

Abstract

A Study on a Rehabilitation Service System for Children With Disabilities:

A Preliminary Survey Based on Occupational Therapy

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Objective : This study aimed to investigate the rehabilitation therapy conditions for children with disabilities, and to gather the opinions of occupational therapists on the improvements needed in rehabilitation systems in a clinical setting.

Methods : For a survey, 4,000 copies of a structured questionnaire were delivered to the staff members of community rehabilitation center. Out of the 966 copies received back, we analyzed 162 copies responded by occupational therapists.

Results : The occupational therapists treat on average 7.1 children daily. The treatment times are 37 minutes per session, 4 times a week on average. The most impending matter appears to be a shortage of therapists for rehabilitation services. As the first option to solve this problem, they selected improved work conditions for occupational therapists. To promote the specialty of rehabilitation therapy providers, there needs to be an increase in the number of specialized subjects that they should take during their coursework, and a team approach is suitable for subject selection for a rehabilitation service. Furthermore, 87.5% of the occupational therapists who responded agreed that specialized providers in rehabilitation therapy

should possess at least a three-year college degree. Most of them had the opinion that a modification of the legal system may be the most important choice to improve rehabilitation therapy services for children with disabilities, and to maintain a consistent pattern in providing such services, the Minister of Health and Welfare should have jurisdiction over a public support system.

Conclusion : This study provided valuable information regarding the real state of rehabilitation services for children with disabilities in a clinical setting, and reflected the opinions of occupational therapists on the improvements necessary for a rehabilitation service. These findings may be helpful in developing future studies for generating a legal system related to occupational therapy, and a delivery system for better rehabilitation services.

Key words : Children with disabilities, Occupational therapy, Rehabilitation therapy system

Abstract

The Characteristics of Unilateral Neglect in Stroke Patients at the Acute Stage

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Objective : This study provided evidence regarding the need for an appropriate evaluation and treatment of neglect by obtaining knowledge on the characteristics and incidences of stroke at the acute stage.

Methods : The subjects were evaluated using a K-MMSE, Albert, γ s test, Clock drawing test, and Catherine Bergego Scale. Neglected subjects were then selected with and their data analyzed.

Results : Among 100 subjects, 30 showed neglected right-hemisphere lesions and 22 neglected left-hemisphere lesions. There were no significant differences in terms of age, duration from onset to the day of evaluation, or K-MMSE scores between neglected and non-neglected patients ($p > .05$). There were significant differences in the CBS score and Albert test percentage in patients with neglected right- and left-hemisphere lesions ($p < .05$).

Conclusion : We found that the incidence of neglect of right- vs left-hemisphere lesions is equal. In addition, the perceptual and egocentric neglect, and severity of neglect of ADL patients, is affected by hemisphere, but the representational neglect is not. Also, not only lesions of the artery and cerebral region, but also the basal ganglion, pons, and thalamus are neglected. Based on this, if therapists provide an appropriate early evaluation and treatment of neglected lesions during the acute stage of stroke victims, it will have a positive effect on decreasing the neglect.

Key words : Albert, γ s test, CBS, Clock Drawing Test, K-MMSE, Stroke on acute stage,

Unilateral neglect

Abstract

The Effects of Social Networks on the Activity Levels of Stroke Patients Living in a Community

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Objective : The purpose of this study was to identify the relationship between the social networks of stroke

patients living in the community and their level of activity.

Methods : This study analyzed 52 survey questionnaires given to stroke patients living in the community. This

survey questionnaires were sent out to community relief centers, health centers, hospitals, etc., and collected

by mail from April 22, 2011 to June 22, 2011. The method of data collection was through person-to-person

interviews using structuralized questionnaires.

Results : The most frequent activity after the onset of a stroke were resting, watching TV, and thinking while

sitting. As a result of the analysis of their social networks, the most important persons are their spouse and

children in that order. 80.8 percent of survey respondents set a high value on natural supportive social

networks. A high frequency of contact and persons living in close proximity make it easier to generate

relationships. Among the items affecting the consistent activities for stroke patients, the strength of the

relationship ($p<.05$), distance ($p<.01$), homogeneity ($p<.05$), and frequency of contact ($p<.01$) showed

statistically significant outcomes.

Conclusion : The factors that affect the social networks of stroke patients in a community were shown to be

restricted to natural supportive social networks. We were able to determine the correlation between social

networks and activity levels. The results of this study will have a significance in

providing a return to the community for stroke patients with an adaptive plan, and in offering education to providers. This research is also expected to secure the validity of systematic management.

Key words: Activity levels, Community, Occupational therapy, Social network

Abstract

Job Characteristics and Factors Affecting Work Orientation of Occupational Therapists Who Take CBR Based on the Regional Public Health Act: Focusing on Public Health Centers and Centers for Dementia

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Objective : This paper aims to determine the job characteristics and work orientation of occupational therapists who take CBR at public health centers and centers for dementia in accordance with the regional public health act, and to suggest basic resources for an improvement in the quality of occupational therapists in terms of CBR.

Methods : A self-administered online questionnaire was distributed to occupational therapists working at public health centers and centers for dementia. The collected data was analyzed to determine the effects on work orientation by carrying out descriptive statistics, a correlation analysis, and a hierarchical regression analysis.

Results : The work conducted by occupational therapists on CBR include patient assessments, preventive education, ADL training, and cognitive and perceptual training of the highest order. Difficult OT service types under their current duties include administrative work and local community education. The reasons for their hardships are a shortage of specialized personnel, lack of program planning, and organization and communication problems with other specialists. While their employment security is unstable, the autonomy of their jobs seem to be guaranteed to a certain degree. There are negative correlations between employment type and employment security, between work place and autonomy, and between the number of patient and

promotion opportunity. On the other hand, there are positive correlations between monthly wage and autonomy, and between educational level and autonomy.

Conclusion : This study demonstrated that it is not only necessary to establish the roles of occupational therapists in CBR, i.e., administrative training beyond occupational therapy for the local community, program planning and organization, and communicating with other specialists, but it is also necessary to establish a law to improve the employment security and autonomy of occupational therapists.

Key words : Center for dementia, Community-based rehabilitation, Occupational therapist, Public health center, Regional public health act, Work orientation

Abstract

Effect of a Shaker Exercise on the Swallowing Function of Stroke Patients

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Objective : The purpose of this study was to investigate effect of a Shaker exercise on the swallowing function

of dysphagia patients after suffering a stroke.

Methods : Nineteen patients experiencing dysphagia after suffering a stroke performed a Shaker exercise for

30 minutes a day, 5 days a week, for 6 weeks. We conducted an initial Videofluoroscopy, and 6 weeks later,

conducted a second Videofluoroscopy for an evaluation of the patients's swallowing function. The data were

analyzed using the New Videofluoroscopic Swallowing Study scale (new VFSS scale) and American Speech-

Language-Hearing Association National Outcomes Measurement System Swallowing scale (ASHA NOMS

scale) to determine the patients's swallowing function and dietary stage.

Results : After the Shaker exercise was conducted, the patients dietary status in the pharyngeal stage

significantly improved ($p < .001$). An itemized change in their swallowing function showed a statistically

significant difference in terms of the residue in the valleculae, a reduced laryngeal elevation and epiglottic

closure, residue in the pyriform sinuses, pharyngeal transit time, and aspiration ($p < .01$).

All patients improved

on the ASHA NOMS scale from 1 to 2 steps.

Conclusion : A Shaker exercise improved the swallowing function of patients experiencing dysphagia after

suffering a stroke. Therefore, a Shaker exercise can be easily applied and considered a

useful treatment

method in occupational therapy for patients with dysphagia.

Key words : Dysphagia, Shaker exercise, Stroke

Abstract

Effect of Telerehabilitation Using Mobile Phone on Motor Function Recovery in Chronic Stroke Patients

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Objective : This research aimed to examine the effect of telerehabilitation on the upper-limb motor functions and equilibrioception (sense of balance) by providing mobile phones to chronic stroke patients.

Methods : This research was conducted on 20 chronic stroke patients. The patients were randomly divided into an experimental group and a control group. Both groups participated in a self-exercise program at home 5 times per week for 8 weeks. Intervention through the use of a mobile phone was provided to the experimental group, and a daily self-check list was completed by the control group. The patients. Functional recovery pre- and post-intervention was measured through FMA: An upper-limb function subtest, BBS, Box & block, MAL, and MBI.

Results : As a result of providing telerehabilitation using mobile phones, the experimental group showed significant improvements in their upper-limb functionality, equilibrioception, and activities of daily living ($p < .05$). The results also showed significant differences in their performance and satisfaction ($p < .05$) compared to the control group.

Conclusion : This study demonstrated the effectiveness of telerehabilitation on the functional recovery of chronic stroke patients by showing an improved performance of upper-limb functionality, equilibrioception,

and activities of daily living. Therefore, the results may be applied to the use of telerehabilitation in a clinical setting.

Key words : Mobile phone, Self exercise program, Stroke, Telerehabilitation

Abstract

The Influence of Instrumental Activities of Daily Living
on the Quality of Life of Cancer Patients at a General Hospital

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Objective : The purpose of this study was to investigate the correlation of the quality of life with the instrumental activities of daily living and the present needs of occupational therapy to increase the quality of life for cancer patients.

Methods : The study was based on 33 patients over 18 years of age, who were diagnosed with cancer and are being treated as inpatients or outpatients. This study was conducted using a Frenchay Activities Index (FAI), Canadian Occupational Performance Measure (COPM), and Short Form 36 Health Survey (SF-36) to measure the IADL, occupational performance, and quality of life. The outcomes were determined based on a t-test, ANOVA, Pearson's correlation coefficient, and hierarchical multiple regression analysis.

Results : The difference in IADL was significant during hospitalization, and the patients' job, financial status, and hospitalization were significant in terms of their QOL. There was a correlation between IADL and QOL. The highest demand in the area of occupational performance was leisure, and respondents of productivity had a high QOL. The factors affecting QOL were IADL and financial status.

Conclusion : IADL in cancer patients has a significant relationship between QOL. The role of occupational therapists is emphasized to improve the QOL of cancer patients in terms of occupational performance based on a patient-centered approach.

Key words : Cancer patients, IADL, Occupational performance, Quality of life

Abstract

Correlation Between Korean-WMFT Functional Score and Activities of Daily Living

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Objective : The purpose of this study was to investigate the correlations between the functional score of a Wolf

Motor Function Test (WMFT) and the Modified Bathel Index (MBI), and to verify the differences in the activities of daily living according to the WMFT functional score.

Methods : The subjects of this study were 100 stroke patients who have been treated for physical function improvement in a rehabilitation hospital located in Ansan, Gyeonggi-do. The subjects were evaluated through WMFT and MBI. We compared the subjects, 9 WMFT functional scores for their affected upper extremities, as well as the total and individual MBI scores.

Results : Except for feeding, the WFMT scores had a high correlation with activities of daily living (bathing, personal hygiene, using the toilet) that require upper extremity movement and fine motor skills of the hand.

Conclusion : An exact evaluation and objective goal setting based on an evaluation of the affected upper extremities are important in stroke patients for functional recovery and an improvement in their independence regarding their activities of daily living performance. Therefore, further studies are needed to enhance the validity of the WMFT.

Key words : Activities of daily living, Modified Bathel Index, Wolf Motor Function Test

Abstract

The Effects of Using a Time-Management Application on the QOL
for People With Schizophrenia: A Case Study

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Objective : The purpose of this study was to demonstrate the clinical effectiveness of occupational intervention

by applying a time-management application to persons with Schizophrenia residing within society.

Methods : This is a case-study and is aimed at a female with Schizophrenia, aged 42.

The period of study was

from August 1st to September 23rd, 2011. The first analysis was an initial assessment and life time use

survey, then meaningful activities and it was classified as a non-meaningful activity. We reorganized the

non-meaningful activities from the survey into other activities that the subject would like to do during daily

life. A week of education regarding how to use the time-management application was then provided. The

period of total intervention was 3 weeks, and a final assessment was conducted after the intervention period.

Additionally, a 2-week follow-up study was conducted.

Results : In this study, the subject's S-QOL score before the intervention was 45.36.

However, there was an

increase in this score after intervention to 66.34. The score after the follow-up study was

60.98, which was

slightly lower than after the intervention, but higher than the initial evaluation.

Conclusion : This paper confirmed that the QOL of a person with schizophrenia was improved owing to the fact

that the occupations of the application were balanced using a. - time-management application. 7 Therefore,

occupational therapists should consider a time-management approach for people with schizophrenia living

with their community.

Key words : Application, Occupational balance, Schizophrenia, Time-management, Quality of Life

Abstract

A Comparison of Electrical Stimulation Treatment Effects Between Motor Stimulation Intensity and Sensory Stimulation Intensity in Dysphagia Patients

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Objective : This study aimed to compare the difference in the effects of treatment between motor and sensory

stimulation intensities on the swallowing function of stroke patients with dysphagia.

Methods : Eighteen cerebral infarction dysphagic patients were recruited based on VFSS. Electrical stimulation

was applied to the neck muscles of the patients for 30 minutes a day, five days a week for four weeks. In

addition, before the electrical stimulation treatment, an oral motor treatment was applied to both groups for 30

minutes. The patients' swallowing function and nutritional state were evaluated using FDS, a P-A scale, and

ASHA NOMS using VFSS.

Results : After 4 weeks of electrical stimulation, both groups showed significant improvement in their total

scores for the pharyngeal phase in FDS ($p < .05$), ASHA NOMS ($p < .05$), and significantly reduced valleculae

and pyriform sinus residue ($p < .05$). For the P-A scale, the motor stimulation group showed significant

improvement in semi-solid type food ($p < .05$), but the sensory stimulation group showed significant

improvement in all food types ($p < .05$). There was no difference in the swallowing function improvement for

the two groups ($p > .05$).

Conclusion : These results indicate that sensory electrical stimulation has a positive effect on the swallowing

function, and is more effective in decreasing penetration and aspiration than motor

electrical stimulation. The

electrical stimulation intensity can be modulated according to the patient's characteristics in a clinical setting.

Key words : Cerebral infarction, Dysphagia, Electrical stimulation therapy, Motor stimulation, Sensory stimulation