

An approach to physical function as one of the internal causes of accidents due to slips and trips Kayo Kawamata

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ABSTRACT

Objective: In Japan, slips and trips became the most common occupational accident (four or more days absence from work) in 2006, and since then the number has been on the increase. Elderly workers is thought to be one of the factors behind this trend. Factors that cause these types of accidents include external factors, such as floor conditions and steps, and internal factors, such as physical function and impatience. The objective of this study was to consider measures for the decline in physical functions associated with elderly workers, and to use these to help prevent slips and trips accidents. **Method:** As a method to promote awareness of physical functions, the "Self-Check Risk Assessment of Slips, Trips and Other Accidents in the workplace" developed by the Japan Industrial Safety and Health Association was used. The Self-Check can be performed in a small space and without special tools, and includes five physical function measurement tests (two-step, stepping while seated, functional reach, one-leg standing with eyes closed, and one- leg standing with eyes open and a nine-item questionnaire. The questionnaire encourages workers to respond to the physical characteristics they themselves perceive and to compare them with the actual physical function results obtained from the physical function measurement, thereby encouraging them to notice changes in physical function that are difficult to recognize in their daily lives. As for measures for physical function, "Iki-Iki Healthy Exercise for Slip, Trip and Back Pain Prevention," which I was involved in developing, improved one-leg standing with eyes closed and two-step in three months, five days a week study conducted at the start of work for sixty-nine employees at four workplaces. **Results:** When we conducted the self-check for workers, we were told that they became more aware of their own physical condition and safety awareness. We received feedback, such as "I realized that my physical functions were worse than I had expected and decided to be more careful in my daily activities," and "I found some items I could not do, so I would like to exercise more". As for the improvement of physical function, it has already been reported that multi-component exercises are effective in preventing accidents due to slips and trips in the elderly. For workers, multi-component exercises may improve physical function and help prevent accidents due to slips and trips. **Conclusion:** For elderly workers it is important to take measures for physical function, which is one of the internal causes of accidents due to slips and trips. The " Self-Check Risk Assessment of Slips, Trips and Other Accidents in the Workplace" and "Iki-Iki Healthy Exercise for Slips, Trips and Back Pain Prevention " introduced here may be effective as measures for physical functions.

Keywords: Slips and trips, physical function, elderly worker
