Key Concepts : psychiatric rehabilitation, self-care, Quality of life, group activity, case management

The Effects of a Community Psychiatric Nursing Program on the Rehabilitation of Home-based Long-term Psychiatric Patients*

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ABSTRACT

In the last few years, psychiatric nurse practitioners have shown a growing an interest in community psychosocial rehabilitation, caring for chronic psychiatric patients as case manager in South Korea. The purpose of this study was to evaluate the effectiveness of a community psychiatric rehabilitation nursing program on self-care activity and quality of life and to suggest this program as an effective nursing intervention in a group of chronic home-based psychiatric patients in a poor town. A non-equivalent control group, pretest-posttest design was used. Of the twenty women that started the program, sixteen finished it. The data were analyzed by the Wilcoxon Rank Sum Test. The program included the process of case management which consisted of four phases: the first was an active case finding and pre-test, the second was home visiting and contacted by phone, the third was group activity therapy of 12 sessions, and the fourth phase was terminal and post-test. The effects of the program were assessed by quality of life and self-care activity. The quality of life and the self-care activity, especially, area of nutrition, elimination, dressing, leisure activity, and follow-up clinic visiting showed greater improvement than those of the control group. The results of this study suggest that this program was effective in improving the quality of life of chronic home-based psychiatric patients.

I. INTRODUCTION

A trend of in the psychiatric profession has focused on the psychosocial rehabilitation of the chronic mentally ill population in the community (Palmer-erbs, 1996). And Korea has not been spared this trend. In a traditional psychiatric-mental health area, there is a longstanding focus of symptoms of illness, differential sorting of symptoms into diagnostic categories, and searching for symptom treatment with medication in hospital or institute. So the results of study are often lost the real life of the clients who live with disabilities in the family and community as a whole person (Spaniol & Koehler, 1994).

Persons with chronic mental illness face many difficulties in increasing their quality of life. They are characteristically dependent individuals

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who see themselves as ineffective and helpless with diminished mental and emotional resources. They may also be unable to establish satisfying connections with others. Because they suffer from severe and persistent mental disorders that interfere with their functional capacities in daily life such as self-care, interpersonal relationships, and work or schooling, which often necessitate lengthy hospital care of psychiatric treatment. Especially, among the poor chronic patients have added barriers to receive health care because of poverty, bad housing and employment, lack of health insurance and family support (Lee, J. H., 1995; Pittman, 1989).

Psychiatric rehabilitation is the recovery of social and instrumental role functioning to the fullest extent possible through learning procedures and environmental supports (Liberman, 1988). When restoration of functioning is limited by continuing deficits and symptoms, rehabilitation efforts aim at helping the individual acquire skills and living and working environments that are adjust to the level of functioning that is realistically attainable. In other words, the goals of rehabilitation professionals are to sustain symptomatic improvement in the long term, establish or reestablish interpersonal and independent living skills, and help the individual reach a satisfactory quality of life.

In Korea, according to government statistics, the number of mentally ill people was estimated to be 1,000,020 in 1995 (Y. M. Lee, 1996), accounting for approximately 2.2 percent of the nation's population. The actual number of mental patients is undoubtedly far greater than the government's official figure, as Koreans in general consider mentally ill people a disgrace to the family and thus refrain from reporting them to authorities or revealing their cases to the community.

Of the reported people, 90,000 or 9 percent need to be hospitalized, but only 35,370 are accommodated in the limited space of mental health institutions, which are largely centralized, custodial and beyond the reach of the poor (Y. M. Lee, 1996). So many mentally ill people who require intermediate treatment are at home without proper health care.

Mental health problems are more serious among the economically underprivileged, where ill people remain at home without proper treatment or care, and the morbidity rate is twice than the other economic status. Earlier heavy investments by the government in institutional development (e. g. mental hospitals) and the promotion of hospital-oriented or clinic-oriented care for the mentally ill, have created a bias that still continues. The health policy has focused on the expansion of large-scale, national or public and private mental hospitals. Capacity at the hospitals remains far short of needs and lacks transition and rehabilitation programs for a normal social life.

Some Korean psychiatrists agree that social stimulation and a therapeutic environment such as psychiatric rehabilitation program, over time, regardless of the use of psychotropic medications, will produce a decrease in symptoms (H. Y. Lee and Y. M. Lee, 1994). However, there are only a few community psychiatric programs in our country. The need for structured support programs and adequate after-care facilities for the population increased. Some nursing scholars reported that the need of developing the community psychiatric rehabilitation nursing program and evaluating the program by nurse in the community (J. S. Lee, 1995; K. J. Lee, 1993). And the Korean Mental Health Act was passed in 1995. So, in this study, the community psychiatric rehabilitation nursing program (CPRNP) including person-centered assertive case management was developed and implemented for the poor inner city chronic mentally

ill who lack of health care and lived in severe social isolation.

Ⅱ. STATEMENT OF PROBLEMS

The purpose of this study was to evaluate the effects of a CPRNP on the self-care activity and the quality of life of the home-based long-term psychiatric patients.

Two hypotheses were developed as follows :

1. The score of the quality of life of the experimental group upon completing of the program will be higher than that of the control group.

2. The score of the self-care activity of the experimental group upon completing of the program will be higher than that of the control group.

Ⅲ. LITERATURE REVIEW

Comprehensive psychiatric rehabilitation involves assessment, training, and modification of living environments in those areas relevant to personal and community life. That includes self-care: including medication and symptom self-management: family relations: friendship: a vocational and employment pursuits: money management: residential living: recreational activities: transportation: food preparation and choice and use of public agencies. Specific goal setting within these generic areas should be conducted with the active involvement of the patient and his or her family and significant others(Huxley, 1992).

The stress-vulnerability-copying-competence model highlights the role of community support programs in psychiatric rehabilitation (Liberman, 1988). In the model, community programs serve as environmental protectors that can reduce the negative effects of critical, non-supportive, emotionally over-involved, and over-individuals. One of the community support programs is case management. Case management, widely regarded as an important innovative alternative to the standard service, is viewed as being a more effective response to the needs of the chronic mentally ill, as it helps to harmonize otherwise fragmented services and provides continuity of care. Case management include patient identification and outreach, individual assessment, service planning, linkage with request services, monitoring of service delivery, health teaching, home visits, crisis intervention, medication monitoring, and patient advocacy (Hromco, Lyons & Nikkel, 1997).

Several investigators have attempted to assess the efficacy of psychiatric rehabilitation case management in the community. Outcomes of rehabilitation were measured focusing on residential, social, clinical, cost effective and quality of life domains. The results showed the increased social functioning (Wasylenki, Gehrs, Goering, et al., 1997), self-esteem and daily life skills (Hellwig, 1993: K.S. Lee and Y.H. Kim, 1998), quality of life (Huxley, 1992: Robinson & Pinkney, 1992: J. S. Lee et al, 1998). And some reports showed the lower cost effectiveness (Clark & Fox, 1993), the lower admission rates (Curtis, Millman, Stmening, et al., 1992: Lang & Maker, 1990). However, studies have not been consistent in showing that psychiatric rehabilitation community support program including case management are either superior to or no better than the usual care in terms of independent living and social or occupational functioning in the community. So the recent emphasis on individual-focused measures such as the client change relating to social and instrumental roles and quality of life is expected to generate beneficial outcome results (Anthony, 1993: Kisthardt, 1993).

Ⅳ. METHODOLOGY

A non-equivalent control group, pre-post test design was used in this study. The independent variable was the community psychosocial rehabilitation nursing program (CPRNP) and the dependent variables were the self-care activity and the quality of life.

1. Subjects

The subjects were volunteers between the ages of thirty five and sixty years who poor long term psychiatric clients who lived at home in Town "S", Seoul City, South Korea.

A list of forty-six clients was given to an investigator from the public health center, the social welfare center, and a psychiatric clinic in that town. They were not involved any other community program. After the investigator interviewed the clients, they were all referred to a regular community nursing program in a social welfare center, and twenty volunteer clients were assigned conveniently to the experimental and control groups. The clients excluded from the study were judged to be imminently dangerous to themselves or others. Two subjects in experimental group were excluded in analysis, because one moved to another city and the other was rejected by some women subjects in the group activity phase. Two subjects in the control group was also excluded, because one subject refused in post-test, one men subject was excluded for homogeneity by the researcher.

A total of sixteen subjects (eight in experimental group, eight in control group) successfully completed the seventeen weeks of program and the pre, post-test measures.

Because the subjects lived at home, not a hospital, also have the characteristics of the disease, the recruitment of subjects was very difficult. Therefore, the small sample size is the major limitation of this study. The homogeneity, which may be affected by sociodemographic and disease characteristics, was verified using the t-test, fisher's exact test. When the homogenity of quality of life and self-care activity status was analyzed, the results showed no differences between the two groups by the Wilcoxon Rank Sum Test.

2. Program Procedures

This CPRNP was implemented in four phases by two psychiatric nurse specialists, a community nurse and a student nurse (Figure1). First, assertive case finding and individual interviews were completed by home visiting for four weeks. Second, home visiting care and telephone counseling were used during four weeks. Home visiting was done twice weekly, on Mondays and Fridays. Telephone counseling was done once a week on Wednesday. This phase were not only to focus specifically on patient self-care activity, drug and symptom management and education, counseling, referral, advocacy, but also to teach families about aiding the patient in developing skills such as stress reduction and coping strategies. Third, group activity therapy was taken total twelve sessions, two sessions per week. The goals of the group were to improve the self-care activity related with dressing, leisure, social activity, self-esteem, and self-expression. This phase included music, movement, cooking, drawing, and a trip with supportive group therapy and patient education. There was about thirty or forty minutes' supportive group therapy each session. Group activity sessions were conducted in a room at the district social welfare center, except the fifth one, which was conducted at a museum and a park in the community. For this reason, only one session was held that week. The fourth and final phase included the formation of a self-help group with a community health

<FIGURE 1> Comparison of the Quality of Life and Self-care activity between two groups

Phase	1phase	2 phase								3 phase							4 phase
Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Exp.	Pre-test -QLS -PSCPS	Home visiting -2 times/wk (Mon., Fri.) -30-60min/time Telephone visiting -1 time/ wk (Wed.) -10-50min/time								Group activity therapy -2 times/wk (Mon., Fri.) -90 -120min/time -total 12sessions Home and telephone visiting Continue							Post-test -QLS -PSCPS Self-help Group Formation
Cont.		Referred to a regular community nursing program															

Exp.: Experimental group
Cont.: Control group
Mon.: Monday Wed.: Wednesday Fri. : Friday
QLS: Quality of Life Scale
PSCPS : Psychiatric Self-Care Performance Scale

nurse in the social welfare center.

The data were gathered from August 22 to December 22, 1995. The subjects were visited by the investigator at their homes. They were interviewed and given a detailed description of the study and the opportunity to ask questions. Twenty volunteer clients were then scheduled for the pre-test during the next home visiting.

The pre-test was conducted at a client's home by two trained student nurses. After the program was finished, the post-test was conducted in the same manner as the pre-test.

3. Instruments

To evaluate the effects of the CPRNP, two instruments were used.

Psychiatric self-care performance scale (PSCPS): The PSCPS(S. J. Yu, 1991) measured the level of self-care performance of discharged psychiatric patients. A scale of fifty-eight items was developed around twelve subgroups (e. g. nutrition, sleeping, hygiene, elimination, housework, grooming, safety, leisure activity, social activity, money management, drug compliance, follow-up visiting). Items were rated on a four-point scale from never (1) to always (4): higher scores indicate higher levels of functioning. The Cronbach's Alpha Reliability was .92(S. J. Yu, 1991). In this study, the score was .89.

The Quality of Life Scale (QLS) : The QLS (Y. J. Noh, 1988) was measured perceived satisfaction of the life. The forty-seven items scale was developed for the middle-age adults. Items were rated on a five point scale from satisfied very strongly (5) to dissatisfied very strongly (1), with negative items scored in reverse direction. The higher scores indicate a higher level of quality of life. The Cronbach's Alpha Reliability was .94(Y. J. Noh, 1988). In this study, the score was .85.

V. RESULTS

The subjects were 16 women, all chronic psychiatric patients living at home. The average

<TABLE 1> Comparison of the Quality of Life and Self-care activity between two groups

Variable	Group	Pre treatment		Post treatment		Z	P
		Mean	SD	Mean	SD		
Quality of Life	Exp.	112.5	15.08	152.25	12.92	-3.10	0.001*
	Control	122.5	19.63	114.12	18.25		
Self Care Activity	Exp.	157.87	29.59	190.50	16.60	-2.835	0.004*
	Control	156.25	23.94	151.62	22.50		

* P<.05

<TABLE 2> Comparison of subgroups in self-care activity between two groups

Self-care	Experimental G.		Control G.		Z	P
Activity	Pre T.	Post T.	Pre T.	Post T.		
Nuturition	14.12(1.35)	17.87(1.18)	13.62(.82)	12.25(.75)	-2.85	.004**
Sleeping	6.95(.84)	7.62(.92)	7.25(1.03)	7.87(1.31)	-2.65	.790
Hygine	13.62(.82)	19.25(.31)	11.37(1.91)	17.00(1.22)	-1.63	.101
Elimination	10.50(.84)	13.00(.37)	11.25(.75)	10.87(.66)	-2.40	.016*
Housework	27.00(1.99)	29.87(.89)	11.25(.75)	10.87(.66)	- .64	.518
Dressing	12.62(1.46)	19.37(.49)	28.37(1.59)	27.37(2.07)	-2.13	.032*
Safety	11.00(.80)	13.75(.59)	12.12(1.02)	11.87(.89)	-1.54	.122
Leisure	8.62(.65)	12.87(.78)	8.25(.95)	7.62(.96)	-2.91	.003**
Social activity	17.62(2.18)	23.62(1.46)	16.87(1.91)	15.25(1.52)	-2.86	.004**
Money management	8.00(.84)	9.12(.81)	8.50(1.08)	8.1291.12)	-.48	.630
Medication	13.62(1.72)	17.50(.94)	11.37(1.91)	12.50(1.74)	-2.11	.034*
Follow-up	5.50(.75)	4.62(.77)	4.62(.77)	4.25(.77)	-1.98	.046*

* P< .05 ** P< .01

age of the experimental group was 49.75, that of the control group was 47.00. The average education level was Grade 6, and the average duration of the disease since diagnosis was over 15 years. Diagnosis of the subjects was schizophrenia and major depression. All of the subjects were married, but only 50 percent, lived with their spouse.

Hypothesis 1: The score of the Quality of life of the experimental group upon completing of the program will be higher than that of the control group.

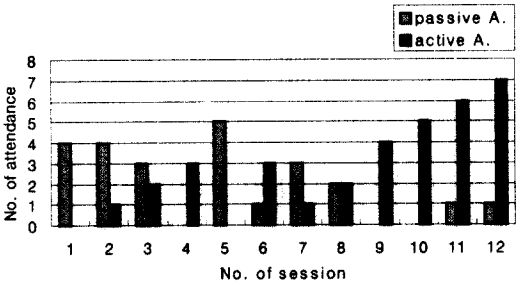
When the quality of life was compared using the Mann-Whitney U Test, the results revealed a significant posttest difference between the two groups (Z=-3.10, P= .001). After the program, the Quality of life of the experimental group was higher than that of the control group. Therefore, the first hypothesis was supported (Table 1).

Hypothesis 2: The score of the self-care performance of the experimental group upon completing of the program will be higher than that of the control group.

When the self-care activity was compared by Mann-Whitney U Test, the results revealed a

significant posttest difference between the two groups (Z= -2.835, P= .004). After the program, the total self-care activity of the experimental group was higher than that of the control group. And the self-care of nutrition (Z=-2.85, P= .004), elimination (Z=-2.40, P=.016), dressing(Z=-2.13, P=.032), leisure activity(Z=-2.91, P=.003), social activity(Z=-2.86, P=.004), medication compliance(Z=-2.11, P=.034) and follow-up visiting(Z=-1.98, P=.046) of the experimental group was higher than that of the control group. Regarding the self-care of sleeping and safety, the score of the experimental group were increased compared with the control group, but it was not statistically significant. And the self-care activity of hygiene, housework, and money management scores were no significant effects in the experimental group (Table 2). In the third phase, group activity therapy, the subjects were attended actively after 6 sessions, so most of them were participated regularly after nine sessions except one subject(Figure 2).

<FIGURE 2> Attendance in the group activity therapy



VI. DISCUSSION

1. The effects of CPRNP on quality of life

The experimental group showed an increase of 39.75 in average in the score of the quality of life after the CPRNP, whereas the control group rather had a decrease of 8.38 in the score of the measure when compared with that of 17 weeks earlier. This significant change (i. e., general increase) in quality of life of the experimental group indicates that the CPRNP is effective in improving quality of life for the poor and chronic mentally ill. If quality of life, a subjective index for individual well-being, can be improved through the CPRNP, the program could also improve the mental health function of the mentally ill and thus, their social adaptation in the community by increasing their life satisfaction through a meaningful life in the community, and by helping them develop positive self-concept and have an optimistic view for the future.

The study finding supports that of Hancock(1987) who reported that nursing case management decreased the readmission rate and increased quality of life for the mentally ill. The study finding also is consistent with those of other studies(Franklin, et al., 1987; Goering, et al., 1988; Huxley, 1992; J. S. Lee, et al., 1998) reporting that nursing case management program of psychosocial rehabilitation through a multidisiplinary-team approach, including psychiatric and mental health nurses and social workers, has a positive effect on quality of life for the mentally ill. The study findings also support the view that quality of life can be improved by the rehabilitation program in which includes the teaching of independent living skills (Stein and Test, 1980), and that discharged patients diagnosed as schizophrenic can actively participate in the program despite their low socio-economic standing (MacGillp, 1991).

2. The effects of the CPRNP on self-care activity

The experimental group had an increase of 32.63 in average in the score of the self-care activity after the CPRNP, while the control group rather had a decrease of 4.63 in the score of the measure when compared with that of 17 weeks earlier. This finding support the view

that the CPRNP is effective in improving self-care activity, which is consistent with that of Wasylenki et al.(1993) who reported that 58 discharged mental patients had a significant improvement in their social adaptation: communication, occupational, and interpersonal relationship skills: and physical function when they received the psychiatric rehabilitation program through an intensive case management. The study findings are also consistent with the results of a study by S.J.Yoo, et al.(1998). In addition, the study showed the increased number of clinic visits by the subjects who had been underserved because of many problems related to their poor economic situation, difficulties in the use of transportation, and lack of confidence in health care professional. And that supports the view that continuing education and support can improve psychiatric rehabilitation.

Self-care activity related to defecation improved significantly in the present study, and yet, the satisfaction rate for defecation failed to show improvement. This finding may result from constipation and voiding difficulty (or urinary retention) which are side effects of antipsychotics and thus, further interventions are required to resolve the problem. Especially, the study failed to improve the self-care activity in the area of sleeping. The subjects still reported having difficulties in sleeping regularly with an adequate amount of time, which might be related to change in sleeping patterns possibly resulting from social isolation, lack of day-time activities, and taking naps. Therefore, after the CPRNP, the development of continuing programs is required to include the mentally ill in daily activities. The self-care activity in the areas of leisure and social life showed a significant improvement through the CPRNP that included the therapeutic use of group activity. This finding is very promising, following the suggestion by Yoo(1991) who suggested that there is a need for therapeutic intervention to improve social life for the mentally ill because her study reported that the teaching of self-care activity brought an improvement in the areas of taking medication, visiting outpatient clinics, defecation, and safety control but not in the area of social life. Pascaris A.(1991) and Ian LamBle et al.(1997) also reported that it is important to include group activity in the psychiatric rehabilitation program. Some other scholars (G. Lee , B. Oh, K. Lim, and G. Yoo, 1995; S. Kim, H. S., Kim, S. J., Yoon, H. I., Jeong, K. M., Sung, 1992) reported that self-care activity in the area of leisure life was improved by the various rehabilitation programs with day-care patients. M. H., Lee (1993) and Y. H., Kim(1994) reported the effectiveness of group activity with psychiatric patients in hospital who had group counseling and group training for social skills two to three times a week for a total 12 sessions. But, in this study, the active subjects for group session could attend only one time per week even though the group activity was designed for two sessions per week. Coming out of home and interacting with strangers might be very difficult for the subjects who had not had social life at all until they participated in this study. So It will be effective to plan one session per week for group activity.

Ⅶ. CONCLUSION

A non-equivalent control group, pre-post test design was used in this study in order to evaluate the effects of a community psychiatric nursing program on the rehabilitation of home-based psychiatric patients. The results showed that the experimental group had a higher score in quality of life and self-care activity than the control group. This suggests that this community psychiatric nursing case management program for rehabilitation is effective in improving the well being of the poor, home-based, chronic psychiatric clients. With this in

mind, the following is suggested for further study. The study is needed to replicate in large population and investigation of the long-term effects of the program with follow-up evaluation.

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