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■ **The 16th International Congress of the WFOT (WFOT2014): Symposium**

Evidence-based Occupational Therapy 2.0—Developing Evidence for Occupation

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**Abstract:** The emphasis of an evidence-based occupational therapy practice includes several challenges for our profession and academic discipline. By using the hierarchical models proposed for reviewing research evidence in occupational therapy research during the last two decades, an imbalance in research methods used is visible. This challenges those of us working in occupational therapy to reflect upon how current theories and approaches are developed, refined and tested in an evidence-building process. Secondly, we need to reflect on how the current evidence we are generating provides support for the unique occupational component in occupational therapy, both in the interventions and outcomes defined and used. Thirdly, we also need to present and discuss our experiences and findings in more global contexts in order to learn from each other and establish new collaborations in the occupational therapy community. By doing so, we can provide evidence-based occupational therapy that is based on the value of occupation and that transcends disability, ethnicity, age and context.

**Key words:** Occupation-based, Occupation-focused, Intervention, Outcomes

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◆RESEARCH ARTICLES

**Factors which affect the biosocial rhythm of elderly patients**

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This study evaluated the bionomics and biosocial rhythm of elderly inpatients from admission until three months after discharge and clarified the factors affecting the biosocial rhythm after discharge. Bionomics and biosocial rhythm evaluation of 22 patients were conducted on admission and monthly for 3 months after discharge, for a total of 4 times. Results indicate that a period of 2 to 3 months is necessary to be able to engage in activities other than resting and ADL. It is suggested that the biosocial rhythm of the mind and body functions 1 month after discharge. The biosocial rhythm 2 months later was affected by the relationship of a person to society, occupation and lifestyle, as well as by time spent on leisure. Furthermore, the biosocial rhythm one month later appeared to be affected by mind and body functions. The biosocial rhythm two months later was affected by the relationship of the person to society, occupation and life range, and time spent on leisure.

Key words: Elderly, Life, Cross-sectional study

**Living conditions of the elderly living alone in rural areas and the influence of instrumental support on individuals without long-term care insurance**

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We surveyed the elderly living alone without long-term care insurance regarding their living conditions and instrumental support. The results showed that “self-care” and independence in “toileting” were fundamental to their lives, and that the prevention of reduction in “locomotion” and maintenance of “cognition” were important in maintaining their independent lifestyle. Our results also showed that some of the elderly living alone were independent in basic ADL but relied on instrumental support to perform applied ADL tasks. As their daily life is liable to change for the better or worse, occupational therapists must work in conjunction with other medical and welfare professionals to understand the actual living conditions of elderly individuals who do not utilize long-term care insurance, and to create an environment that facilitates preventive intervention as needed.

Key words: Elderly living alone, FIM, Frenchay Activities Index, Instrumental support

### **The physical and psychosocial effects of community-based radio calisthenics on the elderly**

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Radio calisthenics are expected to be utilized to promote the health of the elderly because they are familiar exercises requiring no new learning. However, the physical and psychosocial effects of community-based radio calisthenics on the elderly are

unclear. In this study, we examined the effects of radio calisthenics on elderly citizens held by the community 5 times a week during a 3-month intervention. Twenty and 17 subjects were categorized into the radio calisthenics group and control group, respectively. The results of the study showed improved leg muscle strength and dynamic balance in the radio calisthenics group. The continuation ratio of the radio calisthenics group was high at 90.9%. In addition, over 70% of subjects in the experimental group recognized favorable changes in their rhythm of life, mood, and physical condition.

Key words: Community-based radio calisthenics, Community dwelling elderly, Health promotion

### **Psychometric properties of Classification and Assessment of Occupational Dysfunction for healthcare professionals**

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Purpose: To develop the Classification and Assessment of Occupational Dysfunction (CAOD) for healthcare practitioners (nurses, physical therapists, and occupational therapists) and to confirm its validity and reliability. Methods: To assess the validity and reliability, healthcare practitioners (n=674) responded to a questionnaire based on CAOD, Center for Epidemiologic Studies Depression Scale (CES-D), and Burnout Inventory. CAOD was examined using the following parameters: con-firmatory factor analysis (CFA), concurrent validity, internal consistency, cut-off point, multitrait scaling analysis (MSA), and item response theory (IRT). Results: CFA of CAOD had 16 items and 4 factors (CFI=0.915, RMSEA=0.071). Conceptual correlations between CES-D (r=0.541 to 0.341) and Burnout Inventory (r=0.614 to -0.269) were moderately supported. Cronbach's alpha coefficients were 0.816 and 0.912. The best cut-off point using ROC analysis was a score of 52. Multitrait scaling confirmed that CAOD had good item convergent and discriminant validity. Items of CAOD fit according to IRT models.

This implies that it is related to problems of daily life and mental illness. Conclusion: CAOD will use the study of Occupational Dysfunction for healthcare practitioners.

Key words: Occupational dysfunction, Classification and Assessment of Occupational Dysfunction, Depression, Burnout, Scale development

### **Exploratory research on making non-compliant patients more positive toward occupational therapy**

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Occupational therapy for noncompliant clients was surveyed in order to make effective occupational therapy. Based on the results of a questionnaire, 63 occupational therapists had experienced treating noncompliant clients with positive results. We analyzed this data by KJ method. Six types of noncompliant patients were identified, and 11 occupational therapy intervention methods to make noncompliant clients become positive were categorized. Four methods stand out as the most common approaches; “building rapport and supportive relationships with clients”, “listening attentively to the clients’ thoughts and will”, “introducing familiar occupation without making mistake” and “supporting clients to feel easy and happy”.

Key words: Motivation, Therapist-patient relationship, Noncompliant client

### **Recognition of nursery teachers working at handicapped-child day services on occupational therapy-based play**

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The purpose of this study is to investigate how the nursery teachers recognize the occupational therapy-based play and apply it to improving the quality of child care programs at handicapped-child day services. Six nursery teachers working in a handicapped-child day service were interviewed according to the interview guide provided by the author. Prior to the interview, a videotape (48min) about the occupational therapy-based play was shown to the nursery teachers, and the main concerns of the occupational therapist were predicated and explained. The interviews lasted 324 minutes, and the contents were transcribed, analyzed using M-GTA (Modified Grounded Theory Approach), and 25 concepts and 5 categories were identified. The relationship between 25 concepts and 5 categories analyzed, indicating an understanding about the concepts of nursery teachers on occupational therapy-based play. Although there were some discrepancies concerning the concepts on occupational therapy-based play, or concerning the understandings on the syndromes of the handicapped children between nursery teachers and occupational therapist. Since the nursery teachers and occupational therapist stand on different backgrounds. However, it seems that viewpoints from the Sensory Integration theory would be a sort of junction which connects specialists from different fields. It was also possible to confirm that nursery teachers who are concerned with the therapy, education and nursery of the handicapped children at the day service station have almost the same viewpoints on the cares and education with occupational therapist. The nursery teacher was interested in the occupational therapist as professionals to work with.

Key words: Treatment and education, Handicapped-child day service, Cooperative work, Nursery teacher, Qualitative study

### **Effects of occupational therapy on preventing recurrence of depression in occupational therapy patients**

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The purpose of this study was to investigate the contribution of occupational therapy to the prevention of recurrence of depression. We performed a one-year follow-up of 85 hospitalized psychiatric patients after discharge. Recurrence rate after one year was 17.6%, following a lower trend when compared with a previous report. By the multiple logistic regression analysis, “dose of oral antidepressants” (300-399mg), and “implementation of occupational therapy in the hospital”, can predict recurrence within one year after discharge. Occupational therapy contributes to the prevention of recurrent depression, and severity of depression can also influence the outcome. An early “individualized physical approach” is identified as essential to prevent disuse syndrome and prolonged symptoms, and to promote early ambulation.

Key words: Psychiatric occupational therapy, Depression, Prevention of recurrence