

# The effectiveness of increasing interest to community resources and improvement of self-efficacy towards hospital discharge

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Key words : mental disorder, community resources, self-efficacy, social hospitalization, interest

## Abstract

**Background:** As for present conditions, prolongation of hospitalization seems to continue socially. Towards shift to community life, it was thought that it was necessary to raise a feeling of self-efficacy for hospital discharge following confidence towards community life.

**Objectives:** Inpatients in a private psychiatric hospital open ward who have mental disorder was set. An exhibit was carried out this time to community resources, thus increased interest towards community resources and examined the effectiveness to the improvement of self-efficacy towards hospital discharge.

**Methods:** Who hoped for a visit to community life support center and participated in an exhibit were 10 people and they are intervention group. who neither hoped for a visit nor participated in an exhibit were 10 people and they are control group. After doing a preliminary questionnaire (self-administered) on both groups, only the intervention group placed an exhibit into effect. After that, subsequent questionnaire (self-administered) was performed on both groups.

**Results:** Interest towards work center was described. In preliminary questionnaire between both groups, significant difference wasn't recognized ( $p=0.807$ ), but in subsequent questionnaire, it resulted that interest degree was significantly higher in intervention group

( $p=0.033$ ) compared to control group.

Interest towards community life support center was described. In preliminary questionnaire, significant difference wasn't recognized in both groups ( $p=0.514$ ), but in subsequent questionnaire, it resulted that interest degree was significantly higher in intervention group compared to control group( $p=0.003$ ).

Consciousness about hospital discharge was described. The significant difference between two groups wasn't recognized before and after exhibit (before exhibit:  $p=0.282$  / after exhibit:  $p=0.935$ ).

**Conclusion:** Exhibit was effective in increasing interest to community resources. For hoping to discharge from hospital bringing about change, new networks supporting life and introduction of dwellings are needed.

## Introduction

As for the country's mental health care welfare policy entitled [Shift from hospitalized medical treatment to living in the community], an action to break off social hospitalization was demanded.

In the visions in reform of mental health and medical welfare of September, 2004 about [the patient who was already hospitalized for more than one year, depending on the condition and intention of the person himself and, under medical treatment and collaboration of

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community life support system, it was done step-by-step to promote a shift to community life premeditatedly<sup>1)</sup>], but, as for present conditions, prolongation of hospitalization seems to continue socially<sup>2)~6)</sup>.

For a mental patient, it was pointed out that lack of confidence to community life disturbed a comeback to normal life<sup>7)8)</sup>, and towards shift to community life, it was thought that it was necessary to raise a feeling of self-efficacy for hospital discharge following confidence towards community life. However, among inpatients, it seemed there were many people who didn't know and those who had little interest on community resources<sup>9)</sup>, it was thought that these conditions lowered self-efficacy for hospital discharge<sup>10)</sup>.

Therefore, an exhibit was carried out this time to community resources, thus increased interest towards community resources and examined the effectiveness to the improvement of self-efficacy towards hospital discharge. And an investigation was performed to a cognitive degree in community resources totally.

## Study Method

### 1. Target person

Among one of the places in a private psychiatric hospital open ward inpatients in A City was set. Those who hoped for a visit to community life support center and participated in an exhibit were 10 people and they are intervention group. Those who neither hoped for a visit nor participated in an exhibit were 10 people and they are control group.

### 2. Data Collection Method

After doing a preliminary questionnaire (self-administered) on both groups, only the intervention group placed an exhibit into effect. After that, subsequent questionnaire (self-administered) was performed on both groups. In addition, preliminary questionnaire and subsequent questionnaire were performed within 4 weeks around the exhibit working date.

Again, as the target person's background, age, gender, and last hospitalization time, 1 day dose of antipsychotic drugs (chlorpromazine amount based) were investigated from medical examination record.

### 3. Method of Exhibit

For intervention group, an orientation before the exhibit was held. Visiting facilities were explained easily by an explanatory meeting. It was discussed to those who wanted to question in case of an exhibit. In the exhibit, work center and community life support center's 2 places were visited. Visiting time was about 1 hour. In the end, At a cafe that the users of work center worked, intervention group had lunch. During the exhibit, number of attendant staff was 3. Public utility bus was used for transportation.

### 4. Contents of Questionnaire

As Contents of questionnaire, a total of 3 items. For each item, 4 choices were categorized from 1 to 4, and 4 choices were scores as follows; choice 1 was pointed 1, choice 2 was pointed 2, 3 pointed 3, 4 pointed 4.

Investigation on awareness of community resources (initial questionnaire only) was on location of hospital where the target person was hospitalized and available community resources and system. Method of choosing from 4 choices was used - [1.I had used before] [2.I had experienced /visited] [3.I know the name] [4.I don't know]. In addition, community resources and system gave availability in the community with the hospital where target person was hospitalized.

About interest towards work center and community life support center, method of choosing from 4 choices was used - [1.I want to use it] [2.I am very much interested] [3.I am interested a little] [4.I don't want to use it].

On consciousness towards hospital discharge, method of choosing from 4 choices was used. The choices were [1.I think I can be discharged from the hospital and I want to discharge from hospital]

[2.I think I can be discharged from hospital but I don't want to discharge from hospital] [3.I want to discharge from hospital but I think I can't be discharged from hospital] [4.I think I can't be discharged from hospital and I don't want to discharge from hospital]. And it was assumed through this investigation that consciousness towards hospital discharge was high in the above-mentioned choices. In addition, a free entry column was provided for the reasons why the choices were chosen as they were.

Finally, after participating in the exhibit, exhibit group wrote their impressions freely on the column in the subsequent questionnaire.

#### 5. Analysis Method

A comparison was performed between intervention group and control group. The comparison followed the background of target person, before and after exhibit of interest towards work center, community life support center and consciousness towards hospital discharge. For target person's background index, t-test was used and besides the index, Mann-Whitney's U Test was used. Statistical software SPSSver11.0 was used for analysis.

#### 6. Ethical Consideration

In this investigation, purpose of target person's main investigation and research was held explaining it orally and consent was taken. Privacy protection was obeyed on obtained results, and explained that personal anonymity was secured.

### Results

#### 1. Comparison of Background Index (Table 1)

As for average age, significant difference wasn't recognized in both groups ( $p = 0.410$ ). Short tendency could be recognized to intervention group significantly in the last hospitalization time ( $p = 0.016$ ). Antipsychotic drugs 1 day dose couldn't recognize a significant gap between the two groups ( $p = 0.669$ ).

#### 2. Awareness of community resources (Table 2)

In intervention group, more than half answered they didn't know about welfare home, group home, community life support center, work foster system, outpatient occupational therapy and visiting nursing at home. In control group, more than half also answered they didn't know about above-mentioned support and system as well as work center, workshop and public job placement office desk for the handicapped.

#### 3. Interest towards work center and community life support center (Table 3, 4)

Interest towards work center was described. In intervention group, comparing with preliminary questionnaire, increased interest was 5 persons (50%), no change was 3 persons (30%), rest was 2 persons (20%). In control group, increased interest was 0 persons (0%), no change was 6 persons (60%), rest was 4 persons (40%).

In preliminary questionnaire between both groups, significant difference wasn't recognized ( $p = 0.807$ ), but in subsequent questionnaire, it resulted that interest degree was significantly higher in intervention group ( $p = 0.033$ ) compared to control group. Between preliminary and subsequent questionnaire, significant difference wasn't recognized in both groups (intervention group:  $p = 0.380$ , control group:  $p = 0.063$ ).

**Table 1. Background of Target Person**

	Intervention Group	Control Group	p Value
Number of target people	10 (7 males 3 females)	10 (8 males 2 females)	-
Average age	50.1±12.9	54.6±10.9	0.410
Last hospitalization	4.8±4.9 years	13.8±9.3 years	0.016
CPZ conversion 1day dose	376.4±456.4mg/ day	453.7±325.4mg/ day	0.669

**Table 2. Cognitive degree of community resources**

	Intervention group(n=10)				Control group(n=10)				p Value
	I had used before	I had experienced /visited	I know the name	I don't know	I had used before	I had experienced /visited	I know the name	I don't know	
Work foster system	0(0%)	0(0%)	0(0%)	10(100%)	0(0%)	0(0%)	0(0%)	10(100%)	p=1.000
Welfare home	0(0%)	1(10%)	2(20%)	7(70%)	0(0%)	0(0%)	2(20%)	8(80%)	p=0.684
Community life support center	0(0%)	1(10%)	2(20%)	7(70%)	0(0%)	0(0%)	2(20%)	8(80%)	p=0.684
visiting nursing at home	0(0%)	0(0%)	4(40%)	6(60%)	0(0%)	0(0%)	3(30%)	7(70%)	p=0.739
Group home	0(0%)	1(10%)	3(30%)	6(60%)	0(0%)	0(0%)	2(20%)	8(80%)	p=0.436
Outpatient OT	1(10%)	2(20%)	1(10%)	6(60%)	1(10%)	0(0%)	2(20%)	7(70%)	p=0.631
Handicapped job center	0(0%)	0(0%)	6(60%)	4(40%)	0(0%)	0(0%)	6(60%)	4(40%)	p=1.000
Work center	1(10%)	1(10%)	4(40%)	4(40%)	0(0%)	0(0%)	1(10%)	9(90%)	p=0.052
home helper	1(10%)	1(10%)	4(40%)	4(40%)	0(0%)	1(10%)	5(50%)	4(40%)	p=0.796
Workshop	3(30%)	0(0%)	3(30%)	4(40%)	2(20%)	0(0%)	1(10%)	7(70%)	p=0.315
Support dormitory	3(30%)	2(20%)	3(30%)	2(20%)	0(0%)	0(0%)	6(60%)	4(40%)	p=0.143
Public job placement office	3(30%)	0(0%)	5(50%)	2(20%)	0(0%)	0(0%)	5(50%)	5(50%)	p=0.089

**Table 3. Interest towards work center**

	Intervention group(n=10) <sup>†</sup>				Control group(n=10) <sup>§</sup>				p Value
	I want to use it	I am very interested	I am interested a little	I don't want to use it	I want to use it	I am very interested	I am interested a little	I don't want to use it	
initial questionnaire	0(0%)	1(10%)	6(60%)	3(30%)	1(10%)	2(20%)	3(30%)	4(40%)	p=0.807
subsequent questionnaire	1(10%)	2(20%)	5(50%)	2(20%)	0(0%)	0(0%)	4(40%)	6(60%)	p=0.033

<sup>†</sup>Intervening group : a comparison between initial and subsequent p=0.380

<sup>§</sup>Contrasting group : a comparison between initial and subsequent p=0.063

**Table 4. Interest towards community life support center**

	Intervention group(n=10) <sup>†</sup>				Control group(n=10) <sup>§</sup>				p Value
	I want to use it	I am very interested	I am interested a little	I don't want to use it	I want to use it	I am very interested	I am interested a little	I don't want to use it	
initial questionnaire	1(10%)	1(10%)	7(70%)	1(10%)	1(10%)	2(20%)	3(30%)	4(40%)	p=0.514
subsequent questionnaire	4(40%)	3(30%)	3(30%)	0(0%)	1(10%)	1(10%)	0(0%)	8(80%)	p=0.003

<sup>†</sup>Intervening group : a comparison between initial and subsequent p=0.047

<sup>§</sup>Contrasting group : a comparison between initial and subsequent p=0.276

Next, interest towards community life support center was described. In intervention group, increased interest was 6 persons (60%), no change was 3 persons (30%), rest was 1 person (10%) compared to preliminary questionnaire. In control group, increased interest was 1 person (10%), no change was 5 persons (50%), rest was 4 persons (40%).

In preliminary questionnaire, significant difference wasn't recognized in both groups

(p=0.514), but in subsequent questionnaire, it resulted that interest degree was significantly higher in intervention group compared to control group(p=0.003). And in intervention group, it resulted that interest degree was significantly higher in subsequent questionnaire compared to preliminary questionnaire (p =0.047).

In control group, between preliminary and subsequent questionnaire, significant difference wasn't recognized (p=0.276).

4. Consciousness about hospital discharge (Table 5)

The significant difference between two groups wasn't recognized before and after exhibit (before exhibit:  $p=0.282$  / after exhibit:  $p=0.935$ ). In addition, there was no significant difference between preliminary and subsequent questionnaires in both groups (intervention group:  $p=0.276$ , control group:  $p=1.000$ ).

Answers and reasons of consciousness towards hospital discharge are indicated in Table 6. One very visible in answers and reasons was that it was opinion of family and relatives. From then, it was visible from preliminary and subsequent questionnaires placed together, had 9 (among 18 answers) in intervention group, and 7 (among 16 answers) in control group. Next one which was visible was the problem of dwelling. With this, it was visible from preliminary and subsequent questionnaires placed together, had 2 (among 18 answers) in intervention group, and 4 (among 16 answers) in control group.

5. Impressions from those who participated the exhibit

About work center, there were [atmosphere is good] [calm down] [well-turned work] [beautiful] [too hard] [price is expensive] [if I were young, I'd like to use it] and others. In addition, answers to [be slightly strict with oneself] that [felt that I was unsuitable] was also visible. About community life support center, answers to [I can use it freely] [looks happy] [far] [costs money] [good for after work] [I want to play table tennis] [I want to go] [good for fun] were visible.

**Discussion**

First, cognitive degree of community resources was considered. In this investigation, about more than half of facilities and systems, more than half of target persons didn't know. Awareness of community resources can be called low result. On a mental patient's community support, this is a future problem in Japan. Support for past hospital discharges and community resources had

**Table 5. Consciousness towards hospital discharge**

	Intervention group(n=10) <sup>†</sup>				*	Control group(n=10) <sup>§</sup>				p Value
	A	B	C	D		A	B	C	D	
initial questionnaire	3(30%)	0(0%)	7(70%)	0(0%)		2(20%)	1(10%)	6(60%)	1(10%)	$p=0.282$
subsequent questionnaire	3(30%)	1(10%)	5(50%)	1(10%)		1(10%)	0(0%)	6(60%)	3(30%)	$p=0.935$

<sup>†</sup>Intervening group : a comparison between initial and subsequent  $p=0.276$

<sup>§</sup>Contrasting group : a comparison between initial and subsequent  $p=1.000$

\* A. I think I can be discharged from hospital and I want to discharge from hospital

B. I think I can be discharged from hospital but I don't want to discharge from hospital

C. I think I can't be discharged from hospital but I want to discharge from hospital

D. I think I can't be discharged from hospital and, I don't want to discharge from hospital

**Table 6. Answer and reason of consciousness towards hospital discharge**

	Intervention group	Control group
Opinion of family and relatives, relation to family ( Family hopes for hospitalization ) ( There is no acceptance / others )	9/18 answers(50%)	7/16 answers(44%)
Dwelling problem ( House or doesn't have apartment ) ( There is no place to live in / others )	2/18 answers(11%)	4/16 answers(25%)
Others ( Illness isn't yet cured ) ( May be able to leave hospital or uneasiness/others )	7/18 answers(39%)	5/16 answers(31%)

insufficient conditions<sup>1)-6)</sup>. The chance to introduce community resources seemed little, leading to the decrease in the awareness for it. As for hospitalized mental patient, information about community resources and images were poor, and it was said that technique to make up for it was necessary<sup>4)</sup>. It seemed that the exhibit was a good opportunity for target person to know social resources.

Second, interest for community resources was considered. After the exhibit, both work center and community life support center, other than intervention group, interest resulted significantly high compared to control group. From this result, exhibit was effective in increasing interest to community resources. Work center and community life support center, which were this time's visiting facilities, were places where work and life after hospital discharge were being supported. From this result, even if hospitalized, visiting experience to these facilities became orientation of life after hospital discharge. And it was suggested it was useful enough as an opportunity to have interest towards life after hospital discharge. On the other hand, in control group which didn't participate in exhibit, it resulted that comparison before and after for both work center and community life support center, persons who answered [I don't want to use it] increased. We can then say that it was thought of as the reason. By this investigation, we placed an interval of about 1 month to the target person and asked twice about use of community resources. As a result, they might have thought "If I answer [I want to use it], Am I made to use it ?", and the thought caused a vague sense of uneasiness. In intervention group, such tendency was not looked at. With this, it could decrease such feeling of anxiety in acquiring an actual visiting experience.

Third, consciousness towards hospital discharge was considered. It was said therefore that some kind of actions really occurred when it was not only necessary knowledge and skill, but a

high feeling of self-efficacy was needed<sup>11)</sup>. Feeling of self-efficacy is a concept to express personal conviction whether a person thinks that he can carry it out on a certain action. A substitute experience to observe the action of another person as one method to create a feeling of self-efficacy was achieved<sup>12)</sup>. To observe the person using community resources actually through an exhibit raised own feeling of efficacy towards hospital discharge. And for raising the feeling of self-efficacy towards hospital discharge, it could be connected that there was hope that [I can be discharged from hospital] and [I want to discharge from hospital]. However, about consciousness towards hospital discharge, significant difference between both groups interval didn't recognize together before and after the exhibit. In addition, significant difference wasn't recognized either between preliminary and subsequent questionnaires in both groups. From this result, this visiting experience didn't reach to let consciousness towards hospital discharge change.

From the questionnaire, target person who couldn't be discharged from hospital, or giving [I don't want to do] as a reason, opinion from family and receiving destinations were not available and that there was no dwelling, were also very visible. Families of long-term inpatients getting old were also many. And malfunction of personal network by long-term hospitalization was thought about. With these, for those hoping to discharge from hospital bringing about change, new networks supporting life and introduction of dwellings are needed. In other words, it was suggested that opportunities connecting dwellers in community and community staffs, exhibit to group home, welfare home and others were needed. In addition, it was said that restoration of relations with family was necessary for a comeback to normal life by long-term inpatients<sup>13)</sup>. And from this result too, it was indicated that relations with family act as an obstacle towards hospital discharges. For hospital discharge support,

spending time with family and also for family, it was very important to think concretely for life in the community.

In addition, it was also thought that for people with mental disorder, one may give up satisfaction in life, [independence of will] was threatened by big social disadvantage to pass for a long term<sup>13)</sup>. Otsuka, et al pointed out that in this case, a general feeling of self-efficacy and self-respect had a more important meaning. not only self-efficacy of hospital discharge but also there was the necessity to examine these things. And this time, non-control group was being laid out by the presence of one's own request to an exhibit with intervention group. Therefore, it seemed there was possibility that difference occurred when general feeling of self-efficacy was examined. In addition this time, comparing those who hoped to join the exhibit (intervention group), and those who didn't hope to join (control group) last hospitalization time was significantly short. Feeling of self-efficacy to [social life], as long as hospitalization time was long, was said to be low<sup>7)</sup>, and those who hoped to participate in exhibit by presence of target persons' lay out has thought to have caused bias.

A group performed this exhibit. One of the effect of group was mass application. Mass application is application of the group which gathered people and focused its primary objective on the effect of performed number, and being relieved in the group, it was expected that by doing the same thing at the same time in a lot of people saved a lot of time<sup>14)</sup>. It was said that falling into institutionalism, patients [lose motive and confidence], [for a suggestion into entering community life, feeling of uncertainty was produced] [according to loss of responsibility to one's own life, anxiety was produced, and created dependence towards safe hospital environment]<sup>2)</sup>. When one participated in community rehabilitation activity with a sense of security, for such patients, experiencing it by group seemed to

be effective as one aided way.

Life in community could stand as a starting line only after there was hope of wanting to [spend independent hope in a community] by the person himself<sup>15)</sup>. Therefore, it was expected that what developed was the new program that such an experience activity applied more to community life. Not only medical institution staffs but also community staffs from hospitalization time, have to assist the patient and the family in having their vision and hope for the life after hospital discharge.

## References

- 1) Ministry of Health, Labour and Welfare Mental Health Welfare Task Force: Visions in reform of mental health and medical welfare. 2004
- 2) Kageyama M: Trial action towards mental patient's cancellation of social hospitalization through collaboration by private sector and administrative regional system construction. HEALTH CARE 48: 175 - 183, 2006
- 3) Nishio M: For cancellation and prevention of long stay. The Japanese of Occupational Therapy for Mental and Cognitive Disorder 2: 362 - 366, 2005
- 4) Takahashi Y: About a mental patient's discharge promotion support business in Osaka. Journal of Japanese Association of Psychiatric Hospitals 23: 29 - 35, 2004
- 5) Kuwabara H: The present conditions and the problem of independence support medical care. Psychiat neurol Jap.108: 854 - 859, 2006
- 6) Sakuma K: Psychiatric community medicine and mental patient independence support law. Psychiat neurol Jap. 108: 860-866
- 7) Wing JK, Morris B: Handbook of Psychiatric Rehabilitation Practice. Oxford University Press, Oxford, 1981 (Takao Takagi supervising the translation: Mental disorder

- rehabilitation. Iwasaki Gakujutu Shuppansya 1989)
- 8) Okawa N, Oshima I, Cho N, Makio H, Oka I, Ikebuchi E and Ito J: The development of the feeling of self-efficacy standard (SECL) for the community life of the person with schizophrenia. *CLINICAL PSYCHIATRY* 43: 727 - 735,2001
  - 9) Amagai N, Shibata H and Otsuka M: From the practical use situation of social resources of a mental patient sending community life and comparison with an examination - halfway house user about life consciousness and daycare user -. *The Papers Of The Japan Society of Nursing* 37: 223 - 225, 2006
  - 10) Kawata M, Okamura T: The Role of Workplace of Supports Life in a Community. *The Niigata Journal of Health and Welfare* 6: 51 - 56, 2006
  - 11) Lee C: Self-efficacy and behaviour predictors of subsequent behaviour in assertiveness training programme. *Behav Res Ther* 21: 225-232,1983
  - 12) Sakata M, kenma M, Sakuraba S, Nemoto H, Matushita M and Yamane H: Mental nursing essence peer. Nakayama Shoten, Co., Ltd, 2004
  - 13) Kayama A, Kobayashi M, Tsurumi T edition: From mental disorder occupational therapy - acute period supporting life to local practice. Ishiyaku Publishers ,Inc, 2007
  - 14) Yamane H, Kayama A, Kato T and Nagakura H: People and groups / from place of meeting, use of gathering. MIWA-SHOTEN Ltd. Tokyo Japan, 2000
  - 15) Otsuka M, Amagai M, Shibata F: Support to People with Mental Disabilities, and Self-Efficacy. *The Bulletin of Saitama Prefectural University* 4: 181 - 187, 2002
  - 16) Hata A, Hata K, Maeda K, Aso Y, Hujita N, Kaneko M, Tsujii K, Asai H, Shibata K, Iwasaki S, Segawa K, Minmi S and Yoshimoto M: Influence of the social support on empowerment of schizophrenia patients in an authority of work place. *CLINICAL PSYCHIATRY* 46: 257 - 263, 2004
  - 17) Hata A, Maeda K, Tsujii K, Asai H, Akiyama N and Kaneko M: The application of the empowerment scale for the schizophrenia patient. *CLINICAL PSYCHIATRY* 45: 733 - 740, 2003
  - 18) Yatani R supervision: Normal occupational therapy studies specialized field area occupational therapy studies. IGAKU-SHOIN Ltd.Tokyo, Japan,2005
  - 19) Kunikata H, Watanabe K: Influence on WHOQOL-T shortened version - according to factor - domain predicting Quality of Life of person with chronic schizophrenia. *Jpn Acad Nurs Sci* 27: 44 - 53, 2007
  - 20) Morita M, Mayumi O: Role of medical care towards place of life - what people here can do. *The Japanese of Occupational Therapy for Mental and Cognitive Disorder* 2 : 374 - 380, 2005
  - 21) The Niigata prefecture welfare for the handicapped health department, welfare for the handicapped section: Niigata welfare for the handicapped program. 2007
  - 22) Urakawa Bethel's house: Bethel's house [non] support theory. IGAKU-SHOIN Ltd.Tokyo, Japan, 2002