

WORK HARDENING: A BRIDGE TO RETURN TO WORK

Sallie E. Taylor, June M. Blaine

Abstract

Work hardening is a new and vital concept which continues to gain attention among rehabilitation specialists. Work hardening provides a bridging mechanism for moving the rehabilitation patient into the role of productive worker. The relationship of work hardening to the overall process of vocational rehabilitation is reviewed and illustrated with a case study.

Work hardening is a new and vital concept which in the past three years has captured the attention of a number of rehabilitation professionals committed to assisting clients in their efforts to reenter the work force. Physicians, vocational rehabilitation counselors, special educators, employers and insurance carriers have begun to refer their injured workers to work hardening program. They have begun to view work hardening as an important component in consideration of the client's feasibility for employment.

Without accurate and effective vocational assessment there can be, at best, marginal vocational adjustment (Hardy & Cull, 1969, cited in Maki, McCracken, Pape, and Scofield, 1979). Work hardening can provide the rehabilitation counselor with very significant information regarding the client's limitations, abilities and feasibility for employment. Incorporation of this information into the individualized vocational plan may represent a vital factor in the ultimate success or failure of the client's efforts to return to the work force.

Further, beyond the interests, aptitudes, training and even physical capacities, the client's motivation to return to work enters into the overall successful accomplishment of the employment plan. Frequently, the worker who has been injured on the job has multiple questions to resolve concerning his own capacity to safely or realistically return to previous employment. Economic security coupled with subtle factors such as pain and decreased motivation may contribute to a protracted period of work disability (Greenwood, 1984). At this point, the client struggles with the possibility, then often the necessity of changing his or her lifestyle, occupation, and expectations for the future. Clients at this point are often functioning at a basic survival level.

It is in this phase of the client's struggle that a process of self discovery can begin to take place. Under the guidance of the occupational therapist and rehabilitation counselor, new data, therefore new options, may become available to the client. Often, the client needs to experience for himself in order to learn about his "post-injury self" in relation to work (Stewart, et al., 1984). It is at this point that a period of work hardening can bridge the chasm that develops between the individual as a patient and the individual as a worker.

A model formulated by Maki, McCracken, Pape, and Scofield clearly shows the appropriate positioning of the work hardening program in the vocational rehabilitation process (1979).

Their model is comprised of four components: (1) intake, (2) assessment, (3) services, and (4) outcomes. The rehabilitation counselor handles intake procedures and then turns attention to the assessment component. Here, data concerning current levels of functioning is systematically collected by the rehabilitation counselor. Specialized evaluations may provide information critical to the successful outcome of the client's vocational plan. Work performance assessment and work hardening may be among the specialized evaluations engaged to provide valuable input for the rehabilitation counselor and the client.

During the period of work hardening the client engages in a graded program of progressive exercises which challenge and increase tolerances essential to job performance (Holmes, 1985). The incorporation of simulated work tasks selected on the basis of the client's limitations and the critical demands of the job provides both the evaluator and the client with the opportunity to observe and consider work behaviors and characteristics, client interests and motivation, and pain tolerances. The result of the client's effort in the work hardening experience provides important information for planning further treatment as well as for providing a prospective employer with information that has been verified through observation (Stewart, et al., 1984). Frequently the physician is able to provide the rehabilitation counselor with information concerning a client's limitations based on professional judgment. The work hardening experience, frequently guided by an occupational therapist, extends and validates this estimation of physical capacity. Identification of the client's abilities and adaptive techniques can be translated into functional performance related to the job market based on direct observation.

A key to success in work hardening is the ability of the therapist to tailor the program to the client's abilities and limitations (May, 1984). The occupational therapist can determine the extent to which limiting factors in the client's performance can be reduced or eliminated. Some impediments to performance may be overcome through training in compensatory techniques. Others are eliminated or minimized by the use of adaptive or assistive devices or environments. A key to successful outcomes is close coordination among the occupational therapist, the rehabilitation counselor, and the client. The occupational therapist may recommend and provide alternative methods of minimizing the client's limitations. The rehabilitation counselor may confirm the appropriateness of adaptations with the employer. It is the client, however, who ultimately accepts or rejects any accommodation or adaptation to the job task.

CASE STUDY

Don is a 27 year old hod carrier with a wife and three children, the oldest of whom is eleven. He has worked steadily since he was

14 years old. In November, 1982, while completing his regular work duties, he sustained an injury to his right wrist. Initially, the injury was diagnosed as "tendonitis" and strengthening exercises were prescribed. Later, upon referral to another physician, a diagnosis of "sprain of the flexor carpi ulnaris" was provided. In June, 1983, Don came under the care of an orthopedic surgeon who ultimately excised a tear of the triangular fibrocartilage which had been revealed by arthrogram. Due to persistent drainage, the wrist was re-explored in July for wound debridement, irrigation and capsule repair. When the condition did not improve, Don was referred to a plastic surgeon in October, 1983 who diagnosed "exposed radial ulnar joint" and treated the wrist with intravenous antibiotics and a graft covering of the exposed tendon and joint.

After a period of intensive rehabilitation, the physician judged that the client would be unable to return to heavy manual labor and referred Don for vocational rehabilitation. At the time of referral, the goal was to proceed with vocational exploration, and to determine the client's work potential. Following preliminary meetings with the client, an appointment was scheduled with his treating physician to discuss whether additional treatment might be indicated, specifically biofeedback training to assist with the client's pain.

When the physician provided the specific functional guidelines, plans were made to proceed with direct job placement. Given the extensive amount of time that Don had been unemployed, however, a work hardening program was recommended to (1) test his skills and abilities, and (2) to determine whether the guidelines which the physician had outlined would be permanent, or whether his condition might improve so that he would be able to assume heavier duty work with which he was more familiar.

The initial assessment in work hardening indicated that the client had a number of functional limitations related to work performance. His maximum lifting capacity using both upper extremities was 5 pounds. His maximum carrying tolerance with his right hand was 5 pounds and resulted in significant pain in the wrist. He experienced pain with pushing. Instability of the wrist could be palpated with pulling motions. He had marked limitation and pain with motions of supination and pronation.

Don was assigned to a five day per week, four hour per day program of work hardening which included progressive strengthening exercises and graded simulated work tasks requiring pushing, pulling, lifting, carrying, and wrist pronation and supination. Because the client had lost his driver's license, his wife accompanied him to daily treatments.

Although the client had been told that he would be unable to perform the heavy level work of his preinjury occupation, Don had maintained the hope that he would be able to return to his former job as a hod carrier and laborer. During the period of work hardening,

the client was supported in his efforts to maximize strength and endurance of his injured wrist. Progress was tracked through frequent measures using the Baltimore Therapeutic Equipment Company Work Simulator, Jamar Dynamometer, WEST II lifting device, and the WEST IV torquing test.

By the end of the second week of work hardening, the client and his wife began to acknowledge that objective measures remained essentially unchanged, despite the client's best efforts to improve wrist function. Focus of the program shifted, then, to exploration of compensatory techniques for accomplishing simulated work tasks. A wrist splint to provide right wrist stability was suggested by the occupational therapist to the client, the rehabilitation counselor and the physician. The rehabilitation counselor arranged for the fabrication of the supportive device with the orthotist, based on the occupational therapist's specifications.

In the fourth week of work hardening, as the client tested the use of his wrist splint in simulated work tasks, his level of self confidence seemed to improve. He took initiative in suggesting situations to simulate work tasks. He explored a variety of approaches to task accomplishment. He showed pride in successful accomplishment of tasks he considered most challenging. He took initiative and began looking for work independent of the rehabilitation counselor's efforts. On the final day of Don's four week program of work hardening, his wife accompanied him dressed stylishly and with a new permanent.

Unfortunately, Don's independent efforts to obtain work were unsuccessful. He continues, now, with the rehabilitation counselor's assistance to upgrade his skills. He has completed his high school equivalency test successfully, and is now engaged in a job skills training course in preparation for active job searching in the very near future.

Don's case illustrates the process of validation of the physician's professional judgment and the assignment of specific weights and tolerances for the client's limitations. It also shows the self discovery process through which the client moved in recognizing his limitations and in exploring alternative methods of task accomplishment. In the work hardening setting, this client was forced to use his injured hand. He learned compensatory techniques. A supportive option, the wrist splint, was procured and tested under simulated work conditions. He gained confidence in his capabilities and in his work tolerances.

The work hardening program provided the rehabilitation counselor with information about the scope of the client's abilities. This will enable the rehabilitation counselor to describe to the prospective employer in specific terms, the weights, heights, durations and the compensatory techniques that the employer may expect from his prospective employee in a specific, proposed job. The rehabilitation counselor is now also able to describe to the prospective employer the client's ability to

work independently, to report for work on time, to work pleasantly and effectively with co-workers.

This case study illustrates the augmentive role of work hardening in assisting the client in moving from his status as patient and victim of injury into viewing himself as potential worker. This was only one step, but it was a key step, in the total vocational rehabilitation process. The work hardening experience marked a turning point for this client.

For this client, as for many others, the work hardening experience provided a bridge between the client as rehabilitation patient and productive worker.

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AUTHOR

Sallie E. Taylor
Irene Walter Johnson Institute of Rehabilitation
Washington University Medical School
St. Louis, Missouri

June M. Blaine
Employment Vocational Rehabilitation Services
Missouri Goodwill Industries
St. Louis, Missouri

