cost more than younger employees because labor laws require payment of higher wages and higher health insurance contributions.

ADVANTAGES AND DISADVANTAGES

Worker Characteristics

Older workers can differ from their younger counterparts in biological, psychological, and social dimensions. These differences may lead to significant disadvantages for the older worker in terms of work performance. However, changes associated with age such as increased experience and improved judgment may actually enhance capabilities and performance at work.

Age related changes that impact job performance are most likely to come from changes in the musculo-skeletal system, eyes, ears, lungs, skin, and the immune system. However, cognitive and adaptive skills that come with experience and extensive training can actually enhance a worker's ability to respond to change. Most occupations do not require performance at full individual capacity. Therefore, physiological decline only may not impact work performance or function at normal levels.

In addition to the evaluation of physical, chemical, and ergonomic hazards in the work environment, work-related mental, psychosocial, and organizational issues facing older workers should also be considered. This is especially relevant to employees in the service sector where interpersonal skills are often valued more highly than in the more traditional manufacturing sector. Some of the positive qualities that older workers bring to the job that younger employees do not include the following:

- Strong work ethics
- Reliability
- Good time management skills
- Tactfulness
- Life-long experience
- Wisdom
- Serving as a "role model" for others.

In recent years workers in the US over the age of 50 have reported in health surveys that their jobs contain many physical and emotional challenges and stresses, but most reported that they enjoyed going to work. Older workers were healthier and functioning at a higher level than their non-working (retired) counterparts.

Nonetheless, a majority reported at least one chronic illness or disorder, suggesting that some of these conditions do not substantially interfere with job functions, although they may point to a higher risk of future illness or disorder and disability.

Generational Expectations

Generational characteristics of workers may explain how workers from the same generation approach work and communicate with co-workers and supervisors of a different generation. Generational differences can include the following:

1. Attitudes about expectations of work
2. Attitudes toward authority
3. Methods of communication
4. Approaches to learning.

“Older” workers often demonstrate strong work ethics, like structure and rules, respect hierarchies and authority figures, pay attention to quality of work, and have stayed with an organization over long periods of time. “Younger” workers, however, tend to have short-term loyalties, are comfortable with diversity, value informality, embrace technology, learn quickly, and need supervision.

Such different attitudes and values influence how workers view or react to workplace health and safety advice. Therefore, employers and supervisors need to be responsive to such generational differences in order to promote mutual respect and collaboration.

HEALTH AND SAFETY

Specific Issues

Physical changes occur with aging. Such changes are most often observed when a person reaches 50 years and beyond. The most common observed changes include the following:

- The maximum muscular strength and range of joint movement is reduced. In general, persons lose about 15%-20% of their muscular strength between the ages of 20-60. While older employees are able to perform the same tasks as a younger worker, they may be working closer to their work stations. Also, an older person can lose “range of motion” and flexibility. This

may make it difficult for an older worker to reach tools and equipment less effectively and less quickly.

- The regulation of posture and balance is slower. Therefore, work that requires lifting and carrying and walking on slippery or uneven surfaces exposes older workers to a higher risk of slipping, tripping, and falling.
- The ability to sleep and rest after shift and night work becomes more difficult. Recovery after work takes more time.
- Thermoregulation in response to heat and cold is also more difficult. Attention to proper clothing and environmental controls becomes especially important.
- Visual acuity and the ability to accommodate light decreases with age. The ability to respond to contrast changes, glare, and sudden intensity variations is also reduced.
- Hearing ability is reduced. Detection of high pitch tones is impacted more than lower frequencies. Older employees may also have difficulty in distinguishing speech and acoustic signals from loud background noise.

Changes in mental capacity also occur as a person ages. The most common changes include the following:

- Reduced speed of thinking. Fluid intelligence such as reasoning, selective attention, dual-task activities, and information processing declines with age.
- Learning becomes more focused on experience based events. Willingness to accept new learning strategies may be reduced.

Work Environment

Workplace hazards affect the health and safety of workers of all ages. Although age does not make a big difference to a worker’s health and safety requirements, certain hazards may present added challenges for older workers. Vision and hearing are two factors that deserve special attention because of their immediate impact on the health and safety of the older workers including the following:

- Lighting
 - Avoiding high contrast. The ability to adjust and respond quickly to changes in lighting decreases with age.
 - Reducing glare. Distraction from glare increases with age and reduces visual acuity.
 - Simplifying visual information. Printed / written directions and instructions are more difficult to see within complex visual fields.
 - Providing control. Personal adjustment of lighting fixtures can improve quality of light, reduce glare, and provide appropriate contrast
- Acoustics
 - Reducing general background noise level and eliminating unwanted sounds. Ability to differentiate sounds within a complex noise environment decreases with age.
 - Increasing sound signal intensities to differentiate wanted sounds from background noise.
 - Emphasizing low frequency sounds for information transmission. Ability to hear high pitch sounds decreases with age.
- Ergonomics
 - Providing employee appropriate tools and equipment. Grip strength decreases with age. Arthritis may be more common in older workers.

CONCLUSIONS

Industrialized nations are experiencing an aging of their workforce. To sustain their economic growth and vitality, older workers will be needed to maintain the necessary productivity. This will require attention to important health and safety issues within the work environments and special attention given to lighting design, acoustic controls, and ergonomic work station design. Interventions that benefit older employees will always benefit the younger workers also. In addition, social, economic, safety, and medical

beliefs about older workers should be dispelled in order to make the work environments more attractive to the older employees. The perception that older workers are frail, unreliable, and unable to work safely in new environments is not true. Older workers have fewer job-related injuries than younger workers, many enjoy using new technologies, senior workers are often very loyal, have good people skills, and many have a strong work ethic. When managers and supervisors in a workplace adopt supportive attitudes toward older workers and their abilities, it will have a positive impact on everyone in the organization. In the future, "older" workers will be required to make important contributions to the economic growth and well being of their communities. Occupational health and safety will play an important role in this effort.

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ZDRAVLJE I SIGURNOST STARIJIH RADNIKA

SAŽETAK: Industrijske zemlje diljem svijeta suočene su sa starenjem stanovništva. Taj je fenomen posljedica duljeg životnog vijeka i pada stope plodnosti. Rezultat je starenje radnoaktivne populacije. Iako su danas stariji radnici boljeg zdravlja, obrazovanja i imaju veću novčanu sigurnost, bit će potrebno unapređivati zdravlje i sigurnost tih radnika kako bi se optimizirala produktivnost, sigurnost i zadovoljstvo na radu. Najčešće promjene vezane uz stariju dob koje utječu na kvalitetu rada su promjene na mišićno-koštanom sustavu, očima, ušima, plućima, koži i imunološkom sustavu. No, spoznajne i prilagodbene sposobnosti stečene iskustvom i praksom tijekom života često mogu kompenzirati biološke i fiziološke promjene. Međutim, također se treba pozabaviti i stajalištima i vrijednosnim sustavima starijih radnika te njihovim utjecajem na odnos prema pitanjima zdravlja i sigurnosti na radu. Promjene vida i sluha dva su čimbenika što zahtijevaju posebnu pozornost zbog njihova izravnog utjecaja na zdravlje i dobrobit starijih radnika.

Ključne riječi: *zdravlje i sigurnost, stariji radnici*

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