Abstract
In Japanese medicine and nursing, the length of hospital stay is decreasing and patients are encouraged to continue with outpatient care in the community, even though the community resources for such ongoing care are not sufficient. In 1993, the Japanese Nurse Association created the CNS (Certified Nurse Specialist, CNS) licensed category for advanced practice. CNSs are crucial to implementing evidence-based patient care, ensuring patient safety, reducing health care costs, improving patient outcomes, assisting with self-care, and improving QOL (Quality of Life) among patients. In Japan they are 2,104 Certified Nurse Specialists, working at hospitals, outpatient and community settings, covering 13 areas, including oncology nursing, psychiatric mental health nursing, pediatric nursing, community health nursing, maternal care nursing, acute care, chronic care, g nursing, family care nursing, home care nursing, infection nursing, genetic nursing and disaster nursing. We CNSs have developed Japanese Association of CNS and we have shown the effectiveness of CNS through research and advanced practice in Japan. In April 2018, I had been a representative of Japanese Association of CNS for 5 years and by then, I was the associate representative of this association.

Introduction
In Japan, CNS [1,2,3] has taken charge of difficult patients, who are high risk patients (with dual diagnosis), long-term inpatients, and repeated readmitted patients. CNS has assessed patients and families from the view point of bio-psycho-social-developmental aspects. Furthermore, CNS intervened to those patients directly and implemented consultation to nursing staff and multidisciplinary team. Furthermore, CNS has implemented research to improve nursing care and provide education for nursing staff to improve nursing care. Through these studies, we could find out CNS has contributed to the improvement of physical and mental states, self-care, quality of life among patients & families and motivation among nursing staff [4,5,6]. Then CNS has postponed patients' community living and has prevented readmission among difficult patients. However, through this research and clinical practice, we knew that CNS needs to improve advanced clinical knowledge more in order to meet with patients' need in the society. And the more CNS is increasing, the better training we CNS needs. And I have thought CNS needs to have intervention theory and intervention techniques to change patients' self-care ability as soon as possible.

Here I will show the role of CNS in psychiatric mental health nursing through 1) cases and 2) research.

CNS Role in Psychiatric Mental Health Nursing
Case Example
One patient was 34-year-old, her diagnosis was depression and Borderline Personality Disorder. She had graduated from the University and had worked for 5 years as a public servant at the city, gotten married and given birth to one daughter. But her husband died by cancer and she raised her child by herself. She subsequently divorced and remarried at age 32-years, and had another child with this present husband. Because this husband was so busy and she had to take care of her children by herself. They had to move to another place near to her husband's work. After that, she started to cut herself (on her wrist) and overdose of sleeping pills which were sold at the store.
She acted out (overdose, wrist cutting), which led to her read-
mission to the hospital. At the inpatient unit, she blamed the nursing staff, because the nursing staff couldn’t talk with her at night. And multidisciplinary team was divided into two (good and bad people, we call it splitting as defense mechanism). So, treatment team lost the treatment goal for this patient, because each treatment member had each opinion and they didn’t try to understand each opinion. The CNS took charge of this patient, following the hospital staff nurses’ request. CNS met with her and CNS implemented PAS self-care therapy (Psychoanalytic Systems Self-Care Therapy, PAS-SCT) *. PAS-SCT is self-care therapy developed by Dr. Kotani and Usami, which was based on Orem-Underwood self-care model and psychoanalytic systems theory developed by Dr. Kotani [7]. CNS met with her three times per week and we talked about how to control her acting out, improve her overeating, her imbalance of activity and rest, and imbalance of solitude and social interaction. She ate 3-4 meals and she had insomnia and she slept in the day. Furthermore, she got angry at the nurses’ behavior, because nurses couldn’t listen to her talk each time, she wanted them to do so. Through this PAS-SCT, CNS encouraged her to express her anger and looked for her needs what she wanted nurses to do. Furthermore, CNS and this patient tried to set the goal of self-care if she wanted to stay in the community. We set the goal to control food, the balance between activity & rest, the balance between solitude & social interaction. And we discussed how to control food, how she can spend the day time and how she can interact with other people safely. Through this discussion, she gradually recognized she got angry for her husband and when she got angry, she ate so much and she couldn’t sleep at night. When she felt she was not loved by anyone, specially by her husband, she couldn’t spend her time alone and she continued to talk with someone. But through this intervention, she came to control her impulse behavior and self-care in the area of food, activity & rest, solitude & social interaction. CNS talked with primary nurse in the unit and primary nurse talked with her this self-care on the daily base. Furthermore, CNS talked with multidisciplinary team regularly and shared with what was happening in the unit and talked to them psychodynamic assessment. And we tried to share with the treatment goal and we decided each role for this patient. Then CNS talked with her husband and CNS gave psychoeducation mental support to her husband and CNS and her husband talked how to respond to her and cope with her. Gradually her husband understood her behavior and he came to cope with her.

In this case, CNS could improve self-care ability of patient and group performance among multidisciplinary team. In Japan the role of CNS is to improve self-care ability, group performance and the function of organization or community. In the future, CNS can implement this work so quickly. And CNS can encourage discharge and successful community living among difficult patients in the near future.

The Case of CNS Under Disaster

Furthermore, psychiatric mental health CNS support for nurses. When nurses face with the disaster and crisis situation, CNS always support nurses. The following is the case of CNS role under disaster. As for health conditions after disasters, it is reported that chronic illnesses such as high blood pressure, diabetes, cardiovascular disease and cerebrovascular disease increase or worsen around one month after disasters, that there are 7-12% cases of post-traumatic stress disorder (PTSD) and depression in the chronic stage after a large-scale disaster such as the Great East Japan Earthquake and 2016 Kumamoto Earthquakes. Furthermore, the five major illnesses (hearth disease, cerebrovascular disease, malignant tumors, diabetes and mental disorder) worsen because of PTSR (Post-Traumatic Stress Response) or PTSD and depression. It is also reported that public officers, relief workers, and others take more leaves of absence or quit their jobs. However, while it is said that PTSR and depression make chronic illnesses worse, it is not clear what specific preventive programs can be formulated to stop people from quitting their jobs or taking leaves of absence, or to prevent the worsening of chronic illnesses, including how to provide such programs when there is a shortage of people and goods after disasters. Moreover, it is currently not clear how people can be trained to implement such preventive program, including the contents of the training.

Based on this study we can evaluate this program to prevent PTSR and depression among nurses after disaster and we can develop the intervention technique to promote self-care and to decrease high turnover rate after disaster. In the future Advanced Practice of Nurse (APN) including Certified Nurse Specialist (CNS), Nurse Practitioner (NP), Midwife, and Anesthesia Nurse will be able to make use of this special technique after disaster.

The purpose of this study is to develop a therapeutic intervention program to prevent the worsening of PTSR and depressive conditions that aggravate chronic illnesses tend to occur after disasters among nurses, and evaluate its effects. This time I will present the typical case for this study (Shiori Usami, et al.). An intervention program to prevent worsening PTSR and depressive state for about two hundred disaster survivors of Kumamoto Earthquake among nurses is implemented, with a same size control group which consists of nurses. This study gets permission from IRB of WHO and Kumamoto University (2209). Two days program is provided to the participants. This program was developed based on the experience of the Great East Japan Earthquake, and validity of the program was secured by previous research.

Day 1 program is to provide psychoeducation for participants and consultation to promote self-care among nurses. And Day 2 program is Psychodynamic group psychotherapy which is provided to each three group by Dr. Hidefumi Kotani (Institute of Psychoanalytic Systems Psychotherapy in Tokyo) and Shiori Usami, (Certified Nurse Specialist in Japan). Dr. Hidefumi Kotani is an expert of trauma treatment. Data is collected through questionnaire (Primary Care PTSD sheet, CES-D, SF-8 and DCTR) and it is written at the time of baseline and post-intervention.
Furthermore, Psychodynamic group therapies are recorded and they are analyzed by grounded theory approach to clarify the intervention techniques. We have analyzed the data quantitatively and qualitatively. This time we showed the case example. She was 46-year-old and she had worked as certified nurse at one hospital. After Kumamoto earthquake, she worked so hard because it was so busy after earthquake. And her boss was so strict to her. Six month later, she cried every day and depressed at night. She couldn’t eat and she didn’t sleep well. She couldn’t take care of her children. She divorced and she had to take care of her children by herself. Her friends worried about her and one of her friends took her to Certified Nurse Specialist. CNS implemented PAS Self Care Therapy (PAS-SCT) once per week and introduced her to dynamic group psychotherapy. Through this process, she expressed anger for her boss and earthquake, and gradually she started to talk her experience of two trauma, which was about earthquake and the other was about her boss.

After these interventions, she has started to work at hospital again. About her questionnaire, her Primary care PTSD, CES-D, SF-8 and DCTR (Dynamic Change of Trauma Response) have been improved. Now we can recognize the effect of this intervention. However, we need to analyze these data quantitatively and qualitatively. This research is funded by WHO Centre for Health Development (WHO Kobe Centre; WKC, Principle Investigator, Dr. Aiko Yamamoto) and this research is one part of "Development of Specific Care Strategies to Maintain and Recover among Survivors’ Health after disasters" [8].

*PAS-SCT (Psychoanalytic Systems Self-Care Therapy, PAS-SCT) is developed through self-care nursing intervention and crisis intervention for difficult patients who were taken charge of by CNS (Kotani et al.,). For difficult patients, this PAS-SCT is focus on unconscious or preconscious drive (libido, aggression) and desire. Then intentional self-care is delivered. That is to say that PAS-SCT is the deliberate process of Drive (libido/aggression) ⇒ Desire ⇒ Self-care Requisites (universal/developmental/health/education) ⇒ Self-care Goals ⇒ Selection of Action ⇒ Self-Determination ⇒ Action ⇒ Feedback in the patient. Furthermore, difficult patients need to be intervened to family or multidisciplinary team or organization as well as individual. Through these interventions, patients' self-care is improved or developed.

**CNS Effectiveness Through Research in Japan**

In Japan we need to show the effectiveness of CNS in the nursing society. And in order to reflect the reimbursement of CNS’s activity, we need the research outcome. This time I introduce three articles, which are (1) Liaison psychiatric nursing [4], (2) Modified Community Based Care Management, (3) Intervention study and Transition care Model by CNS [9], (4) PAS-Self Care Therapy. These studies were implemented to show the effectiveness of CNS in Japan [10].

**The Need of Liaison Psychiatric CNS For Development of Multidisciplinary Team.**

This study was to show the effectiveness of psychiatric liaison consultation team for the people with chronic illness in the general hospital. Psychiatric liaison consultation team was constructed by Certified Nurse Specialist (CNS), psychiatrist, clinical psychologist, nurse and social worker. Case manager was CNS and team intervened to the patients according to the standard of intervention by team. Intervention had been implemented by CNS mainly. Thirty-one patients who consented to this study were intervened by CNS and team between July of 2007 and Feb 2008. They had chronic illness which was SLE, cancer and other physical illness without mental illness. BPRS, GAF, LSP and SF-37 were written by CNS at the time of baseline before intervention and at the end time of intervention. Furthermore, patients wrote CES-D by themselves at the baseline and the end point of intervention. Those questionnaires were returned by mail. CSQ was written by patients at the end of intervention. Thirty-one patients had high depression score at the baseline and after intervention depressive state was improved. And they had lower SF-36 compared with that of the people who had chronic illness in another study. Furthermore, they needed to be supported psychosocially by CNS to prevent worse their symptom. And they had psychosocial needs and those needs should be intervened by interdisciplinary team. In conclusion, the role of CNS and interdisciplinary team were discussed in order to meet the patients’ needs to prevent worse their symptom in the general hospitals [11]. Based on this study, CNS presented the role of psychiatric mental health CNS in the hospitals and this was reflected into the reimbursement by the government.

**Modified Community Based Care Management (M-CBCM)**

This research was to prevent readmission among psychiatric patients and this study contributed to encourage patients to stay in the community. The purpose of this study was to examine the Modified Community-Based Care Management (M-CBCM) &IPS care model for psychiatric patients who readmitted psychiatric patients within three months of discharge. This study was conducted with the cooperation of a psychiatric hospital in Kyushu at which M-CBCM&IPS were provided to 41 schizophrenic patients from the time of their readmission to six months after discharge. The patients had been unstable both in their psychiatric symptoms and in self-care management. All were either readmitted within three months of their previous discharge or their hospitalization continued more than three months. Evaluations were made upon of readmission, discharge, three months and six months after discharge. Evaluations were based on indexes rating psychiatric symptoms, daily living skills, social functioning, family perceptions of the patient being a burden, Quality of Life (QOL) and work-rate.

The patients were divided into two groups: 18 patients (Group A) were provided M-CBCM&IPS and 23 patients (Group B) were...
provided only M-CBCM. Many of the patients of both groups lived with their families, with parents playing the major role in terms of family support.

Significant difference was not recognized between two groups regarding the Brief Psychiatric Rating Scale (BPRS), the Life Skills Profile (LSP), QOL and work-rate. However Significant improvements were recognized regarding BPRS, GAF, and FAS. And work-rate at the times of six month after the discharge were not recognized between two groups.

But patients in A-Group had high work-rate at the A type working house with that of B-Group. But many patients in both groups were working at B-type working house for psychiatric patients, not in the company.

These results were discussed from a viewpoint acknowledging the significance of M-CBCM&IPS, the necessity of finding and utilizing community resources, and the importance of transitional support from A-type working house to A-type working house [10].

**Intervention Study and Transitional Care Model By CNS**

The purpose of this study was to determine the effect of intervention by certified nurse specialist in psychiatric mental health nursing (PMHCNS) on depressive cancer patients. The randomized controlled trial design was used. Inpatients from three hospitals were randomly allocated into the intervention (n = 34) or control group (n = 37). Participants in the former group received PMHCNS intervention while control participants were given a booklet about self-management of depressive symptoms. The primary outcome was scores of depressions evaluated on the Patient Health Questionnaire (PHQ)-9 scale before and after intervention. PHQ-9 scores improved in both groups. As a result of 2-way ANOVA, there were significant interaction effects between the intervention and time in the scores. The result of the study provided evidence to support that PMHCNS intervention improves depression. Furthermore, CNS has provided transitional care (TC) for high risk patients who readmitted to the hospital many times after discharge (Kiyoka Nozue et al.,). Recently in Japan, the length of stay on admission is decreasing and community care is being promoted by the Health and Welfare ministry. Under this environment, Certified Nurse Specialists (CNSs) fill the role of Advanced Practice Nurses (APNs) focus on improving the quality of care for patients with illness. The purpose of this study is to describe the activities and outcome of CNSs as APN in Japan. This study carried out a literature review of original articles, research reports, and bulletins of each university published between 2009 and 2014. The number of literatures totaled 45, and they were analyzed qualitatively. CNS’ activities could be classified into the following two types: inpatient facility-based activities and outpatient/home care support activities.

**CNSs’ Activities for Inpatients:** CNS provided nursing care for patients who had complicated health problems. CNSs assessed the patients and families from holistic perspectives. And CNSs assessed the dynamics between the treatment team and the patient. And CNSs intervened in the medical needs by performing reassessing the patient’s complicated condition from holistic aspects, introducing effective care methods, and organizing an effective medical team. And as a result, patients’ symptoms, self-care, QOL, and the participation in treatment were improved after CNSs’ intervention.

**CNSs’ Outpatient/Home Care Support Activities:** CNSs were engaged in cases who had complicated health problems. CNSs assessed the patients from the viewpoint of holistic aspects and organized both present care and future care plans. CNSs helped the patient and family learn about how to manage disease. These CNS efforts contributed to improving the patient’s self-care, the family’s ability to cope with patient’s disease, and the home-care support staff’s ability to respond to various situations. Based on these results, it became clear that CNSs play an important role in providing safe and reliable medical care and promoting Transitional Care [12,13,14].

**The Development of PAS-Self-Care Therapy By CNS**

Based on the above studies and Orem-Underwood Self-care model, we APN including CNS has created Japan Nursing Society of PAS Self-Care Therapy (PAS-SCT). The following studies are based on the development of PAS-SCT [15]. The purpose of this study was to clarify the effectiveness and issues of the nursing intervention to self-care by Orem-Underwood Model, by testing it on 11 patients with acting-out diagnosed borderline personality disorder who were readmitted within three months of discharge. In this study, nursing intervention to self-care by Orem-Underwood Model were offered to the subject patients mainly by psychiatric CNS, in cooperation with UNIT nurses, and the CNS journals and care records of the patients were analyzed.

Regarding self-care requisites, two categories were extracted: [what patients want to become able to do by themselves] and [what patients want others to do for them]. The patients’ self-care goals set for these requisites were: [become able to have personal time], [become able to engage in their own activities intentionally], [become able to establish a life rhythm and structure their weekly schedule], [become able to get along with their husband, mother and children], and [control acting-out behaviors]. To help patients achieve these goals, the following nursing interventions were offered: [clarify the target of anger, encourage expression of anger and look for their desire under anger together], [encourage control of anger], [help patients improve activity-rest balance by making daily and weekly schedules], [provide positive feedback when patients can practice coping activities], [help patients take notice before acting-out occurs and become aware of the desire that lies behind acting-out, and discuss how to cope with it]. The results of this study indicate the effectiveness of the nursing intervention to self-care by Orem-Underwood Model in promoting successful community living for patients who are difficult to care for. However, four out of eleven patients had to admit to the hospital again after three-month later. The study has also revealed some issues, including the necessity of understand-
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These are the example of CNS in Japan. In Japan the graduate education for Nurse Practitioner (NP) has been started and NP will increase the number as well as CNS. CNS needs to develop our role more along with the needs of health problems in Japan.

References


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