Global Health & Medicine. 2023; 5(3):136-141.

ORIGINAL ARTICLE

DOI: 10.35772/ghm.2023.01041

Service contents and recovery orientation of psychiatric home-visit nursing evaluated by users in Japan

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Abstract: The aim of this study was to clarify the differences perceived by users of home-visit nursing care between providers from medical institutions and services from independent home-visit nursing stations, as well as to examine the recovery orientation from the perspectives of the users. We conducted a questionnaire survey of 32 home-visit nursing stations and 18 medical institutions. From these facilities, 10 users of psychiatric home-visit nursing services who were being treated for schizophrenia and bipolar disorder were selected. With regard to the care that they thought was good, the home-visit nursing station users responded more often than users of home-visit nursing care provided by medical institutions regarding "help with hobbies and fun" and "support to empower you". Regarding what users wanted from home-visit nursing care, a statistically significant difference was found between users of home nursing stations who answered, "I want the same person to come", and users of home-visit nursing services provided by medical institutions, who answered, "I want various people to come". Brief INSPIRE-J score for study participants was 81.9 (standard deviation; SD 18.1) for users of home-visit nursing care services from medical institutions and 83.7 (SD 15.5) for home-visit nursing station users. It is conceivable that the care provided by psychiatric home-visit nursing services may have a greater potential for promoting recovery. However, since the characteristics of users and facilities may differ, future research is needed to clarify which recovery factors are effectively promoted by each service.

***Keywords*:** psychiatric home-visit nursing, perspectives of users, recovery orientation

Introduction

The number of psychiatric beds per population and the average length of a hospital stay are still high in Japan, even after successive system revisions (*1,2*). Against this backdrop, the Ministry of Health, Labour and Welfare (MHLW), in its 2004 "Vision for the Reform of Mental Health and Medical Welfare", set forth the principle of "shifting from a focus on inpatient care to a focus on community life", and efforts are currently underway to transition people with mental disorders from hospital.

Specific efforts are being made to expand support systems and services for people with mental illnesses who are living in the community to help them with psychosocial rehabilitation and provide early discharge support after hospitalization. Psychiatric home-visit nursing care plays a major role. Psychiatric home-visit nursing is a core service supporting community psychiatric care that has been reimbursed since 1986. Services are provided by nurses, occupational therapists, and other medical staff who visit patients in their homes. The number of home-visit nursing care services to persons with mental illness was approximately 640,000 in 2009. This number increased to approximately 2.16 million in 2019 (*3*). While psychiatric home-visit nursing continues to expand quantitatively, the quality of services provided and outcomes must improve.

To date, the effectiveness of psychiatric home-visit nursing has been evaluated using objective indicators, such as relapse rate (readmission rate), number of days spent in the community, employment rate, and social reintegration rate (*4,5*). However, in recent years, in

addition to objective indicators, the importance of subjective evaluations by service users, such as recovery orientation and satisfaction with services, has been highlighted (*6*). Recovery-oriented services are mental health services from the perspective of the service user and encompass five factors that serve as a conceptual framework for personal recovery: connectedness, hope and optimism about the future, identity, meaning in life, and empowerment (*7,8*).

However, there are few studies in Japan in which users of psychiatric home-visit nursing care evaluated the services they received (*9,10*), and no quantitative studies exist. In addition, none have evaluated whether services are recovery-oriented.

Although there are two systems of psychiatric home-visit nursing care in Japan, it is unclear how the differences in providers are perceived by users of home-visit nursing care from medical institutions (hospitals and clinics) and services from independent home-visit nursing stations. The aim of this study was to clarify the services received in psychiatric home-visit nursing and check the recovery orientation from the perspectives of service users.

Materials and Methods

Subjects

Of the facilities belonging to two organizations related to psychiatric home-visit nursing (Japan Psychiatric Nurse Association and National Association for Visiting Nurse Service), 32 home-visit nursing stations and 18 medical institutions were selected through convenience sampling. From these facilities, 10 users of psychiatric home-visit nursing services who were being treated for schizophrenia and bipolar disorder were selected.

The selection criteria for users were a diagnosis of schizophrenia or bipolar disorder, the criteria for Severe Mental Illness (SMI) with chronic symptoms and high severity, and utilizing psychiatric home nursing services. The reason for this was that the individuals with SMI have high support needs and constitute approximately half of all users receiving psychiatric home-visit nursing.

Exclusion criteria were people who were judged by the administrator/facility director (department head) to have difficulty responding to the survey due to fluctuating symptoms, comprehension, or judgment and those who were judged by the administrator/facility director (department head) to be likely to experience disadvantages, such as fluctuating symptoms or a psychological burden, as a result of responding.

Contents of questionnaire and measures

The questionnaire used in this study addressed the duration of participants' use of home-visit nursing care, support received from home-visit nursing care and support they considered good, what they wanted from home-visit nursing care, the personal recovery orientation of home-visit nursing services, and loneliness felt in life situations.

The duration of home-visit nursing care was categorized as follows: less than six months, less than one year, 1–2 years, 2–5 years, 5–10 years, and more than 10 years.

For each of the care items extracted by previous study (*11*), respondents were asked whether they received such care (yes or no) and whether they thought the care was good (yes or no).

Personal recovery orientation of home-visit nursing services was measured using a shortened Japanese version of the INSPIRE-J (Brief INSPIRE-J). This scale is a five-item shortened version of the 27-item INSPIRE (*12*), with higher scores indicating higher recovery orientation. The Brief INSPIRE-J has shown high reliability and adequate validity (*13*).

Loneliness felt in life situations was measured using a shortened version of the UCLA (University of California, Los Angeles) Loneliness Scale (three items). Higher total scores indicate higher levels of loneliness. The original version (*14-16*) and Japanese version (*17*) have been assessed as reliable and valid.

Desire for home-visit nursing care was measured with the items used in the Japan Psychiatric Nursing Association Report (*18*). For each item, possible responses were "desire" or "do not desire".

Analysis

Prior to the analysis, the study participants were divided into two groups: users of services from medical institutions and users of services from home-visit nursing stations. After calculating descriptive statistics for each item for each group, statistical significance was tested using an analysis of variance and the chi-square test. For loneliness (three-item UCLA Loneliness Scale) and recovery orientation of service received (Brief INSPIRE-J), the total scores were calculated according to the guidelines for each scale, and the statistical significance of the differences between the two groups was also tested. The probability of significance was set at 5%, and SPSS version 28 (IBM Corp.) was used for all analyses.

Ethical considerations

A self-administered questionnaire was distributed to selected users, along with a written explanation of the study. The questionnaire was unsigned, answered only by those who agreed to cooperate in the study, and mailed directly to the researcher without going through the facility providing the service.

This study was approved by the Review Board of the National Center for Global Health and Medicine in Japan

(approval No. NCGM-S-004521-00).

Results

Fifty facilities were asked to cooperate; ultimately, 27 facilities cooperated. The questionnaire was distributed to 270 people, and 118 responded (47.3% response rate). Fifty-eight responses containing missing values were excluded, so responses from 60 individuals were analyzed (valid response rate: 22.2%).

Duration of use of psychiatric home-visit nursing services

Table 1 shows the duration of use of psychiatric home-visit nursing services by the study participants. There were no statistically significant differences between the two groups.

Users' perceptions of psychiatric home-visit nursing

Table 2 shows the care users perceived from home-visit nursing, the care that they thought was good, and what they wanted from home-visit nursing services. First, there was no statistically significant difference between the two groups regarding the care they received.

Second, with regard to the care that they thought was good, the home-visit nursing station users responded more often than users of home-visit nursing care provided by medical institutions regarding "help with hobbies and fun" (13.5% and 39.1%, respectively) and "support to empower you" (56.8% and 82.6%, respectively). These differences were statistically significant (p = 0.02, p = 0.04, respectively).

Third, regarding what users wanted from home nursing care, a statistically significant difference was found between users of home-visit nursing stations who answered, "I want the same person to come" (16.2% and 47.8%, respectively), and users of home-visit nursing services provided by medical institutions, who answered, "I want various people to come" (43.2% and 17.4%, respectively). The difference between the two groups was statistically significant (p = 0.01, p = 0.04, respectively). Although there was no statistically significant difference (p = 0.053), a greater percentage of users of home nursing services provided by medical institutions responded that "they would like to talk to make them feel better" (51.4% and 26.1%, respectively) than users of home-visit nursing stations did (p = 0.01, p = 0.04).

Loneliness felt by study participants in their daily life situations

Table 3 shows the levels of loneliness felt by the study participants in life situations according to the three-item UCLA Loneliness Scale. Recent studies using the same scale are also listed as references. The overall scores for the study participants were 5.22 (standard deviation; SD = 1.98), 4.81 (SD = 1.73) for users of home-visit nursing services from medical institutions and 5.87 (SD 2.22) for home-visit nursing station users.

Recovery orientation of psychiatric home-visit nursing

Table 4 shows the results of the recovery orientation of the services rated by the study participants as measured by the Brief INSPIRE. Recent studies using the same scale have been conducted for reference. The overall score for study participants was 82.6 (SD 17.0), 81.9 (SD 18.1) for users of home-visit nursing care services from medical institutions and 83.7 (SD 15.5) for home-visit nursing station users.

Discussion

Duration of study participants' use of psychiatric home-visit nursing services

There was no significant difference in the duration of home-visit nursing use among the participants in this study between the two groups. Additionally, the duration of use was similar to that of psychiatric home-visit nursing users in the previous study (*19*). Despite the limitations indicating low valid response rates among the participants in this study, they can still be considered as an adequate representative sample.

Table 1. Duration of psychiatric home-visit nursing use of survey participants (n = 60)

Items	Total		Users of services from medical institutions		Users of services from home-visit nursing stations		χ^2	n
	n	%	n	%	n	%		
Duration of use of psychiatric home-visit nursing							2.098	0.835
less than six months	2	3.3%	1	2.7%	1	4.3%		
less than one year	5	8.3%	4	10.8%	1	4.3%		
1–2 years	5	8.3%	4	10.8%	1	4.3%		
2–5 years	21	35.0%	12	32.4%	9	39.1%		
5–10 years	18	30.0%	10	27.0%	8	34.8%		
more than ten years	9	15.0%	6	16.2%	3	13.0%		

Table 2. The care users perceived from home-visit nursing, the care that they thought was good, and what they wanted from home nursing services (*n* = 60)

Items	All		Users of services from medical institutions		Users of services from home-visit nursing stations		χ^2	*p*
	n	%	*n*	%	*n*	%		
The care they received								
Help with daily life	14	23.3	8	21.6	6	26.1	0.16	0.69
Help with hobbies and fun	17	28.3	8	21.6	9	39.1	2.14	0.14
Mental Health Care	57	95.0	35	94.6	22	95.7	0.03	0.85
Help with symptoms	49	81.7	29	78.4	20	87.0	0.70	0.40
Physical care	55	91.7	34	91.9	21	91.3	0.01	0.94
Help with medication	46	76.7	28	75.7	18	78.3	0.05	0.82
Support to empower you	44	73.3	24	64.9	20	87.0	3.54	0.06
Help with socializing	30	50.0	17	45.9	13	56.5	0.64	0.43
Support for your family	25	41.7	14	37.8	11	47.8	0.58	0.45
Others	6	10.0	3	8.1	3	13.0	0.38	0.54
The care that they thought was good								
Help with daily life	10	16.7	4	10.8	6	26.1	2.38	0.12
Help with hobbies and fun	14	23.3	5	13.5	9	39.1	5.20	0.02*
Mental Health Care	54	90.0	32	86.5	22	95.7	1.32	0.25
Help with symptoms	43	71.7	25	67.6	18	78.3	0.80	0.37
Physical care	50	83.3	31	83.8	19	82.6	0.01	0.91
Help with medication	41	68.3	25	67.6	16	69.6	0.03	0.87
Support to empower you	40	66.7	21	56.8	19	82.6	4.27	0.04*
Help with socializing	28	46.7	16	43.2	12	52.2	0.46	0.50
Support for your family	23	38.3	13	35.1	10	43.5	0.42	0.52
Others	2	3.3	2	5.4	0	0.0	1.29	0.26
What they wanted from home-visit nursing services								
I want you to come to me more often	9	15.0	6	16.2	3	13.0	0.11	0.74
I want the same person to come	14	23.3	7	18.9	7	30.4	1.05	0.31
I want the same person to come	17	28.3	6	16.2	11	47.8	6.98	0.01*
I want various people to come	20	33.3	16	43.2	4	17.4	4.27	0.04*
I want the same person to come	25	41.7	19	51.4	6	26.1	3.73	0.05
I want the same person to come more often	9	15.0	6	16.2	3	13.0	0.11	0.74
I want you to tell me about my medicine	7	11.7	4	10.8	3	13.0	0.07	0.79
I want someone to accompany me when I go out	8	13.3	5	13.5	3	13.0	0.00	0.96
I want a lower fee	11	18.3	6	16.2	5	21.7	0.29	0.59
Cooperate with hospital staff, etc.	11	18.3	7	18.9	4	17.4	0.02	0.88
Help my family understand my condition	10	16.7	7	18.9	3	13.0	0.35	0.55
Others	13	21.7	6	16.2	7	30.4	1.69	0.19

*Significant at the 0.05 level, two-sided test.

Table 3. Loneliness felt by study participants in their daily life situations (*n* = 60)

Participants	This study						cf. 1 (Saito *et al*., 2019) (*16*)		cf. 2 (Alhalaseh *et al*., 2022) (*17*)	
	Users of psychiatric home-visit nursing (Japan)						older adults living in public housing (Japan)		community-living older adults during the COVID-19 pandemic (Jordan)	
	All		Users of services from medical institutions		Users of services from home-visit nursing stations					
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Total score of 3-item Loneliness Scale	5.22	1.98	4.81	1.73	5.87	2.22	4.30	1.65	5.33	1.67

SD, standard deviation.

Users' perceptions of psychiatric home-visit nursing

No statistically significant difference was noted for service users from medical institutions and those from home nursing stations in terms of the type of psychiatric home-visit nursing service they perceived themselves as receiving. As several previous qualitative studies (*9,10*) have not shown differences in items of care perceived by users depending on the type of entity, this study is considered quantitatively supportive of previous studies.

Table 4. Recovery orientation of psychiatric home-visit nursing (*n* = 60)

Participants	This study						cf. 3 (Kotake *et al*., 2020) (*11*)		cf. 4 (Williams *et al*., 2014) (*10*)	
	Users of psychiatric home-visit nursing (Japan)						Users of community mental health services (Japan)		Users of community mental health teams (UK)	
	All		Users of services from medical institutions		Users of services from home-visit nursing stations					
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Total score of Brief INSPIRE	82.6	17.0	81.9	18.1	83.7	15.5	78.5	19.3	73.0	18.8

SD, standard deviation.

A statistically significant, higher percentage of participants who received home-visit nursing care from a home-visit nursing station responded "good" for two items: "help with hobbies and fun" and "support to empower you". Many users who received home visits from a medical facility were originally hospitalized and received home-visit nursing care from the same facility after being discharged (*6*). Although dependent on how long they were hospitalized, it is possible that the longer they were hospitalized, the longer they were away from the hobbies and pleasures they enjoyed before hospitalization and might not have pursued hobbies and pleasures after discharge. Therefore, home-visiting nurses should actively listen to what their patients used to do in terms of hobbies or pleasures before hospitalization or what they would like to do following discharge and support the realization of these hobbies or pleasures through "support to empower you".

Users' desires for psychiatric home-visit nursing care

As for what they wanted from home nursing care, a large percentage of the home-visit nursing station users said they wanted the same person to come, whereas a large percentage of the medical institution home-visit nursing users said they wanted a variety of people to come. The two groups showed contrasting results, possibly because home-visit nursing stations often visit one patient without assigning a staff to the patient (*20*), whereas home-visit nursing care from medical institutions is often assigned to the same staff. It is conceivable that this could be a managerial decision, but further research is needed to support this consideration, as there are no objective statistical data to indicate this premise.

Loneliness felt by psychiatric home-visit nursing users

The scores for loneliness experienced by psychiatric home-visit nursing users were higher than those of Japanese older adults (*18*), especially among home-visit nursing station users. This score is close to that of older Jordanians during the coronavirus disease 2019 (COVID-19) pandemic (*21*). Although comparisons with previous studies are difficult because of various background factors, it is possible that psychiatric home-visit nursing care users live with a stronger sense of loneliness than others. Although users need support in their daily lives because of their disabilities, they are often estranged from support resources, such as family and friends. In addition, a sense of distance from society, such as a lack of employment opportunities and stigma, may also increase feelings of loneliness. Thus, visiting nurses must help their patients connect with society and others and support communication in order to reduce the loneliness of users as much as possible.

Users' evaluations of the recovery orientation of psychiatric home-visit nursing care

The Brief INSPIRE-J score, which measures the recovery orientation of services, is higher than that assessed by users of community mental health services in Japan (*13*) and the UK (*12*). The main goals of psychiatric home-visit nursing care are to support stable daily living, contribute to symptom control, and simultaneously provide care in the user's living environment, so that the user's desired lifestyle can be achieved to the extent possible. It is conceivable that the care provided by psychiatric home-visit nursing services may have a greater potential for promoting recovery than day care services. However, since the characteristics of users may differ, future research is needed to clarify which recovery factors are effectively promoted by each service.

Limitations

This study has several limitations. First, the institutions that were asked to cooperate in this study were selected using convenience sampling; thus, a selection bias existed. Second, data on several factors that might be relevant to the results of this study were not collected; these include user characteristics, such as age, sex, and diagnosis. Further, it was not possible to verify the impact of these factors on the results. Third, the valid response rate in this study was considerably lower than in previous studies (*12,13*). This may have had an impact

on the results, largely due to the exclusion of 58 cases from the analysis due to missing responses. This suggests the need for improvements in response precautions and providing assistance to respondents who experience difficulty in answering the questions.

Acknowledgements

We sincerely thank all study participants.

Funding: This study was conducted as a part of a Health, Labour and Welfare Scientific Research Grant 2022 (22GC1002) for "Research on examining the nursing practice of specialized nurses and their effectiveness in mental health care".

Conflict of Interest: The authors have no conflicts of interest to disclose.

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Received March 31, 2023; Revised May 29, 2023; Accepted June 16, 2023.

Released online in J-STAGE as advance publication June 20, 2023.

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