

Factors Influencing Service Use Among Families of Children With Cerebral Palsy

Christopher M. Chacha, Ph.D.
Ph.D., The University of Alabama, 2000
Tuscaloosa, Alabama

Statement of the Research Problem

The objective of this study was to investigate factors that encourage or impede service use for children with cerebral palsy and to identify concerns of service users to help policy makers, service providers, and advocates improve their services. Knowing factors that affect service use should help improve service use and determine whether our services are client-centered. Improving services is possible if service users' concerns are known. The study focused on the relationship between service use and individual characteristics, family characteristics, and agency characteristics. The study was designed as an ex post facto exploratory study. Since the study explored the relationship between service use and individual, family, and agency characteristics it was a relational study.

This study is important because, although studies on factors influencing service use have been conducted in the area of disability, none have been conducted on children with cerebral palsy or their families (Korenbrodt, Simpson, & Phibbs, 1994; Summerfelt, Foster, & Sanders, 1996; Zahner & Daskalakis, 1997; Epstein, Cullinan, Quinn & Cumbland, 1995; Koloski & Montgomery, 1994; Richardson, 1992). Cerebral palsy is cited as a cause of disability in 3% or 400,000 of all disability cases (UCPA, 1996; 1996; McNeil, 1993; Hallahan & Kauffman, 1994; Hunt & Marshall, 1994; Levy, 1996). This underscores the importance of cerebral palsy as a disabling condition.

Research Background Questions/Hypotheses

The study had three main hypotheses. These hypotheses sought to discover whether there were significant differences in service use among families based on child characteristics, family characteristics, and service provider characteristics (agency). The hypotheses are as follows: (a) Based on child characteristics, there will be no significant differences in the use of services among parents. Any differences in service use may be attributed to chance alone. Follow-up null hypotheses covered in this hypothesis are as follows: There will be no significant difference in service use on the basis of the child's age, gender, ethnicity, cerebral palsy type, and severity of cerebral palsy. Any differences in service use may be attributed to chance alone. (b) Based on family characteristics, there will be no significant differences in the use of services among families/parents. Any differences in service use may be attributed to chance alone. Follow-up null hypotheses covered in this hypothesis are as follows: There will be no significant difference in service

use on the basis the family or parent's residency, relationship of primary caregiver to child, age of primary caregiver, household size, employment status of caregiver, household income, and education of primary caregiver. Any differences in service use may be attributed to chance alone. (c) Based on agency characteristics, there will be no significant differences in the use of services among parents. Any differences in service use may be attributed to chance alone. Follow-up null hypotheses covered in this hypothesis are as follows: There will be no significant difference in service use on the basis the agency's professionals, information about the agency, agency bureaucracy, and location characteristics. Any differences in service use may be attributed to chance alone.

Methodology

Participants in this study, who were parents of school children with cerebral palsy came from Sixty-nine school districts in Alabama. The study employed a modified instrument based on other service use studies. Questionnaires were mailed to 145 parents, of whom about 50% of the parents responded.

Three levels of data analysis were employed in this study. Descriptive statistics were used to describe the sample. Univariate analysis was used to examine the distribution of cases on one variable at a time. Odds ratio, sometimes referred to as cross-product ratio, is the preferred measure for assessing the size of association between two categories, that is, between dichotomous variables. Odds ratios show the relationship between expected values and cell probabilities. This makes it possible to predict likelihood of use of services between groups (Rosenthal, 2001).

Summary of Results

The results of the study confirmed that child, caretaker or parent, and agency characteristics do influence the use of services. Several significant differences ($p < .05$) were noted between child, family, and agency characteristics and the use of services. Odds ratios provided exact service use likelihood between groups. The child's gender was found to influence the use of mental health services, social services, and assistive devices. Race was found to influence the use of social services, health services, and financial support. Age had an influence in the use of health services, and severity influenced the use of assistive devices.

Among family/caretaker characteristics, the education of the caretaker influenced the use of mental health services, educational services, health services, assistive devices, and financial support. The size of household influenced the use of educational services, health services, and financial support. Income was a factor in the use of educational services, health services, and assistive devices. The relationship of the caretaker also influenced the use of educational services, assistive devices, and financial support. Employment status affected the use of health services only, while age of caretaker affected the use of assistive devices.

The bureaucratization of the providers affected most services. Bureaucracy was found to influence the use of mental health services, social services, educational services, health services, recreational services, and financial services. Parents or caretakers indicated that professionals' attitudes affected their children's use of mental health services, educational services, and financial support. Lack of information affected the use of mental health and educational services. Location affected the use of educational services.

Table 1 Child Characteristics and Services Use

Service	Gender	Ethnicity	CP type	Severity	Age
Mental Health	*				
Social Services	*				
Educational Services		*			
Health Services		*			
Recreational Services					
Assistive Devices	*			*	
Financial Support		*			

* = $p < .05$

Table 2 Family/Parents/Caregivers Characteristics and Services Use

Service	1	2	3	4	5	6	7
Mental Health				*			
Social Services							
Educational Services		*		*	*	*	
Health Services		*	*	*	*		*
Recreational Services			*				
Assistive Devices	*			*		*	
Financial Support		*	*	*		*	

* = $p < .05$; 1 = age, 2 = household size, 3 = income, 4 = education, 5 = residency, 6 = relationship, 7 = employment status

Table 3 Agency Characteristics Factors Impacting Service Use

Service	Information	Bureaucracy	Location	Professionals
Mental Health		*		*
Social Services	*	*		
Educational Services	*	*	*	*
Health Services		*		
Recreational Services		*		
Assistive Devices				
Financial Support		*		*

* = $p < .05$

Utility for Social Work Practice

The traditional role of social work has been to work with disadvantaged individuals, aiming at restoring equity that has resulted from social injustice. This role includes assessing need and improving service use. Social workers need to be aware of personal or individual factors that may inhibit service use. Our study results indicate that gender, ethnicity, age, and disability severity may at times be barriers to the use of services among children with cerebral palsy and their families. Social workers need to be sensitive to individual characteristics when providing services. Individuals may have the same type of disability and disabling conditions, but our service provision must take into account other characteristics including gender, ethnicity, severity, and age. Sensitivity to the characteristics is likely to increase the frequency of service use. Educators need to increase and retain minority social work majors and graduates. This will increase minorities both at beginning and middle-level social work professionals in different agencies. People feel comfortable if they can relate to those serving them.

Equity is our ideal goal, and yet we find that services are not equitably used. Males are more likely to use services than females. Whites are more likely to use services than non-Whites. Non-Whites generally use fewer services both quantitatively and qualitatively than Whites. Social workers can help by advocating for minorities. There may be several reasons why minorities use fewer services. School-based services are important for children. Lack of such services will decrease the chances of children's academic performance and future life success. Advocacy for increased service use among minority children should therefore be a major goal for social workers.

It is important that social workers bear in mind that service utilization can be impaired not only by affordability and availability of services within a community but also

by the acceptability of the services, which is likely to be influenced by personal characteristics. This study found that service use is influenced by family caregiver characteristics like relationship, caregiver age, household size, family income, caregiver education, residency, and employment status. This means that family characteristics will impede or encourage service use. The findings are important to social workers because they will help social workers improve service use among children with cerebral palsy and their families. This study clearly indicates that family factors are an important factor in service use. Social workers should identify family factors that may impede service use and work toward eliminating obstacles related to such factors.

Such factors such as information about the agency, bureaucracy within the agency, location of the agency, and professionals working for the agency are important in increasing service use. Research has an important role of providing data-backed information on products provided by agencies and the effectiveness of these services. Social workers have an important role in advocacy and dissemination of information of available services, where they are located, and qualifications for services.

References

Epstein, M. H., Cullinan, D., Quinn, K. P., & Cumbland, C. (1995). Personal, family, and service characteristics of young people served by interagency community-based system of care. Journal of Emotional & Behavioral Disorders, 3(1), 55-65.

Hallahan, D. P. & Kauffman, J. M. (1994). Exceptional children: An introduction to special education. Boston, MA: Allyn and Bacon

Hunt, N., & Marshall, K. (1994). Exceptional children and youth. Boston, MA: Houghton Mifflin Company.

Korenbrodt, C. C., Simpson, L., Phibbs (1994) Prenatal care needs assessment comparing service use and outcomes in Fresno, California. Public Health Reports, 109, 68-77

Kosloski, K. & Montgomery, R. J. V. (1994). Investigating patterns of service by families providing care for dependent elders. Journal of Aging & Health, 6(2), 17-38.

Richardson, V. (1992). Service use among urban African American elderly people. Social work, 37, 47-54

Levy, S. E. (1996). The developmental disabilities. In L. A. Kurtz, P. W. Dowrick, S. E. Levy, & M. L. Batshaw (Eds.), Handbook of developmental disabilities. Gaithersburg, VA: Aspen Publishers.

Rosenthal, J. A. (2001). Statistics and data interpretation for the helping profession. Belmont, CA: Brooks/Cole

Summerfelt, W. T., Foster, E. M., & Sanders, R. C. (1996). Mental health services utilization in a children's mental health managed care demonstration. Journal of Mental Health Administration, 23(1), 80-91.

Zahner, G. E. P. & Daskalakis, C. (1997). Factors associated with mental health, general health, and school-based service use for child psychopathology. American Journal of Public Health, 87, 1440-1449.

UCPA-United Cerebral Palsy Association (1996). Research fact sheet. Washington, DC: Research and Education Foundation.