

## Department of Psychiatry

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### General Summary

Our research activities cover a wide range of topics: disorders at the psychological and biologic levels, from childhood and adolescence, through adulthood, to the senile period. Sociologic, psychological, physiologic, and biochemical methods were used.

### Research Activities

#### *Psychopathology, psychotherapy and child study group*

Studies examined: 1) the care systems for developmental disorders (attention-deficit hyperactivity disorder and pervasive developmental disorder) in the psychiatry unit; 2) the psychopathology underlying acute psychosis observed in some developmental disorders, especially the relationship between age and changes in scores of the Wechsler Intelligence Scale for Children-II; 3) diary therapy for Asperger disorders. A study of ground factors of depression in white-collar workers found close relationships between depression and personal characteristics, feelings of self-esteem, and psychological stress experienced outside, rather than inside the workplace.

#### *Morita therapy group*

“Guideline for Outpatient Morita therapy” was translated into English and presented at the 7<sup>th</sup> International Congress of Morita Therapy. A study of the character profiles of patients with chronic depression was completed. In this study, low scores for “Openness” and “Agreeableness” of the revised NEO Personality Inventory were found to be characteristics of patients with chronic-depression. Subjects of studies continued this year included: the relationship between panic disorders and generalized anxiety disorders from the aspect of patients’ character and comorbidity, subtypes of obsessive-compulsive disorder, “fall-in reaction” occurring in the development of mood or anxiety disorders, and factors in the recovery of patients with depression treated with inpatient Morita therapy.

#### *Psychopharmacology group*

In basic research, 1) the mechanism of central action of a new generation of psychotropic drugs was studied with microdialysis and radioimmunoassay, and 2) brain mechanisms underlying drug dependence and the development of a new drug for drug dependence

were studied in rats (in collaboration with the Japan Science and Technology Agency). In clinical research, studies examined: 1) the effectiveness and adverse effects of new psychotropic drugs, 2) the involvement of the medial prefrontal cortex in motivation-oriented behavior (functional magnetic resonance imaging study in collaboration with the National Institute of Radiological Science,); 3) nerve growth factors involved in neurodegenerative diseases (genetic research in collaboration with the Institute of DNA Medicine,); and 4) the genetics of akathisia induced by antipsychotic agents.

#### *Psychophysiology group*

Studies examined: 1) the effects of “*yokukansan*” and quetiapine on the cyclic alternating pattern as an index of sleep structures,; 2) guidelines for the evaluation and management of chronic insomnia in primary care,; 3) the clinical effects of group cognitive behavioral therapy for outpatients with psychophysiological insomnia,; 4) psychiatric care for patients with obstructive sleep apnea syndrome treated with nasal continuous positive air-way pressure, and 5) the characteristics of sleep disturbance in patients with functionally gastrointestinal disorders.

#### *Psychogeriatric group*

Firstly, a study of the neuropsychological evaluation of neurodegenerative disorders using brain imaging modalities such as magnetic resonance imaging and single-photon emission computed tomography, which suggested that a reduction in hippocampal volume in Alzheimer’s disease is related to delayed responses on neuropsychological tasks. Secondly, a longitudinal study of the prevalence of psychiatric disorders in patients with breast cancer was performed.

#### *General hospital psychiatry*

In a study of interventional therapy based on cognitive-behavioral therapy aimed at preventing recurrences of depression, a computer system and sleep evaluation methods were introduced in addition to a previous evaluation system for more effective presentations and for more precise estimation, respectively. Furthermore, an investigation of new indications for this intervention for atypical depression, bipolar depression, and patients with insomnia was performed. Another study investigated the issues associated with mental care services for patients with cancer, and their families and medical staff.

#### *Clinical electroencephalography group*

Studies examined: 1) adverse properties of psychotropic drugs to reduce seizure threshold and provoke seizures, which might result in the several forms of psychosis in patients with epilepsy; and, 2) characteristics of patients with epilepsy demonstrating social withdrawal. Furthermore, we reported on a patient with symptomatic generalized epilepsy in which long-lasting control was achieved by the addition of zonisamide.

#### *Clinical psychology group*

Studies examined: 1) psychotherapeutic processes and the treatment techniques of cognitive behavior therapy, Morita therapy, relief care, and psycho-oncology; and 2) the

characteristics of developmental disorders and higher brain dysfunctions using psychological assessments. Furthermore, we taught graduate students and engaged in the training of residents.

## Publications

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- Okino S.** Preliminary study on circumstance surrounding patients with HIV and their psychological stress (in Japanese). *Shakai Seishinigaku Kennkyuuiyo Nenpou* 2009; **37**: 30-6.
- Kubota M.** Morita therapy for Taijin-kyouhu (in Japanese). *Kokoronokagaku* 2009; **147**: 72-8.

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- Nakayama K, Nakamura K.** When treatment is terminated: focusing on panic disorder (in Japanese). *Seishinka Chiryogaku* 2009; **24**: 1461-5.
- Nakayama K.** Studies on generic drugs: focusing on patient's satisfaction (in Japanese). *Seishinka* 2009; **15**: 258-66.
- Nakamura K, Kitanishi K, Maruyama S, Ishiyama I, Itoh K, Tatematsu K, Kuroki T, Kubota M, Hashimoto K, Ichikawa M.** Guidelines for practising outpatient Morita Therapy (English Ed). Komae: The Japanese Society for Morita Therapy; 2010.
- Nakamura K.** Obsessive compulsive neurosis theory and subtypes of obsessive compulsive disorder (in Japanese). *Saishin Seishinigaku* 2009; **14**: 225-30.
- Miyata H.** Antipsychotic drugs and occupational psychiatry (in Japanese). *Sangyo Counseling* 2009; **258**: 28-9.
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