Cognitive Rehabilitation Service Provision: Results of a Survey of Practitioners

Carol J. Wheatley

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The Cognitive/Visual Perceptual Special Interest Section (SIS) of the Maryland Occupational Therapy Association, which was formed in 1982, has had many discussions regarding the value of occupational therapy in cognitive rehabilitation and the difficulty with role delineation in our hospital systems. Other issues included the need for additional training and education and the scarcity of standardized test instruments. The group developed a questionnaire to gather information from other occupational therapy departments across the country on cognitive rehabilitation service provision.

Questionnaires were mailed to 50 head trauma centers nationwide, which were randomly selected from the National Directory of Head Trauma Rehabilitation Services published by the National Head Injury Foundation (1988). A total of 22 surveys (46%) were returned, too small a sample for our purposes.

A revised, shortened questionnaire was circulated at the 1989 American Occupational Therapy Association Annual Conference in Baltimore, which increased the sample size to 60. Approximately 50% of the sample were head trauma specialists and 50% specialized in general physical dysfunction. This sample was not considered to be representative of the profession as a whole; however, the respondents could be expected to be knowledgeable about trends and issues surrounding cognitive rehabilitation, as they cited persons with cerebrovascular accidents and head trauma as two of the major disability populations served.

Profile of Respondents

Fifty-nine of the 60 respondents were occupational therapists and one was a speech–language pathologist from a head trauma facility that did not have an occupational therapist on staff at the time.

The respondents listed the types of facilities as follows: rehabilitation center, 74%; acute care hospital, 37%; prevocational facility, 13%; long-term chronic setting, 8%; vocational center, 4.9%. Respondents frequently checked more than one age group or type of facility on the questionnaire, thus the total number of facilities exceeds 100%.

The majority of respondents (65.5%) worked in a general occupational therapy department, serving a variety of disability groups. A smaller percentage (24.5%) worked on a head trauma unit within a larger facility, and 6.5% were from specialized head trauma centers. The remainder of the sample indicated other disability groups (e.g., orthopedics, neurological disorders) as their primary focus of services.

Of the 38 respondents to the revised form, 23 (62%) indicated that clients with cerebrovascular accidents constituted their primary population; 39% indicated that head trauma was the second most frequently served population. Eleven percent of the 38 respondents reported...
that clients with head injuries were the primary population served. These findings correlate with the 1990 Member Data Survey conducted by the American Occupational Therapy Association (AOTA, 1991), which lists cerebrovascular accident/hemiplegia as the most frequently served health problem (27.1%) and traumatic brain injury as the seventh most frequent, composing 4.2% of the population served.

Responses

Evaluation Procedures

Three quarters of the 60 respondents (75%) believed that occupational therapists need to develop additional standardized tests. Desired characteristics of such tests were that they be functional (72%), comprehensive (43%), brief (36%), and low cost (25%). Comments indicated that acute care facilities require brief screening tools, due to the client's short hospital stay, but long-term care centers wanted a more comprehensive test battery.

When asked what changes were desired in the handling of visual perceptual testing, 53% wanted a standardized assessment battery. Comments indicated that a standardized group of tests would provide consistency of evaluation and interpretation and would lead to more uniform treatment planning and verification of treatment results. When asked the same question about cognitive testing, 40% desired a streamlined battery and identified the need to standardize the battery and to give cognitive testing greater emphasis. Comments indicated a need for test results to facilitate communication among team members for better client care.

Treatment of Cognitive/Visual Perceptual Deficits

A strong response was elicited concerning the need to develop treatment guidelines (67%) and to develop additional therapeutic materials (53%). Additional comments indicated need for a stronger team approach, consistency of treatment and results, and the ability to set goals in measurable terms. The need for treatment approaches, in addition to computer activities, was identified; several comments referred to the need for higher level tasks, relating them to functional outcome.

Interdisciplinary Relations

Ratings for the involvement of various disciplines in the assessment and treatment of cognitive/visual perceptual skills are shown in Table 1. When asked to identify the team leader for cognitive rehabilitation in their facility, 26% indicated that the leadership was interdisciplinary, 18% cited the neuropsychologist as the team leader, 17% indicated the occupational therapist, 12% indicated the speech/language pathologist, 5% listed psychologists, and 5% listed physicians. The comments indicated that many facilities do not have a specific leader designated.

In a similar question on an interdisciplinary survey conducted by Cognitive Rehabilitation (Bracy, 1984), psychology was most frequently cited as the discipline that held the primary responsibility for cognitive retraining; speech/language pathology was second (40%), and occupational therapy was third (20%).

Educational Background and Recommendations

When asked to indicate the resources used in developing their expertise in visual perception and cognition, 80% of the respondents indicated on-the-job experience, and 65% cited workshops and conferences conducted by occupational therapists, listing Beatriz Abreu, Mary Jane Bouska, and Joan Toglia as speakers, among others. Sixty-seven percent indicated their occupational therapy undergraduate curriculum as a resource, with 26% citing graduate course work in occupational therapy. Thirty-four percent had taken courses in other disciplines, such as neuropsychology, psychology, and education, to augment their knowledge base.

Independent reading was indicated by 52% of the respondents as a resource. Journals from occupational therapy, neuropsychology, and education were included, as well as publications from facilities such as Rancho Los Amigos (Malkmus, Booth, & Kodimer, 1980) and the Rehabilitation Institute of Chicago (Kovich & Bermann, 1988). Abreu and Toglia (1987) were again frequently listed as authors, as well as Siev, Freishhant, and Zollan (1986), Ayres (1972), and Trombly and Scott (1977).

When asked to indicate the changes they would suggest in curricula to better prepare therapists for cognitive retraining services, 75% cited the need to include content on both treatment methods and the relationship of the deficits to function; 61% desired more information regarding testing procedures. Comments focused on the need to develop observation skills, the need for understanding brain-behavior theory, and most frequently, the effect of deficits, and of treatment, on the client's function.

Research

When asked if they were or had been involved with re-

Table 1

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Assess (%)</th>
<th>Treat (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational therapy</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Speech/language pathology</td>
<td>83</td>
<td>82</td>
</tr>
<tr>
<td>Neuropsychology</td>
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<td>28</td>
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<td>Psychology</td>
<td>35</td>
<td>18</td>
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<tr>
<td>Physical therapy</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>Other (Nursing, Recreation, therapy, Physiatry)</td>
<td>30</td>
<td>36</td>
</tr>
</tbody>
</table>

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search in visual perception and cognition, only 25% responded affirmatively. Regarding suggestions for future research, more than half the sample checked both items listed: determine efficacy of treatment and validate assessment tools. Written comments revealed these additional suggestions: Examine the relationship of standardized test results to function, compare various treatment approaches (such as computer-based vs. functional), and examine the effect of this research to increase the credibility of our profession.

Cognitive Retraining as a Specialty

The respondents were almost equally divided (49% yes, 43% no, 8% no response) in answering the question: “Do you feel that cognitive retraining should be developed as a separate specialty of occupational therapy?” Those answering affirmatively alluded to the growing population of persons with head injury and the need for a specialized body of knowledge in the treatment of cognitive dysfunction. Others noted current gaps in the knowledge base, such as the lack of an organizing framework, the lack of information concerning the relationship of cognition to function, and the need for goal-oriented treatment approaches. Many stressed the need for additional research. The suggestion was made to develop a procedure for certification, similar to that of Neuro-Developmental Treatment. Additional respondents noted the rapid expansion of the field and thought that occupational therapists were falling behind other professionals in knowledge of assessment and treatment approaches.

Respondents opposed to this trend were concerned that specialization would restrict the information from the general occupational therapy profession, as all occupational therapists need knowledge about cognitive rehabilitation. Concern was expressed about fragmentation of the profession and the possibility of competition from other disciplines.

Discussion

Cognitive rehabilitation is rapidly developing as an important service for persons with traumatic brain injury, cerebrovascular accident, and other forms of neurological dysfunction (Bracy, 1984). Although the term cognitive rehabilitation may be relatively new, the profession of occupational therapy has been dealing with this area of practice for many years. The profession’s emphasis on the importance of the person’s performance in functional activity is a unique perspective, as the broader field of cognitive rehabilitation realizes the limits of standardized tests in predicting everyday performance.

The need for additional standardized evaluation procedures that reflect the unique perspective of occupational therapy and for a mechanism for consistent interpretation to define the relationship of test results to functional performance were heavily emphasized in the survey responses. Frequently, occupational therapists use evaluation tools that were developed by other disciplines or for other populations. The profession needs tests that have been designed by and for the practice of occupational therapy. Concurrently, treatment guidelines and tools must also reflect our unique functional perspective. Expansion of treatment approaches and materials would further strengthen the capacity of occupational therapy in cognitive retraining service provision.

Many respondents believed their knowledge base to be lacking in this area, and have therefore pursued independent means of obtaining this information, often from other disciplines. This situation suggests a strong need for additional resources development within the profession, for texts, seminars, university course work, and so on. The ambiguous nature of the roles of occupational therapy, speech/language pathology, and psychology/neuropsychology were noted in the service provision of cognitive rehabilitation. There is a need for support in role delineation and development of occupational therapy’s professional identity as separate and distinct from these neighboring disciplines.

The group was almost equally divided on the issue of cognitive rehabilitation as a separate specialty area, recognizing the unique body of knowledge required to provide this service, but concerned that the specialization process would restrict the information from the profession at large. It is believed that a compromise could be achieved that would address both concerns: to provide basic knowledge regarding cognitive processing, evaluation, and treatment as part of the general occupational therapy curriculum, but in addition to offer specialized training to those therapists who desire to expand their skill level.

This project was born of the interest of the SIS members in obtaining input from other occupational therapists across the country as to their training, evaluation and treatment procedures, and interdisciplinary relationships in their efforts to provide cognitive rehabilitation services. The SIS members were gratified to learn that their concerns were reflected in the responses from other therapists across the country.

Although the information reflects the state of the art from several years prior to the publication of this article, the issues raised continue to be topics of discussion in current SIS meetings. A repeat of the survey would be valuable to track the change in trends as the field progresses.

Since this survey was conducted, an expansion of resources on this topic has begun. Examples include the emphasis on cognitive rehabilitation in the 1993 AOTA Annual Conference in Seattle, Washington, and the two AOTA Self Study Series books, Neuroscience Foundations of Human Performance and Cognitive Rehabilitation. This is an exciting time as the profession strives to define its unique contributions to this emerging field.
Acknowledgments

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References


Cognitive Rehabilitation, 2(6), 12-13.


Occupational Therapy Treatment Goals for the Physically and Cognitively Disabled

This innovative text, coauthored by Claudia Kay Allen, MA, OTR, FAOTA, Catherine A. Earhart, OTR, and Tina Blue, OTR, is designed to help therapists predict the rehabilitation potential for clients with physical and cognitive disabilities and to set treatment goals to maximize the client's ability to process information.

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