The Characteristics of Self-care Ability and Self-care support for Successful Community Living among Schizophrenic Patients Readmitted within 3 months of Discharge, or with Continued Hospitalization of more than 3 months in M-CBCM.

Natsuki Shimozono[1], Shiori Usami[2], Yoko Nakayama[3], Kiyoka Nozue[4], Chisato Yano[5]

Abstract : The purpose of this study was to describe the characteristics of self-care ability & self-care support among 29 schizophrenic patients who received M-CBCM. These patients were either readmitted within three months of their previous discharge or their hospitalization continued more than three months. This study got the permission from Research Ethical Committee of Kumamoto University in 2009. Twenty nine patients were provided M-CBCM, but finally, they were divided into two groups. C-group (N=17) was able to live in the community for more than three months after discharge. But D-group(N=12) was either readmitted within 3 months of discharge. In C-group, significant improvements were recognized regarding self-care ability. Self-care ability and self-care support were analyzed qualitatively. In C-group, patients could make use of family support and they could learn from their experience. But in D-group, they had poor symptom & medication management, they were lack of insight to themselves, and they had poor impulsive control. Nurses provided individualized care for expected outcome in C-group, but there was unclear treatment goal in D-group. For patients' successful community living, nurses needed to set the goal and to spend time with patients for improvement of self-care ability which was needed in the community.

Key words : Schizophrenia, Self-Care support, Successful community living, Modified Community Based Care Management, Self-Care ability

I . Introduction

At present, the average duration of hospitalization of psychiatric patients in Japan is the longest in the world, 310.8 days. Of the total number, 60% are hospitalized for less than a year (a potential long-term hospitalization group) and the rest (40%) are hospitalized for longer than a year. The number of patients whose hospital stay is less than a year includes those who repeat hospitalization within 3 months after the last discharge and those who are hospitalized longer than 3 months.

Among today's psychiatric medical services,

1) Graduate School of Health Sciences, Kumamoto University 2) Faculty of Life Sciences, Kumamoto University
3) School of Nursing, Fukushima Medical University 4) School of Medical and Nursing, Keio University
5) Kikuyo Hospital
Corresponding author: Natsuki Shimozono, Email; natsuki_vinci@yahoo.co.jp

division in the functions of psychiatric hospitals is being promoted, and the number of the Acute-stage Care Unit and the Super Emergency Psychiatric Care Unit is increasing. At the same time, support for deinstitutionalization and community living is being emphasized. However, there are still many repeat readmissions shortly after discharge, and many patients who tend to prolong their hospital stay; both of which imply that deinstitutionalization and/or community living support is not working effectively.

On the other hand, Japan is facing a shortage of physicians and regional disparities in medical services. This shortage is severe enough that the government is promoting an increase in the number of physicians, role division, and teamed medical services involving the various medical professions[1]. In such an environment it is not surprising that experienced Certified Nurse Specialists (CNS) who have completed graduate school and are certified by the Japanese Nursing Association are very active in the field. The roles of the CNS includes direct care for psychiatric patients with severe mental illness, consultation with medical care staff members, education for improving the care quality of hospitals and the in-patient units, research study towards the improvement and maintenance of care quality, and mediate ethical issues when such matters arise. The role of any given CNS differs according to the individual institutional setting. In Japan at present, enlarging the scope of discretionary action of such advanced nurse practitioners as the CNS and attaining the right of professional discretion are being actively discussed in the medical service field. These caregivers, particularly psychiatric nurses who attend patients with serious symptoms attempting discharge and settlement in the community after the long hospital stays, are expected to play an important role[2].

Usami et al. modified the internationally recognized Community Based Care Management (CBCM) [formerly known as Intensive Care Management (ICM)] which focuses on discharge support and community settlement of patients who repeat admissions shortly after discharge and who are hospitalized for more than 3 months. The modification was based on a foundation of and thorough knowledge of the special features of psychiatric medical care and the results of prior research and studies. The Modified CBCM (M-CBCM) was conducted with subject patients and evaluated. Results clearly show a successful reduction of readmissions within 3 months of discharge, and improvement of social functioning ability and daily life skills of schizophrenic patients[3]. However, regarding self-care support which is an important function of psychiatric nursing; the actual self-care conditions or self-care support methods among the long-term hospitalization reserve group were not known well to us. This study, therefore, is intended to shed light on the self-care conditions of the long-term hospitalization reserve group and to gain a clearer understanding of the characteristics of self-care support in the M-CBCM.

The reserve group is defined as psychiatric patients with repeated admissions within 3 months of previous discharge, and those whose hospitalization is for more than 3 months, both of whom show similar or common properties as psychiatric patients

according to the results of our previous study[4].

Ⅱ. Review of Literature

1. Study Regarding Self-care of Psychiatric Patients

Regarding self-care of the patient, the Orem-Underwood Model was introduced in 1985, which was a modification of the Orem theory, and this has been widely practiced in Japan. The Underwood definition of self-care ability invoked knowledge, skills, repertoire of the skill set, decision-making, insight and judgment, and motivation of the individual. Underwood also defines self-care as the action of taking care of oneself using the ability to take care of oneself. She further stated that being able to make one's own decisions is also of utmost importance for psychiatric patients. It was called Self-determination. Self-determination by oneself means to identify one's own needs in daily life and to set the identified needs as goals of one's self-care. This ability is to act according to some selected goals. Thus, self-care ability is a series of intentional processes[5].

After the introduction of this definition, studies of daily living and the self-care of psychiatric patients slowly increased. Valimaki et al. interviewed 72 schizophrenic patients. These interviews formed the base on which self-determination was categorized using the grounded theory approach. They sorted the patients into two groups; namely (1) 'Psychiatric Patients with Self-Determination' - that is, they can conduct activities for themselves and they have a purpose for their actions, and (2) 'Patients with Limited Self-Determination' or 'Patients Lacking Self-Determination'[6].

McCann interviewed 9 psychiatric nurses on how to promote patient's self-care activities. In promoting self-care, McCann said that the important elements were (1) the nurse understands the purpose of the patient's actions, (2) reminding the patient to control himself/herself, and (3) to change the balance of the provided care and his/her self-care[7].

Studies on the self-care of psychiatric patients in Japan are frequently conducted from the viewpoint of the patients' needs and their QOL improvement. Ando elucidated the daily living needs of 219 out-patients based on the elements of universal self-care. The most common daily-living-related needs of the patients were to get a job (male patients) and the stabilization of symptoms and restoration of health (female patients). Regarding the professional help they receive, support from a psychiatrist was the top answer followed by the Life Support Center staff and nurses. Regarding support from the people around them - family was number one followed by friends and peers. As for what the out-patients are most careful about in self-care; the use of fire, keeping oneself presentable by bathing and washing one's face, and keeping clean[8].

Shimasawa conducted an interview survey of seven psychiatric patients living at home in order to better understand the behavioral structure of their self-care actions. The survey reported such commonalities as 'eating meals, cleaning, and bathing', 'symptom management', 'medication management', 'daily schedule management', 'money management',

'associating with others', 'spending time with family', 'health management', 'spending time on what is enjoyed', 'having something one can spiritually rely on', and ' making preparation for future'[9].

Furthermore, Usami elucidated the self-care actions of 71 Schizophrenic patients living in the community applying the Orem-Underwood Self-Care Model and Deci's theory on decision making as a research framework. The self-care behaviors of Schizophrenic patients living in the community fall into two categories: one involving the practice of self-care decided by the patient her/himself, and the other practicing a habitual self-care or imposed self-care. Patients practicing self-care under their own direction were in better mental health and their self-care decisions were influenced by symptoms. Further, they performed self-care for the purpose of improving their existential value and QOL. In addition, those patients were trying to control their symptoms while managing their daily lives, and they regarded the creation of a structured daily life as being significant. Even though each patient regarded different areas of daily life as more important, Usami reported that the selection of the important area by the patient was influenced by the length of associating with the symptoms, the seriousness of the symptoms, his/her social network, the psychological pain caused by the length of hospital stays and recurrences in the past[10].

2. Relation between the Efficacy of CBCM Abroad and the Self-Care of Psychiatric Patients

Since 1970, Intensive Care Management (ICM), a community living support system, was developed abroad as a way to meet the needs of psychiatric patients who experienced repeated hospitalization or recurrences of symptoms. This support system has been referred to as Community Based Case Management (CBCM) and has the same support content. Care/Case Management is one of the community care systems which helps psychiatric patients in the community take advantage of the diverse medical and social supports available for community living. They are designed to provide continuous comprehensive support - from physiological to mental to social. In particular, CBCM has been given to patients with a long hospitalization experience, those who have been re-hospitalized soon after their last discharge, those with repeat readmissions, frequent users of emergency units, those with severe addictions to drugs, and/or those having a criminal record. CBCM, being able to conduct crisis intervention in the community primarily through management of symptoms and medication, provides support with nursing care and psycho-therapy in the patients' homes as well as providing counseling, family therapy, daily living and job related support. Our experiences show that CBCM contributes to prolonging the patient's community living period. The details of support to the patients, the criteria of intervention, and the composition of the support team have not, however, been clarified.

Champney, Ruffolo, and Fransis respectively conducted comparative studies on the correlation between provisions of ICM to the patients and their symptoms, and their self-care abilities. They reported that ICM

improved symptoms and the self-care abilities of the patients as well as their feelings of satisfaction with the care they received[11)-13)]. However, the self-care of those who repeat hospitalization and the supporting methods to improve their self-care abilities have not been reported in details in the ICM studies.

Previous references recognize that Case Management of psychiatric patients improves their self-care. However, the actual self-care conditions of patients within a long-term hospitalization reserve group and the characteristics of self-care support of patients are not yet clearly reported.

3. Evaluation Studies of CBCM and M-CBCM in Japan

CBCM, known abroad for its efficacy, was carried out by Usami et al. with 33 Schizophrenic patients during the period from April, 2007 to March, 2008.[4)]. In this study, CBCM intervention helped in significantly improving psychiatric symptoms, daily life functioning, social functioning, and satisfaction levels of the patient between the times of discharge and three months following discharge. Comparing the duration of the patients' life in the community prior to last admission; with intervention the patients showed significant improvement (over three months) in the duration of home/community living. The content of intervention is, however, mostly support for stabilizing symptoms. Support is not yet sufficient in satisfying the needs and self-actualization of the patients, and social resources were not put into good use in the community setting. The patients continue to face a difficulty in forming social networks as well. Challenges remain in the pursuit of efficient support towards meeting the needs of patients.

Furthermore, Usami et al. created the Modified - CBCM (M-CBCM) to strengthen such points as providing patients a place to belong in the community[3)], social support, and patient's peer networks. Study and evaluation were then carried out.

The subjects of the M-CBCM were 29 Schizophrenic patients who were readmitted within three months after the previous discharge, or whose hospitalization was over three months. These patients were regarded as a long hospitalization reserve group. All agreed to take part in the study. M-CBCM evaluation were made on psychiatric symptoms, daily life functioning, social functioning, family attitude, and QOL at the times of re-admission, discharge, and three months after discharge. Seventeen out of the 29 (C Group, 58.8%) lived in the community more than three months after the last discharge, and 12 (D Group, 41.4%) either continued hospitalization or were re-admitted within three months after the previous discharge. This, being compared with data from abroad, was regarded as a successful intervention[3)]. Based on this study, M-CBCM were thought to be effective for these patients but it is not analyzed from the view point of self-care support. Therefore this study tries to analyze self-care support.

Ⅲ. Definitions of Terms

1. *Long-term hospitalization candidates* refers to Schizophrenic patients who were re-admitted within three months after the last discharge, or those patients who were

hospitalized for more than three months at the time of this survey.

2. *Self-care ability* means a series of intentional processes wherein a goal is set regarding the patients' self-care needs concerning symptoms, treatment, and daily living using the patients' knowledge, self-determination, repertoire of skills and techniques, and motivation. The patient selects items of action and acts on these selections in order to achieve the goal which is then evaluated.

3. *M-CBCM* means psychiatric care management for Schizophrenic patients which is modified in Japanese psychiatry.

4. *Self-care support* means nursing care for improvement of psychiatric patients' self-care ability.

Ⅳ. Method

1. Subjects

The subjects of the study were 29 psychiatric patients at K Psychiatric Hospital located in Kyushu and employing Psychiatric Certified Nurse Specialists (CNS). The patients and the hospital agreed to take part in the study. The patients included those who repeated admissions within 3 months of the previous discharge because of their symptoms and unstable self-care ability, and schizophrenic patients hospitalized for more than 3 months as of August 2009. The records of the subjects' self-care ability and self-care support were also included as the subject of this study, and all patients received support from the M-CBCM team.

2. Method

The M-CBCM was conducted between August 01, 2009 through March 31, 2010 with the patients and hospital mentioned above. The medical records of 29 Schizophrenic patients were analyzed qualitatively. And some researchers examined the validity of analysis.

3. Outline of M-CBCM as an Intervention

1) For CBCM overseas, psychiatric care management teams provide crisis intervention for patients from the time of their hospitalization to a period of 3 to 6 months after discharge. Regular psycho-therapy and home-visit nursing are offered more than once a week, however no clear standards were set for the performance of the intervention and time provided for care.

A multi-professional psychiatric care management team was formed with the chief out-patient unit nurse (full time) and a psychiatric CNS (part time) serving as psychiatric care managers at the time of the patient's admission.

The team held a care meeting biweekly and set a schedule of self-care support to be given once a week - each time for more than one hour - and interviewed his/her family once or more in two weeks during the patient's hospitalization. The goal of self-care support was for the patient to obtain those self-care abilities both needed and wanted by the patient after discharge. The biweekly care meeting after the patient's discharge was continued and intervention was made with home-visit nursing in addition to meeting with the patient in his/her community-living setting (for supporting reconstruction of community living and symptom control) - both at a rate of once or more per week.

Regarding family support, biweekly interviews

were provided to the family for the purpose of reducing psychological and physical stress, and for introducing and coordinating any needed social resources. Each interview lasted more than an hour.

Furthermore the following were added to the M-CBCM:

- Weekly small-group psychotherapy during the period from the admission to three months post-discharge. A psychiatric CNS joined in the group in order to strengthen the poor social networks of the patients,.
- Utilization of a Discharge-Promotion Support Advisor

A Discharge-Promotion Support Advisor was introduced as a social resource with the advisor consulting with the psychiatric care management team once every 2 weeks. At the same time human resources were sought in the community where the patient lived so as to better securing the patients living environs through physical and mental assistance. A Community Living Support Advisor (a psychiatric social worker) employed by the local government was selected as a Discharge-Promotion Advisor instead of one working for a hospital so as to more objectively examine social.

- Regular psychiatric care management team meetings

Psychiatric care management team meetings were held every two weeks and a support plan was made based on the needs of the patients and their families. Role and responsibility were then assigned to respective professionals. During the meetings, role performance of roles was evaluated, while, at the same time, it was discussed whether or not support relied too much on hospital resources rather than on community social resources. Meetings also examined whether the needs of the patients were being met.

4. Ethical considerations in research

Approval for the study came first from the Kumamoto University Graduate School Life Science Committee on Ethics Regarding Studies on Epidemiology, Etc. (Ethics No.331), and then from the K Hospital Committee on Ethics. Permission was also obtained at the commencement of the study from the subject patients hospitalized in K Hospital after the following information and conditions were given:

1) the purpose, significance, and method of the study,
2) the freedom to decide whether to participate in the study or not, and the freedom to withdraw from the study at any time,
3) there would be no disadvantages/punishments for not participating,
4) data from the study would be analyzed in such a manner as to ensure the privacy of the patients.
5) the results would be published in a medical journal in such a way that the identity of the participating individuals and institutions would not be revealed.

V. Results

1. Characteristics of subjects reported in the previous study, and comparisons between, before, and after intervention

Results of the M-CBCM involving the 29 subject patients have been reported. The average age of the subjects was 39.14 (SD±12.64), the average age of onset 22.79 (SD±9.

26), CP conversion value 666.82 (SD±309.49), total days of hospitalization to date 5.33 years (SD±6.49), 12 males (37.93%) and 17 females (58.62%). Twenty-five (86.21%) lived with their families and four (13.79%) lived alone. Twenty-seven (93.10%) received some support from their families, the main support coming from parent(s)-24 (88.89%)-followed by sibling(s)- 2 (7.41%).

Among the subject patients, 24 (85.89%) had held no job previously, 18 (66,67%) had utilized some type of community resources - home-visit nursing, 7 cases (41.18%), and day-care service, 7 cases (41.18%).

Table 1 Characteristics of subjects, symptom (BPRS: Brief Psychiatric Rating Scale), daily life skills/social functioning (GAF: Global Assessment of the Functioning, LSP: Life Skills Profile), family attitudes (FAS: Family Attitude Scale), and assessment of QOL

	Total (N=29)	GroupC (N=17)	GroupD (N=12)	U·χ2-test
Age	39.14 (SD±12.64)	35.82 (SD±7.44)	43.09 (SD±17.51)	P<0.05
Age of onset	22.79 (SD±9.26)	21.53 (SD±4.67)	25.09 (SD±13.98)	NS
CP conversion value	666.81 (SD±309.49)	665.00 (SD±304.16)	670.11 (SD±353.58)	NS
The total duration of hospitalization before admission (Years)	5.33 (SD±6.49)	3.08 (SD±2.51)	9.12 (SD±9.08)	P<0.05
The period of working in the past (Months)	5.86 (SD±17.66)	9.88 (SD±22.32)	2.88 (SD±3.14)	NS
Sex	Man 12 (41.38%)	6 (35.29%)	6 (50%)	NS
	Female 17 (58.62%)	11 (4.71%)	6 (50%)	
The reason why he/ she was readmitted*1	① 13 (44.83%)	① 8 (47.06%)	① 5 (41.67%)	NS
	② 16 (55.17%)	② 9 (52.94%)	② 7 (58.33%)	
Support from one's family members	Yes 27 (93.10%)	Yes 16 (94.12%)	Yes 11 (91.67%)	NS
	No 2 (6.90%)	No 1 (5.88%)	No 1 (8.33%)	
Major sponsors	Parents 24(88.89%)	16 (100%)	8 (72.73%)	NS
	Siblings 2(7.41%)	0 (0%)	2 (18.18%)	
	Other 1(3.7%)	0 (0%)	1 (9.09%)	
Past employment	Yes 4 (13.79%)	Yes 4 (25%)	Yes 0 (0%)	NS
	No 25 (86.21%)	No 12 (75%)	No 13 (100%)	
Utilization of social resources	Yes 17 (58.62%)	14 (93.33%)	3 (21.43%)	P<0.01
	No 9 (31.03%)	1 (6.67%)	8 (57.14%)	
	Unknown 3 (10.35%)		3 (21.43%)	
The content of social resources	Work place 3(17.64%)	3 (21.43%)	0 (0%)	NS
	Day-care service 7 (41.18%)	7 (50%)	0 (0%)	
	Home-visit nursing 7 (41.18%)	4 (28.57%)	3 (100%)	
Frequency of use of social resource in a week	2.75 (SD±1.44)	3.00 (SD±1.36)	1.00 (0.00)	NS
BPRS/ admission	64.59 (SD±15.05)	62.12 (SD±15.85)	68.80 (SD±13.28)	NS
BPRS/ discharge	42.29 (SD±13.98)	38.47 (SD±11.97)	39.55 (SD±12.07)	NS
BPRS/ 3 months after discharge	45.78 (SD±18.01)	41.00 (SD±15.31)	69.67 (SD±9.50)	P<0.05
GAF/ admission	37.41 (SD±11.88)	39.7 6(SD±11.28)	33.40 (SD±12.38)	NS
GAF/ discharge	47.74 (SD±14.03)	51.65 (SD±14.32)	41.10 (SD±11.25)	NS
GAF/ 3 months after discharge	50.11 (SD±13.98)	52.47 (SD±12.26)	38.33 (SD±18.93)	NS
LSP/ admission	102.89 (SD±17.84)	108.82 (SD±16.58)	92.80 (SD±15.82)	P<0.05
LSP/ discharge	113.96 (SD±11.89)	118.59 (SD±11.73)	106.10 (SD±7.37)	P<0.01
LSP/ 3 months after discharge	116.95 (SD±13.62)	119.41 (SD±13.29)	103.00 (SD±2.65	P<0.05
QOL/ admission	2.67 (SD±1.28)	3.03 (SD±1.47)	2.06 (SD±0.46)	P<0.01
QOL/ discharge	2.92 (SD±0.39)	3.07 (SD±0.27)	2.66 (SD±0.45)	P<0.05
QOL/ 3 months after discharge	2.97 (SD±0.29)	3.01 (SD±0.26)	2.72 (SD±0.43)	NS
FAS/ admission	54.25 (SD±8.16)	54.44 (SD±8.96)	53.88 (SD±6.81)	NS
FAS/ discharge	42.50 (SD±13.52)	40.94 (SD±13.60)	45.63 (SD±13.68)	NS
FAS/ 3 months after discharge	45.00 (SD±10.79)	43.75 (SD±10.80)	55.00 (SD±1.41)	NS

*1: ① There were troubles between patients and their families. ② Symptoms got worse.

Among the 29 patients, a comparison was made between those who could live in the community for more than 3 months (C group) and those who could not (D group). C group had 17 of the patients (58.62%) and D group had 12 (41.18%). The average age of C group was 35.82 yrs (SD±7.44), and age at onset 21.53 (SD±4.67). The CP conversion value was 665.00 (SD±304.16), and the total length of hospitalization 3.08 yrs (SD±2.51). The number of patients who used social resources was 14(93.33%). The average age of D group was 40.09 yrs (SD ±17.51), and age at onset 25.09 (SD±13.98) The CP conversion value was 670.11 (SD± 353.58), and the total length of hospitalization 9.12yrs (SD±9.08). And the number of patients who used social resources was 3 (21.43%).

A significant difference was recognized in the ages, total length of hospitalization and utilization of social resources($P<0.05$).: C group was younger and the hospital stay was shorter. Then C group could make use of social resources better than D group. Regarding family support, no significant difference was recognized with both groups receiving support from their families with the main support coming from parent(s). When symptoms, daily life skills/social functioning, and QOL were compared, a significant difference was seen in the symptoms at three months after discharge; in daily life skills at times of admission, discharge, and three months after discharge; and in QOL at time of admission and discharge ($P<0.05$). Both groups improved in daily life skills and also in QOL. At the three month point after discharge (regarding D group at the time of C group's discharge) a significant difference in symptoms and daily life skills was seen ($P<0.05$).

Regarding family attitudes, both groups exhibited values indicating high emotional levels, however, no significant difference was recognized. But Group C received support interventions for both patients and their families. This study led us to the realization that optimum utilization of all the social resources available to the community - including resources for those with disabilities and difficulties and not necessarily tailored for patients with psychiatric disorders - promotes a patient's stable settlement in the community after discharge from the hospital. The results are shown in Table 1. These quantitative results were reported and discussed in "The Japanese Journal of Nursing Research in 2011[3)].

2. Characteristics of self-care and self-care support

1) The needs and goals of self-care

The intention-based process of self-care was qualitatively analyzed. Both groups demonstrated strong self-care related needs and goals for "Want to be discharged and live in the community". This need was broken down into 'Want to live freely at home', 'Want to attend the workshop', and 'Want to live with one's parents'. The goals of self-care related needs were different from each group. The goals of C group patients were "Balance activities between home and outside", "Being able to sleep at night", "Refrain from violent acts and/or language", "Get along with family members", and "Maintain adequate symptom management". On the other hand, the D

group patients did not have any concrete goals regarding their self-care related needs and many of them just depended on the opinions of the parents or doctors.

2）Actions towards self-care goals

Actions towards self-care related goals differed. In C group, their choices of actions for "Balance activities between home and outside" were broken down into 'Go to day-care or workshop once or twice a week', 'Try to do shopping, etc. by oneself', and 'Try to have some time alone'. For "Being able to sleep at night", the choices of actions were broken down into 'Take medicine', 'Do not wander around at night', and 'Call a hospital instead of telling the family when the condition is bad'. For "Refrain from violent acts and/or language", the choices were broken down into 'Hold it in', 'Change the mood by going out', 'Do something enjoyable', and 'Talk to someone outside the family'. "Get along with the family members" was broken down into 'Listen to the family', 'Go out and talk with a friend', and 'Avoid being in the presence of an angry family member'. Actions for "Maintain good symptom management" included 'Take medicine proactively', 'Visit the outpatient ward regularly', and 'Exercise patience in continuing medication even if discontinued for a while'.

No efforts in behavioral self-encouragement were seen in D group. And, while C group actually performed some action choices and evaluated and revised their actions based on their evaluations, D group did not make an effort to reflect on their acts, though the reasons for not doing so remain obscure.

3）The general characteristics of self-care ability

The self-care characteristics of each group are "Strength of desire for discharge", "Recognition of the need for symptom control", "Insight into/judgment of oneself", "Ability to maintain a balance between activity and rest, and being alone and associating with others", and "Ability to utilize family support".

"Strength of desire for discharge" was divided into 'Strong desire to go home', 'Want to work', and 'Want to live with the family'. And "Recognition of the need for symptom control" was divided into 'Try to eliminate shouting and destructive acts', 'Notice the signs of a deteriorating condition', 'Maintain medication', 'Take temporary medications', and 'Contact the hospital'.

Then "Insight into/judgment of oneself" was divided into 'Understanding the reasons for hospitalization', 'Understanding the reasons for criticism from family members', and 'Ability to avoid becoming too tense'.

Furthermore "Ability to maintain a balance between activity and rest, and being alone and associating with others" involved 'Work at following daily or weekly routines', 'Make it a rule to sleep at night', and 'Be able to make adjustments in your times for being with others'.

"Ability to utilize family support" was divided into 'Being able to let the family know when it is hard' and 'Becoming able to talk with the family'.

The last "Ability to learn from mistakes and success" was divided into 'Control the behaviors which led to readmission', and 'Consciously engage in activities which help

maintain a good condition'.

These Results are shown in Tables 2 and 3.

4) Self-care support for Promoting Patient Self-Care Abilities

The following types of support to promote self-care were provided to patients of C group:

- "Self-care support for maintaining the present psychiatric condition, and general health care while living in the community" was broken down to 'Promote what the patient can do in his/her daily living', 'Maintain what he/she enjoys', and 'Find someone who can accept his/her present condition'.

Table 2 The characteristics about needs of self-care of each group, goals for one's self-care, and the choice of actions

Group C	
<Needs of self-care>	
(Category)	(Subcategory)
Want to be discharged and live in the community	Want to live freely at home
	Want to attend the workshop
	Want to live with one's parents
<Goals of self-care> ⟹	<The choice of actions>
Balance activities between home and outside	Go to day-care or workshop once or twice a week
	Try to do shopping, etc. by oneself
	Try to have some time alone
Being able to sleep at night	Take medicine
	Do not wander around at night
	Call a hospital instead of telling the family when the condition is bad
Refrain from violent acts and/or language	Hold it in
	Change the mood by going out
	Do something enjoyable
	Talk to someone outside the family
Get along with family members	Listen to the family
	Go out and talk with a friend
	Avoid being in the presence of an angry family member
Maintain adequate symptom management	Take medicine proactively
	Visit the out-patient ward regularly
	Exercise patience in continuing medication even if discontinued for a while

Group D	
<Needs of self-care>	
(Category)	(Subcategory)
Want to be discharged and live in the community	Want to live freely at home
	Want to attend the workshop
	Want to live with one's parents
<Goals of self-care>	<The choice of actions>
The D group patients did not have any concrete goals regarding their self-care related needs and many of them just depended on the opinions of the parents or doctors.	No efforts in behavioral self-encouragement were seen.

- "Support for the family assisting the patient's self-care" was broken down to 'Meet with the family regularly to reduce their feelings of guilt and burden', 'Uncover troublesome situations and discuss and practice dealing with the patient in those situations', and 'Find and take advantage of social resources which can support the family'.

- "Estimation of the self-care needed for the future, and regularly scheduled times with the patient to improve his/her self-care abilities" was broken down to 'Discuss and

practice impulse control and violent feelings', 'Discuss ways to share time with the family and ways to spend time alone', 'Make a schedule of activities', and 'Discuss and practice what to do when the patient's condition worsens'.

- "Arrangement of frequent times with the patient to reflect upon failures and successes, and helping the patient learn from these experiences" was broken down to 'Reflect on experiences of failure and success when the patient has spent the night away from hospital' and 'Confirm the relationship between symptoms and the daily living'.

Table 3 The self-care characteristics of each group are related discharge and community living

Category	Subcategory
Strength of desire for discharge	Strong desire to go home
	Want to work
	Want to live with the family
Recognition of the need for symptom control	Try to eliminate shouting and destructive acts
	Notice the signs of a deteriorating condition
	Maintain medication
	Take temporary medications
	Contact the hospital
Insight into/judgment of oneself	Understanding the reasons for hospitalization
	Understanding the reasons for criticism from family members
	Ability to avoid becoming too tense
Ability to maintain a balance between activity and rest, and being alone and associating with others	Work at following daily or weekly routines
	Make it a rule to sleep at night
	Be able to make adjustments in your times for being with others
Ability to utilize family support	Being able to let the family know when it is hard
	Becoming able to talk with the family
Ability to learn from mistakes and successes	Control the behaviors which led to readmission
	Consciously engage in activities which help maintain a good condition

*The underlined parts were shown especially C group and the parts of the wavy line were shown especially D group.

The self-care support characteristics of D group were:

- "An inability to choose self-care directions because of a seemingly overwhelming number of needs" was broken down to 'Symptoms drastically change", "Self-care ability is too low', 'Symptoms cannot be managed alone', and 'Behavior patterns are erratic'.

- "An inability to get family support to compensate for the lack of self-care abilities of the patient" was broken down to 'Lack of progress towards the patient's discharge because of unrealistic expectations from the family', 'Mental conditions within the family itself are not favorable', and 'The patient's idea of the family is so fixed that alternative plans are not accepted'.

- "Fragmentary support and lack of commitment and unity within the treatment team" was broken down to 'Conference participation by all sections of the team is counterproductive', 'Team sections fail to take responsibility even after roles are assigned in conference', 'Concern of in-patient nurses regarding post-discharge living is low', and 'There is poor collaboration among the in-patient unit, out-patient unit, and community-based support staff'.

The self-care supports for promoting patient self-care abilities were different from each group.

Support for promoting patients self-care were "Self-care for maintaining the present

psychiatric condition, and general health care while living in the community", "Support for the family assisting the patient's self-care", "Estimation of the self-care needed for the future, and regularly scheduled times with the patient to improve his/her self-care abilities", and "Arrangement of frequent times with the patient to reflect upon failures and successes, and helping the patient learn from these experiences".

On the other hand, the self-care support characteristics of D group were "An inability to choose self-care directions because of a seemingly overwhelming number of needs", "An inability to get family support to compensate for the lack of self-care abilities of the patient", and "Fragmentary support and lack of commitment and unity within the treatment team".

The results are shown in Table 4.

Table 4 The characteristics of support to promote self-care

Group C	
Category	Subcategory
Self-care support for maintaining the present psychiatric condition, and general health care while living in the community	Promote what the patient can do in his/her daily living
	Maintain what he/she enjoys
	Find someone who can accept his/her present condition
Support for the family assisting the patient's self-care	Meet with the family regularly to reduce their feelings of guilt and burden
	Uncover troublesome situations and discuss and practice dealing with the patient in those situations
	Find and take advantage of social resources which can support the family
Estimation of the self-care needed for the future, and regularly scheduled times with the patient to improve his/her self-care abilities	Discuss and practice impulse control and violent feelings
	Discuss ways to share time with the family and ways to spend time alone
	Make a schedule of activities
	Discuss and practice what to do when the patient's condition worsens
Arrangement of frequent times with the patient to reflect upon failures and successes, and helping the patient learn from these experiences	Reflect on experiences of failure and success when the patient's has spent the night away from hospital
	Confirm the relationship between symptoms and the daily living

Group D	
Category	Subcategory
An inability to choose self-care directions because of a seemingly overwhelming number of needs	Symptoms drastically change
	Self-care ability is too low
	Symptoms cannot be managed alone
	Behavior patterns are erratic
An inability to get family support to compensate for the lack of self-care abilities of the patient	Lack of progress towards the patient's discharge because of unrealistic expectations from the family
	Mental conditions within the family itself are not favorable
	The patient's idea of the family is so fixed that alternative plans are not accepted
Fragmentary support and lack of commitment and unity within the treatment team	Conference participation by all sections of the team is counterproductive
	Team sections fail to take responsibility even after roles are assigned in conference
	Concern of in-patient nurses regarding post-discharge living is low
	There is poor collaboration among the in-patient unit, out-patient unit, and community-based support staff

VI. Discussion

In both group, a significant difference was recognized in the ages, total length of hospitalization and utilization of social resources: C group was younger and the hospital stay was shorter. Then C group could make use of social resources better than D group. However, in both group, there was no significant difference about symptoms, social functioning and the amount of medication at the time of admission. It was thought that the patients of C group were easy to adapt

the situations because of their young age.

When a comparison was made of C group members who were able to lead lives in their community for three months or longer and D group members who could not, the desire for discharge and community living was very strong in both groups. However, C group had clear and concrete goals for their self-care, were able to utilize the support of their family well, and were able to learn from their failures and successes.

As for the health care aspect of patients living in the community, the patients made time and effort to meet those self-care needs after discharge. Families were able to help when the patients' self-care was not successful, and were supportive in making time with the patients to reflect upon failures and successes.

McCann has said that critical factors in promoting self-care among psychiatric patients (based on their self-decision) are that the nurse must understand the goals of the patient, encourage the patient's self control, and shift the balance between the care the patient receives and the patient's self-care[7]. Furthermore, Shimasawa et al. reported that the identifying characteristics of psychiatric patients able to maintain life at home are found in: symptom and medication management; ways of spending time and/or associating with family and friends; and the ability to prepare for future possibilities while having something that can be relied on psychologically[9]. Usami also reported that psychiatric patients who are living in the community are able to manage their symptoms and medication and maintain a social network. She also reported that the psychological pain they experienced in past hospitalizations and recurrence of the disease is linked in some way with the ability to maintain community living[10].

The results of this study also indicate that in C group the nurse worked with the patient to achieve the goal of developing, through practice, the self-care skills needed after discharge. Thus, support was given on a practical level and encouraged the patient's learning. In D group, although showing no significant difference in symptoms or medication, the same or similar nursing approach was not found.

According to Sueyasu et al. the critical points for transitional support towards community living are: Deciding the case-based support direction, and creating, through frequent nurse visits, an image of the patient's community life after discharge[14]. Inoue et al. has stated that the linkage of 'group support' and 'individual support' along with seamless collaborative support by the community support staff and hospital staff are the key factors of successful discharge support[15].

Characteristic of support for D group - whose members remained hospitalized continuously or failed to live in the community for more than three months after discharge - was that the support staff could not imagine a successful post-discharge life for the patient due to his/her unstable psychiatric condition and low self-care skills, and a failure to empower family members needed to support the patient. In addition it was thought that although the support team did hold discussions, their individual case-based support was insufficient.

From these findings it is suggested that to

produce results as successful as C group, it is necessary to not only form a psychiatric care management team from the time of a patient's admission, but to also make an assessment and build a support program that draws a positive and realistic image of the post-discharge life of the patient. For patients for whom it is difficult to provide discharge support, Inoue et al. said that mutual support among patients as well as support by the staff can increase the motivation of the patient[15].

It is our understanding that mindset change among the medical staff, improvement of a patient's motivation, support of a patient's family and the supporters of the patient, and empowerment of the psychiatric care management team are all necessary during the early stages of a case.

The number of the subject patients in this study was small and there is a limit to generalizing these results, therefore in the future it will be necessary to increase the number of subject patients. We also recognize the importance of further discussing and improving the support protocols of community living based on the results obtained through this study.

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