

■ INFORMATION

The 52nd Japanese Occupational Therapy Congress and Expo

◆ FOREWORD

Innovation

Kazuo Saito..... 243

◆ RESEARCH ARTICLES

Potential of group treatment sessions in occupational therapy for people with physical disabilities in the recovery stage:

Clients' and therapists' experience

Etsuko Odawara..... 245

Factors affecting health-related quality of life in elderly orthopedic outpatients

Takuhiro Okabe et al..... 256

Brain activation in errorful and errorless learning as an open task:

A functional near-infrared spectroscopy study

Tomomi Nakajima et al..... 265

Clarification of health-related QOL-related factors for breast cancer patients:

Influence on the range of shoulder joint movement and subjective postoperative symptoms

Tetsuya Sano et al..... 276

OT relationships with cases that do not seek support:

Process of creating opportunities which support relationships

Naomi Kurumisawa..... 285

Relationship between functioning and psychiatric symptoms in long-term inpatients with schizophrenia

Tomoe Ebisu et al..... 295

Relationship between belief conflicts arising from model-based practices and self-acceptance

Kengo Kohiyama et al..... 301

◆ PRACTICAL REPORTS

Social Skills Training on occupational therapy students

Ryuzo Yamagata et al..... 310

Efficacy of CI therapy combined with orthosis and electrical stimulation therapy for

moderate arm paresis in stroke convalescence:	
Investigation of progress one year after discharge	
Rie Ito et al.....	316
The efficacy of co-operation between occupational therapists and nutrition	
instructors in school children with dietary issues	
Shigeki Kurasawa et al.....	323
The effect of “experience” and “discussion” on consciousness of medical staff	
and local residents:	
AWA café project action	
Ritsuko Ose et al.....	330
The effectiveness of occupational therapy-focused IADL on patients in psychiatric	
emergency wards	
Shigehito Shiota et al.....	339
Feelings of proximal femoral fracture patients during surgery waiting period	
Koji Yamada et al.....	345
Examination of the effectiveness of the return to work program for patients with mood	
disorders	
Eri Yoshihara et al.....	352
■AUTHORS’ GUIDE.....	361
■EDITOR’ S NOTE.....	364

◆RESEARCH ARTICLES

**Potential of group treatment sessions in occupational therapy for people with physical disabilities in the recovery stage:
Clients' and therapists' experience**

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In Japan, many stroke survivors in the recovery stage suffer from depression and low life satisfaction. Social participation is very difficult for people with physical disabilities, including stroke survivors. Individual rehabilitation sessions have seen an increase in perceived value. Since 2006, only individual as opposed to group occupational therapy is reimbursable for clients with physical disabilities in the recovery stage. Peer-support among stroke survivors is shown to be effective in enhancing social participation. To investigate the potential of group sessions in occupational therapy for clients with physical disabilities in the recovery stage, qualitative research using participant observations, individual interviews and focus groups was conducted with clients and occupational therapists participating in group sessions. Understanding the experience of clients and occupational therapists led to an awareness of the potential benefits of group therapy in promoting clients' social participation. "Friendly environment" supported participation, while "more complicated environment" were challenging to the clients; both environments prepared clients' for social participation. By participating in group sessions, clients experienced unity, and cooperation with their peers. Participating in group sessions, clients experienced unity with other clients, cooperation with other clients, and peer existence. The clients also recognized their ability with their present body and their new social roles. That experience helped them to be empowered and bridge their past and present which helped them develop their future. To prepare clients for their future social participation, occupational therapists are able to prepare two environments, "friendly environment" and "more complicated environment", by understanding each client's occupational existence.

Key words: Rehabilitation in the recovery stage, Occupational science, Social

participation, Preventive care service, Qualitative research

Factors affecting health-related quality of life in elderly orthopedic outpatients

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In the present study, we examined the factors associated with Health-related quality of life (HRQOL) among elderly orthopedic rehabilitation outpatients. This study included 91 elderly outpatients. We evaluated physical function and performance in comprehensive activities of daily living (ADL: including basic ADL and instrumental ADL) and administered a 36-item Short-Form Health Survey Version 2.0 (SF-36v2) to analyze their relevance to HRQOL. Results showed that difficulty in comprehensive ADL was significantly correlated with most of the SF-36v2 sub-items. In addition, the number of areas where pain was experienced was significantly correlated with most of the SF-36v2 sub-items, and was significantly associated with physical function, bodily pain, and general health in the multiple regression analysis. The results indicate that pain affects not only body functions and structure levels, but also activities and participation levels, thereby affecting HRQOL. Therefore, occupational therapists aiming to improve HRQOL seem to be required to perform evaluations and interventions that consider the difficulties in comprehensive ADL and the number of areas where pain is experienced.

Key words: Outpatients, Health-related quality of life, Pain, Activities of daily living, Orthopedics

**Brain activation in errorful and errorless learning as an open task:
A functional near-infrared spectroscopy study**

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The purpose of this study was to clarify differences in the activities of the prefrontal cortex to control attention when performing an open task through errorful (EF) and errorless (EL) learning. The former does not involve skill acquisition errors, while the latter is performed with trial and error. Two right-handed healthy groups performed a drawing task with the non-dominant hand to acquire skills needed for data entry using the pen-touch method: the EF group and the EL group (EF 7; mean age: 25.9 ± 6.0); and (EL 7; mean age: 27.7 ± 4.7). During the task, changes in cerebral hemodynamics in the frontal association area were measured using functional near-infrared spectroscopy for comparison among the groups. As a result, the concentration of oxyhemoglobin in the blood flow within the left frontal pole and the left dorsolateral prefrontal cortex increased significantly in the EF group. This suggests that performing open tasks through EF learning could activate the brain regions that control attention.

Key words: Learning strategy, Frontal lobe, Attention

**Clarification of health-related QOL-related factors for breast cancer patients:
Influence on the range of shoulder joint movement and subjective postoperative
symptoms**

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52 post-operative breast cancer patients undergoing occupational therapy during hospitalization were investigated. Temporal changes for 3 months from pre-operation to post-operation in terms of the range of shoulder joint movement (flexion of shoulder joint/abduction angle), postoperative subjective symptoms (pain of surgical site/stretched feeling/feelings of anxiety), and health-related QOL (HRQOL) scale: FACT-B and EQ-5D-5L, were examined, along with HRQOL-related factors. As a result, the range of shoulder joint movement was significantly decreased even from pre-operation to 3 months after surgery, but the subjective symptoms were significantly improved in the third month after surgery. Considering the results from a multi-regression analysis, anxiety during the first and third month after surgery was extracted as a significant variable in terms of factors influencing on FACT-B/EQ-5D-5L. Thus, functional aspects and postoperative subjective symptoms could possibly influence the improvement of HRQOL.

Key words: Breast cancer, Health-related QOL, Shoulder joint

OT relationships with cases that do not seek support:

Process of creating opportunities which support relationships

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In the field of community OT support, there are numerous clients who do not seek

occupational therapy. In such circumstances, it is difficult for therapists to establish relationships with the clients who have difficulties in activities of daily living (ADL). In this research, I interviewed 3 social welfare workers and 3 public health nurses with more than 20 years' experience in order to clarify the process of establishing relationships and obtain suggestions to improve support. Analysis used the modified grounded theory approach, and 4 categories, 9 sub categories, and 25 concepts were extracted. The results indicate that knowing how to diminish negative emotions of supporters at an early stage is important for building support relationships with cases that do not seek support voluntarily.

Key words: Community support, Negative emotions, Qualitative research

Relationship between functioning and psychiatric symptoms in long-term inpatients with schizophrenia

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In Japan, there are about 130,000 inpatients with schizophrenia who have been hospitalized for more than a year. They experience continuous psychiatric symptoms and reduced functioning. Several studies on the relationship between functioning and psychiatric symptoms have failed to reach a definite conclusion. This study aimed to examine the relationship between functioning and psychiatric symptoms in long-term schizophrenic inpatients. The participants were 73 inpatients with schizophrenia diagnosed using the ICD-10 who had been hospitalized more than a year. Functioning and psychiatric symptoms were measured using the Rehabilitation Evaluation Hall and Baker (Rehab) and the Positive and Negative Syndrome Scale (PANSS), respectively. A correlational analysis was conducted with these scores. The ethical review board

of a psychiatric hospital approved this study. There was a significant correlation between total general behavior scores for the Rehab and the negative scale scores for the PANSS ($r_s=0.49$, $p<0.001$). No significant correlation was observed between total deviant behavior scores for the Rehab and any of the PANSS scores. Long-term inpatients with schizophrenia who have lower functioning might have more severe negative symptoms. Occupational therapy focusing on patients' general behavior may be more crucial than other therapies focusing on deviant behavior, and could contribute to improving their functioning as well as psychiatric symptoms.

Key words: Long-term hospitalization, Schizophrenia, Functioning, Psychiatric symptom

Relationship between belief conflicts arising from model-based practices and self-acceptance

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The purpose of this study was to clarify the relationship between belief conflicts arising from model-based practices and self-acceptance. The method of this study consisted of two steps. In Step 1, we developed a scale to evaluate belief conflict arising from model-based practices. In Step 2, we confirmed the replicability of the scale. Moreover, we examined the relationship between belief conflict and self-acceptance. As a result, the scale developed in Step 1, guaranteed reliability and validity, and in Step 2, the replicability of the scale was confirmed. Furthermore, we found that the "relationship with other people" and "not being emotionally unstable" in self-acceptance have an effect on the belief conflict. The results indicate that demonstrating a broad-minded attitude towards other people's practices and maintaining mental well-being produce less belief conflict.

Key words: Measure, Occupational therapist, Belief conflict, Structural equation modeling

◆PRACTICAL REPORTS

Social Skills Training on occupational therapy students

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We carried out a 10-session program of Social Skills Training on 25 occupational therapy students with low social skills. The Social Skills Training was devised from the standpoint of clinical communication. Results showed that scores of both communication scale and the Objective Structured Clinical Examination, using questionnaires measuring social skills related to clinical communication, improved significantly. In contrast, scores of Kikuchi's Scale of Social Skills:18 items from a questionnaire measuring generalized social skills, and the Generalized Self-Efficacy Scale showed no significant changes. This study indicated that Social Skills Training improved social skills related to clinical communication, but it did not change generalized social skills nor generalized self-efficacy.

Key words: SST, Social skills, Self efficacy, Occupational therapy education, Clinical training

Efficacy of CI therapy combined with orthosis and electrical stimulation therapy for moderate arm paresis in stroke convalescence:

Investigation of progress one year after discharge

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We treated subacute stroke patients with moderately affected arm function who met the exclusion criteria for constraint-induced movement therapy, using task-oriented intensive training and transfer package (TP) whose intervention had long-term effects for arm function. This was combined with both electro-stimulation and orthosis therapies. After the intervention, the affected arm function and amount of arm use in activities of daily living improved during inpatient settings. However, one month post-intervention, the affected arm function and amount of arm use in activities of daily living decreased again. By treating the affected arm function and amount of use in activities of daily living using an approach similar to intervention in inpatient settings once a week, the affected arm function and amount of use in activities of daily living improved. However, the arm function failed to improve as much as the original intervention in the inpatient setting. Therefore, we thought that the traditional TP might be insufficient to maintain arm function after the intervention, and additional treatment is required in concert with traditional TP.

Key words: CI therapy, Electric stimulation, Orthosis

The efficacy of co-operation between occupational therapists and nutrition instructors in school children with dietary issues

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This report examined the efficacy of co-operation between occupational therapists and nutrition instructors. Eight school children with dietary issues such as an unbalanced diet were chosen in cooperation with a nutrition instructor who took part in a workshop. The workshop instructor was an occupational therapist who instructed workshop participants in intervention methods based on the physiological mechanisms of food, the association between eating disorders and developmental disorders, evaluation scales, and the Japanese version of the Sensory Profile and Applied Behavior Analysis. Thereafter, the focus was placed on dietary issues by means of goal attainment scaling, and individual support plans were created for the nutrition instructor and homeroom teacher to provide guidance to the school children. After intervention, one child had a score of 41.2, which failed to meet expectations, while the other seven children achieved their goals with scores exceeding expectations (mean of the overall sample: 52.3 ± 5.6 points).

Key words: Nutrition instructor, Occupational therapist, Co-operation, Feeding

The effect of “experience” and “discussion” on consciousness of medical staff and local residents:

AWA café project action

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The AWA cafe project was started to have local residents and medical staff consider optimal health, medical care and nursing. Two health classes were developed: one on general health and one on diet and health, specifically reducing sodium intake. Both classes were divided into two parts: experiencing the program, discussing their experience with the program. As a result of the discussion and their hands-on experience, local residents became more health conscious and improved their lifestyles. This was an opportunity for medical staff to think about the environment

outside the hospital and consider how to take actions in their local community. It is important that both local residents and medical staff become aware of improving community health.

Key words: Health course, Experience and discussion, Change in consciousness

The effectiveness of occupational therapy–focused IADL on patients in psychiatric emergency wards

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The purpose of this study was to verify the effect of occupational therapy which focuses on Instrumental Activities of Daily Living (IADL) in psychiatric emergency wards. A retrospective cross sectional study was performed to analyze data from 55 patients with psychiatric diseases who were admitted to a psychiatric emergency ward at Ishikawa Prefectural Takamatsu Hospital for treatment for manifestations of neurologic diseases between September 2014 and June 2015. Patients were classified into the IADL group (n=20) and the non-IADL group (n=35) based on the occupational therapy programs. Demographic characteristics, length of stay in hospital, the rate of re-hospitalization in a year, and social outcome at 3-months post discharge between the two groups were compared. The IADL group was older, had longer periods of hospitalization, and lower rates of readmission than the non-IADL group. There were no significant differences in the social outcomes between both groups. The results suggest that the occupational therapy which focuses on IADL is more effective in

preventing re-hospitalization in psychiatry emergency wards.

Key words: Social skills, Instructive Activities of Daily Living, Occupational therapy, Psychiatric emergency

Feelings of proximal femoral fracture patients during surgery waiting period

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This study examines the well-being of patients awaiting surgery for proximal femoral fractures. Our objective was to identify patient needs through personal interviews. We analysed patient remarks by breaking them down into 9 categories and 21 individual concepts. These included a category for pre-surgery pain, particularly as to how it affected patients' daily life. There was also a category for patients' emotional well-being, which included questions regarding pre-surgery anxiety as well as relationships with family, hospital staff, and any potential roommates. Patients also shared positive experiences. Using this information, we were able to identify five necessities for pre-surgery patient care.

Key words: Proximal femoral fracture, Early occupational therapy, Qualitative study

Examination of the effectiveness of the return to work program for patients with mood disorders

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The purpose of the study was to examine the effectiveness of the return to work (rework) program and to determine factors associated with reinstatement. Participants of the rework program were diagnosed with mood disorders. The three-month course comprised psychoeducation based on illness management and recovery twice a week and occupational therapy five times a week. The participants were evaluated using Japanese version of the Brief Assessment of Cognition in Schizophrenia (BACS), the Social Adaptation Self-evaluation Scale-Japanese version (SASS-J), the Global Assessment of Functioning (GAF), Hamilton Rating Scale for Depression (HAM-D), Young Mania Rating Scale (YMRS), and the Psychiatric Rework Readiness Scale (PRRS) before and after the program. These measures compared the reinstatement group (RG) that was able to return to work and the continuation group (CG) that was not able to return to work. Thirteen patients participated in the program. The BACS scores and the PRRS scores significantly increased after the program. The improvement in cognitive function and reinstatement readiness were the main outcomes of this program. After the program, the personal relationship scores of the PRRS were seen more in the RG than in the CG. Furthermore, significantly higher preparation conditions of the PRRS were seen in the RG than in the CG. The improvement of personal relationship skills and reinstatement readiness were considered important. It is necessary to replicate the study using an increase in the sample size in the future.

Key words: Mood disorder, Employment support, Cognitive function, Return to work program