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Research and Development of a Rehabilitation Model System That Enables Early Return to Work

— For the Early Return to Work of Workers Suffering from Cerebrovascular Disorders —

Field name "Rehabilitation for returning to work"

In order to develop a rehabilitation model system that enables early return to work (Fig. 39), we conducted an investigation targeting cases of cerebrovascular disorders, and looked for the cause of the differences between two groups, one that returned to work (104 cases) and another comprising those who could not return to work (247 cases). The results of the investigation confirmed the following.

1. Based on demographic examination, there are many examples indicating that those of higher posts (managerial positions) can return to work early.
2. Based on an investigation from a medical and social medicine support viewpoint, the following factors influence the ability to return to work.
   - The shorter the time period before beginning rehabilitation the better (Fig. 40-1).
   - The shorter the time period before hospitalization the better (Fig. 40-2).
   - The higher the score when performing functions such as eating and moving at the beginning of rehabilitation and at discharge (Barthel Index) (Fig. 40-4 / 5) or overall status (Modified Rankin Scale) the better (Fig. 40-6 / 7).
   - The higher the level of awareness at discharge (check based on Mini-Mental State Examination) the better (Fig. 40- 8).
   - The sooner the patient meets with a Medical Social Worker (MSW) the better (Fig. 40-9).

These results showed that based on factors such as the investigation of the type of occupation, the period before beginning rehabilitation, and the body function and overall status at the beginning of rehabilitation, we can estimate the ability to return to work after discharge from the hospital. The results also showed that, at the time rehabilitation begins, returning to work can be facilitated by having the attending physician contact the workplace to inform them of the possibility of returning to work [1, 2, 3, 4].

Barthel Index and Modified Rankin Scale

- The more that a patient retains functionality, the higher the Barthel Score.
- The more that a patient retains functionality, the lower the numerical value of the Modified Rankin Score.

Physiotherapist uses stairs to train patient suffering from paralysis of the left side of the body.

Occupational therapist uses a PC to train patient suffering from paralysis of the left hand.

Fig. 39 Rehabilitation training for cerebrovascular disorder cases

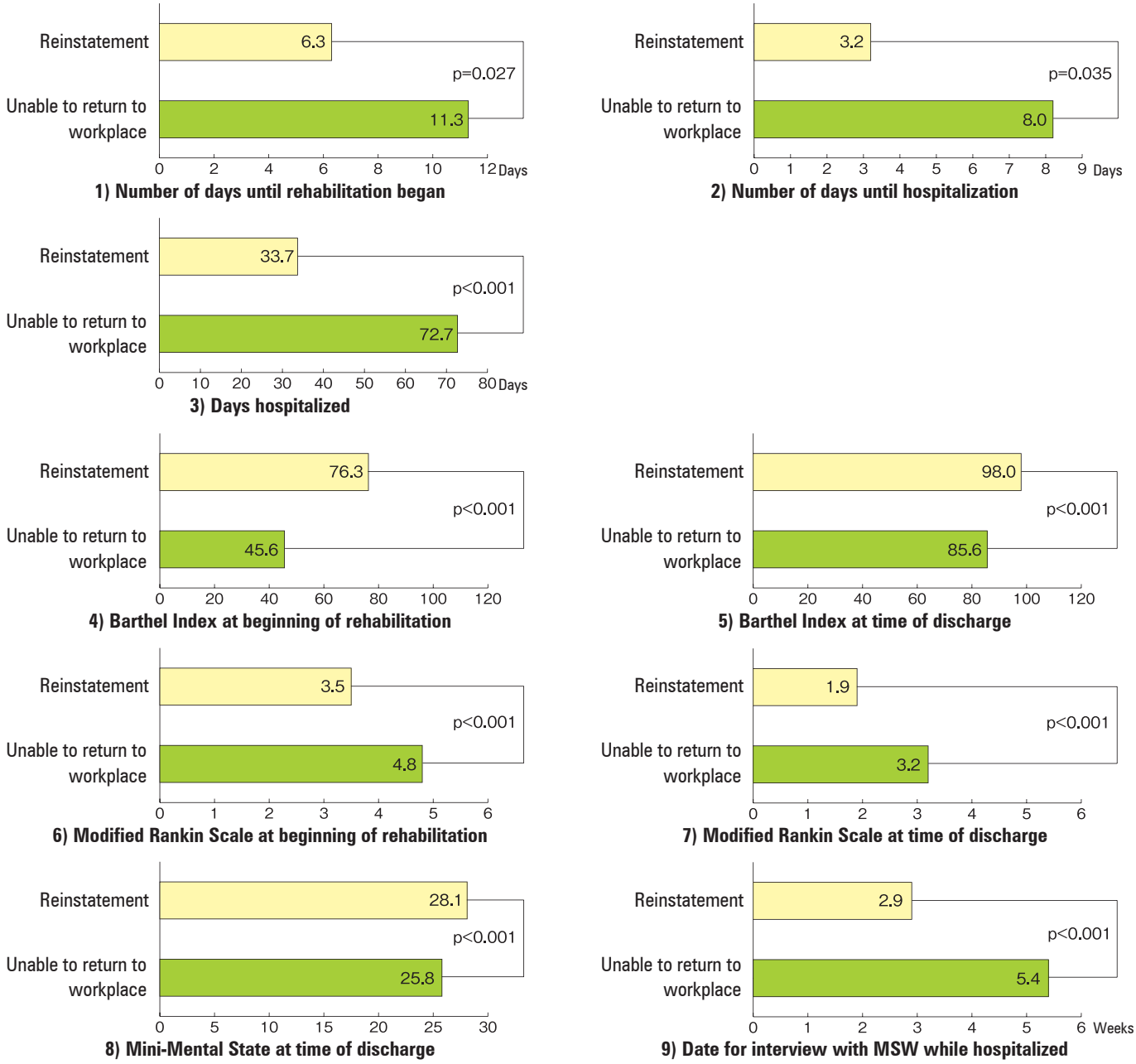

Fig. 40 Investigation of the factors promoting early reinstatement
Comparison between cases where early reinstatement was not possible and cases of early reinstatement based on factors such as the number of days until rehabilitation began

References:

1) Toyonaga T.: Research, development, and dissemination of a rehabilitation treatment model for various diseases that enables early return to work, Research report. The Japan Labour Health and Welfare Organization, Clinical Research Center for Worker' s Rehabilitation, 2008.
2) Toyonaga T.: Research and development of a rehabilitation treatment model for various diseases that enables early return to work - Targeting early reinstatement of workers suffering from cerebrovascular disorders. The Japan Labour Health and Welfare Organization, Clinical Research Center for Worker's Rehabilitation, 2008.
3) Toyonaga T.: Rehabilitation for returning to work - Discriminating factors for work reinstatement of workers at discharge after a stroke. Japanese Journal of Occupational Medicine and Traumatology, 56: 135-145, 2008.
4) Tanaka H. and Toyonaga T.: Role of the occupational physician in return to work of stroke patients. Japanese Journal of Occupational Medicine and Traumatology, 57: 29-38, 2009.

* Reference 1 can be viewed at **http://www.research12.jp/h13/index2.html**, a site dedicated to the research and development, and dissemination projects related to the 13 fields of occupational injuries and illnesses.
* Reference 2 can be viewed at **http://www.research12.jp/h13/index.html**, a site dedicated to the research and development, and dissemination projects related to the 13 fields of occupational injuries and illnesses.