The aging worker

The topic of aging and work is becoming increasingly important given current demographic trends. It is estimated that the annual growth rate of workers 55 years of age and older will be 3.7% between 1996 and 2006. By the year 2030 people aged 65 and older will represent 18% of the population. While the numbers of older workers in this age group is expected to increase, the participation of older people in the workforce is declining [3]. Attention from both policy makers and the private sector has begun to focus on increasing job opportunities for older workers. For policy makers, concerns are related to the increased demands placed on the government systems that must support retired workers. For the private sector, economic factors are of greatest concern. Employers anticipate a labor shortage due to the changes in demographic trends. There are also issues directly affecting the older worker. With the age expectancy increasing, older people will require financial resources for many more years than in the past. More older people are healthy and active and may choose to continue working for financial or social reasons [3].

In a 1998 study [1] the American Association for Retired Persons (AARP), indicated that age, physically demanding work, early retirement plans offered by employers, and three or more functional limitations were among the factors that have the most significant impact on retirement for both men and women. While the vast majority of workers, even those aged 65 and older, are in good health and do not have any functional limitations or conditions that limit work, it is essential to consider the physiological and functional effects of aging on work performance.

The older worker experiences physical, neurological, and sensory changes throughout the normal aging process. The results may include loss of muscle strength and joint flexibility, increased reaction time, decreased speed of movement, postural changes, decreased balance control and changes in vision and hearing. The older worker learns to adapt to these changes. The knowledge, skills, and abilities that have been acquired by the older worker can be of great value to an

employer. Aging is developmental and normal aging changes occur continuously throughout our lives. Such changes do not have to decrease the value of an older worker, but may change the methods the worker uses to accomplish certain tasks. Aging changes do not appear at any particular age; however, many begin to occur in the forties and fifties. For many older individuals, conditions such as arthritis, diabetes, or heart disease add to the effects of the normal aging process [2].

These physical, neurological, sensory and/or pathological changes may affect the older worker's safety and productivity in the workplace. In order to maximize employment potential for the older worker it is important to recognize and validate critical job demands, be aware of individual health limitations, and identify potential employer accommodations.

When addressing these issues an emphasis should be placed on ergonomics. If jobs can be made less physically demanding the ability of workers to extend their working lives can be increased. Workplace interventions for the older worker might include job redesign, workplace and equipment modification, and development of training strategies specific to the jobs to be done. Effects of regular exercise and activity should be communicated to the older worker. Basic ergonomic principles apply when designing work environments for older workers; however certain areas merit special consideration [2].

For example,

- Installing multiple lighting sources located in several positions may address the simultaneous need for increased illumination and decreased glare.
- Color coding schemes must be carefully planned so older workers can see and read any small print or fine detail needed for the safe and effective completion of a job.
- Older workers must be able to hear verbal directions and identify safety warnings.
- Changes in an older worker's flexibility, strength, speed and reaction time should be taken into account when determining the requirements of a task.

- Special attention should be paid to preventing slips, trips or falls.
- Magnifiers may enhance the older worker's ability to read small print or work on small objects.
- Safety lines marking warehouse traffic should be regularly painted so they are easily visible.
- The older worker should be represented on ergonomics and safety committees.

While this is far from an exhaustive checklist of environmental considerations, it stresses the need for ergonomic adaptation to maintain healthy, productive older workers [2].

As older workers retire, labor markets will lose valuable employees. The pool of potential replacements is growing very slowly. An important question is the extent to which the private labor market will take steps to increase labor force participation rates. Will employers reduce incentives for early retirement? Will they make it easier for workers to scale back their hours while remaining at their career jobs? Will employers be willing to make ergonomic changes that impact the ability of the older worker to remain employed?

Along with ergonomic or environmental adaptations or modifications the value of the existing skills, knowledge, and experiences of older workers should be taken into consideration [4].

- Older workers may be safer because they are more conservative and cautious when performing work tasks and take less risks than younger less experienced workers.
- Many older workers are seasoned employees and as a result may have more training and safety awareness than younger workers.
- Younger workers whose bodies are not accustomed to the physical stresses of heavy industry may not be prepared for physically demanding jobs.
- The older worker will be more skilled in the techniques required to do certain jobs.

The rehabilitation ergonomist can have an impacting role in this process by assisting employers in (a) recognizing the older worker is in a life transition, (b) understanding the aging process, (c) assessing the workplace for barriers that could be addressed through ergonomic intervention, and (d) identifying an older worker's ability to perform a particular job based on his or her functional capacities.

Interventions that allow older people to function effectively in work environments need to be identified. Work experience and use of compensatory strategies can have a strong impact on a person's ability to perform a job. Of great importance to those providing services to older workers is the need to understand the relationship between age-related changes in functioning and the specific skill requirements of jobs.

References

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