DOI: 10.35772/ghm.2025.01040

Assessing the sufficiency of patient information transfer from hospitals to psychiatric home-visit nurses: A nationwide cross-sectional survey

Yoshiyuki Takashima^{1,*}, Takemasa Ishikawa²

Abstract: Effective information transfer from hospitals to psychiatric home-visit nurses is essential for ensuring continuity of care. However, previous studies have suggested that discharge information is often inadequate, particularly regarding the psychosocial aspects of patient care. This study assessed home-visit nurses' subjective evaluations of the adequacy of patient information provided by hospitals in psychiatric home-visit nursing. A nationwide cross-sectional survey was distributed to 2,000 home-visit nursing agencies across Japan, yielding 482 responses. After excluding one invalid response, 481 responses were analyzed (response rate: 8.0%). The sufficiency of patient information was calculated as the logarithm of the ratio between the information received and the information requested by nurses. Wilcoxon signed-rank tests confirmed that all gaps between the information received and requested were significant (p < 0.001). The information that was least adequately provided included "psychological test results" (mean adequacy score = -0.23, SD = 0.28), "signs of worsening psychiatric symptoms" (mean adequacy score = -0.21, SD = 0.23), and "coping strategies for psychiatric symptoms" (mean adequacy score = -0.21, SD = 0.23). The information that was most adequately provided was "prescription details" (mean adequacy score = -0.07, SD = 0.16) and "diagnosis" (mean adequacy score = -0.09, SD = 0.18). To enhance information transfer, hospitals should review and revise discharge summaries to ensure the inclusion of critical items with low adequacy scores.

Keywords: psychiatric home-visit nursing, community care, psychiatric nursing, patient information, discharge planning

Introduction

In Japan's mental health and welfare system, a reform vision titled "From Hospital-Based Care to Community-Based Living" was introduced in 2004 (1). Since the 2017 discussion on the "Future Directions for Mental Health and Welfare", efforts to build a "Comprehensive Community Care System Including Support for Mental Disorders" have been actively promoted (2). One of the key community support services for individuals with mental illnesses — psychiatric home-visit nursing — has been shown to prevent re-hospitalization (3,4), shorten hospital stays (5,6), and improve daily functioning (7). From 2011 to 2021, the number of patients receiving psychiatric home-visit nursing services increased from 7,651 to 51,420 (8). Among these patients, the majority had a history of multiple hospitalizations, with many having been admitted three to ten times (9). This suggests that psychiatric home-visit nursing is primarily introduced for patients who experience repeated hospital admissions and discharges, underscoring its critical role in supporting community-based care and preventing rehospitalization. The proportion of home-visit nursing agencies providing psychiatric home-visit services also steadily increased, from 35.5% in 2006 to 58.3% in 2016 (10). According to Setoya et al., home-visit nursing agencies providing psychiatric home-visit nursing vary in their affiliation and structure. In home-visit nursing agencies, where more than 80% of patients have mental disorders, there is a particularly strong need for a well-structured regional collaboration system and the development of a strong networking foundation (11).

Psychiatric home-visit nurses primarily receive patient information through discharge summaries and discharge conferences with hospital staff; however, approximately 50% of them reported that the quality of hospital information received was insufficient (12). Therefore, this study aimed to clarify the subjective evaluations of home-visit nurses regarding the adequacy of patient information provided by hospitals in

¹ Faculty of Nursing, School of Medicine, Nara Medical University, Nara, Japan;

² Nana-r Home-visit Nursing Development Center, Osaka, Japan.

psychiatric home-visit nursing. This study also sought to improve the quality of information transmission from hospitals to home-visit nurses.

Methods

Study design

A cross-sectional questionnaire survey was conducted between January 11 and 31, 2023.

Participants

The study targeted nurses and assistant nurses engaged in psychiatric home-visit nursing.

Participant selection method

Home-visit nursing agencies were selected from designated psychiatric outpatient care agencies providing independent support for medical care in the most populous city of each of Japan's 47 prefectures. The population ratios of these 47 cities were calculated, and 2,000 agencies were randomly selected in proportion to the population of each city using a random number generator. From each selected agency, three psychiatric home-visit nurses were invited to participate, with selections based on the alphabetical order of their surnames.

Data collection method

A written request for research cooperation was sent to the administrators of the home-visit nursing agencies. The administrators were asked to distribute cooperative request documents to eligible psychiatric home-visit nurses in their agencies. Participants who agreed to participate accessed the questionnaire *via* the QR code provided in the document (Google Forms). All responses were mandatory in order to prevent missing data.

Survey items

The survey items comprised basic attributes and questions regarding patient information transmission between psychiatric hospitals and home-visit nurses.

Basic attributes

Participants were asked to provide information on the following: age, gender, years of experience as a nurse, experience working in a psychiatric hospital, years of psychiatric nursing experience, years of home-visit nursing experience, years of psychiatric home-visit nursing experience, proportion of psychiatric home-visit nursing in overall work (0%–25%, 25%–50%, 50%–75%, 75%–100%), highest level of nursing education (high school nursing program, vocational school,

university, graduate school), and nursing qualifications (registered nurse, licensed practical nurse, certified nurse specialist, certified nurse).

Information transmission from hospitals

A questionnaire was developed based on an interview survey conducted by Takashima *et al.* with psychiatric home-visit nurses with over five years of experience regarding the information they require from psychiatric hospital nurses (13). A pre-test was conducted with 20 psychiatric home-visit nurses to assess the clarity of the questions and ceiling/floor effects, resulting in the finalization of 32 questions.

Participants were asked two key questions for each item using a 7-point Likert scale (1 = strongly disagree to 7 = strongly agree) on Google Forms: i) "Do you need this information from hospitals?" and ii) "Do you receive sufficient information from hospitals?"

"Patient Information Required by Psychiatric Home-Visit Nurses from Hospitals" was defined as the information psychiatric home-visit nurses need from hospitals, while "Patient Information Received by Psychiatric Home-Visit Nurses from Hospitals" was defined as the information actually provided by hospitals to psychiatric home-visit nurses.

Data analysis method

Analysis of basic attributes

Descriptive statistics were used to confirm the response status of participants' basic attributes. Mean values were presented along with standard deviations (± SD).

Comparison of "Patient Information Required by Psychiatric Home-Visit Nurses from Hospitals" and "Patient Information Received by Psychiatric Home-Visit Nurses from Hospitals"

A simple tabulation was conducted to compare the information needs and supply. Means, standard deviations, medians, and interquartile ranges were calculated. The Kolmogorov-Smirnov test was used to assess normality. The Wilcoxon signed-rank test was used to compare "Patient Information Required by Psychiatric Home-Visit Nurses from Hospitals" and "Patient Information Received by Psychiatric Home-Visit Nurses from Hospitals", and the effect size (r) was calculated. Effect sizes were interpreted using Cohen's criteria: r = 0.10 for small, r = 0.30 for medium, and r =0.50 for large effects (14). The significance level was set at 0.05, and the Bonferroni correction was applied ($\alpha =$ 0.05/32 = 0.00156) to account for multiple comparisons. All statistical analyses were performed using SPSS version 29.0.

Adequacy of patient information

The adequacy of patient information was calculated as the logarithm of the ratio of the "Patient Information Received by Psychiatric Home-Visit Nurses from Hospitals" to the "Patient Information Required by Psychiatric Home-Visit Nurses from Hospitals" using the following formula:

Adequacy of Patient Information =

 $log_{10} \frac{Patient\ Information\ Received\ by\ Psychiatric\ Home-Visit\ Nurses\ from\ Hospitals}{Patient\ Information\ Required\ by\ Psychiatric\ Home-Visit\ Nurses\ from\ Hospitals}$

When the required and received information were balanced, the adequacy value was 0. The values ranged from a minimum of -0.85 to a maximum of 0.85. A simple tabulation was conducted to analyze the adequacy of the patient information.

Ethical considerations

This study was approved by the Research Ethics Committee of BAIKA Women's University (Approval Number: 2022-0226), the first author's previous affiliation. The study was designed and initiated while the first author was affiliated with BAIKA Women's University. Participation was voluntary and the protection of private information and strict data handling were guaranteed. The participants provided consent by checking the research consent box in the questionnaire. To protect participants' privacy, the survey was designed to avoid the collection of personally identifiable information (e.g., email and IP addresses).

Results and Discussion

Analysis of basic attributes

The questionnaire was distributed to 2,000 homevisit nursing agencies. From each selected agency, three psychiatric home-visit nurses were invited to participate in the survey, resulting in responses from 482 participants. After excluding one response due to abnormal attribute data, 481 responses were included in the analysis (response rate, 8.0%). The mean (\pm SD) years of nursing experience, psychiatric hospital experience, and home-visit nursing experience were 20.4 \pm 9.6, 3.2 \pm 6.4, and 6.9 \pm 6.1 years, respectively. The mean (\pm SD) age of participants was 45.1 \pm 15.5 years, which was 3.8 years higher than the national average age of nursing staff in Japan (41.3 years). Similarly, the average years of nursing experience among the participants exceeded the national average of 17.8 years by 2.6 years (15).

The distribution of participants by gender was as follows: 424 (88.2%) women, 55 (11.4%) men, and one (0.2%) each identifying as "other" or preferring not to answer. The proportion of psychiatric home-visit nursing services varied among the participants: 298 (62.0%)

engaged in psychiatric home-visit nursing less than 25% of the time, 37 (7.7%) between 25% and 50%, 25 (5.2%) between 50% and 75%, and 121 (25.1%) more than 75% (Table 1).

Given the standard deviations observed in this study, these differences were not considered significant enough to undermine the representativeness of the study sample. Regarding gender distribution, 11.4% of the participants were men, compared to 9.1% of men nurses in Japanese home-visit nursing agencies (16), reflecting a difference of 2.3%. Among the 482 participants in this study, this difference corresponded to approximately 11.2 individuals, which was unlikely to substantially impact the overall analysis. Therefore, the sample characteristics in this study can be considered reasonably representative of the broader population of psychiatric home-visit nurses.

Comparison of "Patient Information Required by Psychiatric Home-Visit Nurses from Hospitals" and "Patient Information Received by Psychiatric Home-Visit Nurses from Hospitals"

The Kolmogorov-Smirnov test indicated significant differences for all items. In all areas, patient information needed from hospitals received significantly stronger agreement than information actually received from hospitals (p < 0.001). After applying the Bonferroni correction for multiple comparisons (adjusted significance level: p < 0.00156), all results remained statistically significant. Effect sizes (r) ranged from 0.46 to 0.73. Twenty-nine of the 30 items showed effect sizes greater than 0.5, indicating large effects. Only

Table 1. Participants' demographic characteristics (n = 481)

| Characteristic | Mean | SD |
|--|------|------|
| Age | 45.1 | 15.5 |
| Years of nursing experience | 20.4 | 9.6 |
| Years of psychiatric hospital experience | 3.2 | 6.4 |
| Years of psychiatric nursing experience | 6.5 | 7.1 |
| Years of home-visit nursing experience | 6.9 | 6.1 |
| | n | % |
| Gender | | |
| Women | 424 | 88.2 |
| Men | 55 | 11.4 |
| Preferring not to answer | 1 | 0.2 |
| Other | 1 | 0.2 |
| Nursing qualifications | | |
| Registered Nurse | 461 | 95.8 |
| Licensed Practical Nurse | 14 | 2.9 |
| Certified Nurse Specialist | 1 | 0.3 |
| Certified Nurse | 5 | 1.0 |
| Education level | | |
| Vocational school | 360 | 74.8 |
| University | 87 | 18.0 |
| High school (nursing program) | 26 | 5.4 |
| Graduate school | 8 | 1.6 |
| Proportion of psychiatric home-visit nursing | | |
| among all home-visit nursing services | | |
| 0–25 | 298 | 62.0 |
| 25–50 | 37 | 7.7 |
| 50–75 | 25 | 5.2 |
| 75–100 | 121 | 25.1 |

"prescription details" had an effect size below $0.5\ (r=0.46)$, suggesting a medium effect. The six items with the largest effect sizes were: "Signs of worsening psychiatric symptoms" (r=0.73), "Family relationships and support system" (r=0.73), "Coping strategies for psychiatric symptoms" (r=0.72), "Life skills and strengths" (r=0.72), "Interpersonal relationships" (r=0.71), and "Hopes for life after discharge" (r=0.70) (Table 2).

A significant difference was observed between hospitals' information needs and the information actually received across all items. Similarly, Kato's (17) study on discrepancies in information transmission between hospitals and home-visit nurses reported that home-visit nurses perceived a lack of information on all surveyed items. This finding aligns with that of the present study, indicating that insufficient information transmission is prevalent among psychiatric home-visit nurses.

Adequacy of patient information

The adequacy of patient information and the difference between the patient information needed from hospitals and what was actually received is shown in Table 2. The items with the lowest adequacy scores included "psychological test results" (mean adequacy score = -0.23, SD = 0.28), "signs of worsening psychiatric symptoms" (mean adequacy score = -0.21, SD = 0.23), "coping strategies for psychiatric symptoms" (mean adequacy score = -0.21, SD = 0.23), "life skills and strengths" (mean adequacy score = -0.21, SD = 0.23), "hopes for life after discharge" (mean adequacy score = -0.20, SD = 0.24), "prediction of life after discharge" (mean adequacy score = -0.20, SD = 0.24), "family relationships and support system" (mean adequacy score = -0.19, SD = 0.22), "interpersonal relationships" (mean adequacy score = -0.19, SD = 0.22), "primary physician's assessment and future predictions" (mean adequacy score = -0.19, SD = 0.23) and "characteristics of thoughts and behaviors" (mean adequacy score = -0.19, SD = 0.23). The item with the most balanced adequacy score, closest to zero, was "prescription details" (mean adequacy score = -0.07, SD = 0.16) followed by "diagnosis" (mean adequacy score = -0.07, SD = 0.16). These findings suggest that hospital discharge summaries frequently omit psychosocial details critical to continuity of care in psychiatric home-visit nursing.

Psychiatric home-visit nurses often face difficulties in assessing the daily lives of patients outside their visits (18). Therefore, they sought information from hospitals regarding "life skills and strengths", "signs of worsening psychiatric symptoms", "coping strategies for psychiatric symptoms", "prediction of life after discharge", "hopes for life after discharge", and "interpersonal relationships". Receiving such information enables nurses to assess psychiatric symptoms based on the patient's lifestyle during the initial stages of home-visit nursing.

A study by Setoya et al. identified the most common

challenges in psychiatric home-visit nursing as "refusal of care by patients or families" (56.3%), "management of psychiatric symptoms" (54.0%), and "assessment of psychiatric symptoms" (49.1%) (11). Receiving information on "patients' perceptions of home-visit nursing" and "family relationships and support systems" may assist in assessing the risk of care refusal and aid in decision-making for home-visit nursing interventions. Additionally, providing psychiatric home-visit nurses with information on "signs of worsening psychiatric symptoms" and "coping strategies for psychiatric symptoms" from hospitals may alleviate the challenges in psychiatric home-visit nursing and improve the quality of psychiatric symptom management. Meanwhile, "prescription details" and "diagnosis" were among the most balanced items in terms of information adequacy.

Enhancing collaboration between hospitals and psychiatric home-visit nursing services

When transmitting patient information from hospitals to psychiatric home-visit nurses, it is essential to actively provide information in areas with low adequacy scores. The satisfaction of psychiatric home-visit nurses with information provision was significantly influenced by the quality of the information they receive (12). To improve the quality of information transmission, hospitals should review and revise their discharge summaries to ensure that items with low adequacy are included. Schwarz *et al.* highlighted the benefits of tailored discharge summaries in improving patient safety and health literacy (19). These findings support the conclusions of the present study.

Implications and future research

This study underscores the need to improve the quality and quantity of patient information transferred from hospitals to psychiatric home-visit nurses, particularly regarding psychosocial care aspects. The findings can inform the development of standardized discharge summary formats or checklists to ensure the inclusion of information essential to community-based psychiatric nurses. Such tools could strengthen collaboration between hospital and community settings, thereby enhancing the continuity and quality of mental health care.

Research limitations

This study was limited to the most populous cities in the 47 prefectures of Japan. In less populated areas, the number of home-visit nursing agencies and hospitals is limited, which may restrict information exchanges between them.

Conclusion

A survey on information provision between hospitals

Table 2. Adequacy of patient information and comparison of information required by psychiatric home-visit nurses and information actually received from hospitals

| Mean SD Median (QR) Mean SD Median (QR) P Intension of the components of the component | | Patient Psychiatric H | t Information ome-Visit N | Patient Information Required by Psychiatric Home-Visit Nurses from Hospitals | Psychiat | atient Infor ric Home- | Patient Information Received by Psychiatric Home-Visit Nurses from Hospitals | spitals | Deffect time (a) | Adequacy of Patient Information | ıcy of ormation |
|--|--|--------------------------|------------------------------|--|----------|---------------------------|--|-------------|------------------|------------------------------------|--------------------|
| tisk symptoms 6.0 1.5 7(5-7) 3.0 1.6 3(1-4) **** 0.65 state symptoms 6.0 1.5 7(5-7) 3.9 1.5 4(3-5) **** 0.73 sybiantic symptoms 6.0 1.5 7(5-7) 3.9 1.5 4(3-5) **** 0.73 sybiantic symptoms 6.0 1.5 7(5-7) 3.9 1.5 4(3-5) **** 0.73 sybiantic symptoms 6.0 1.5 7(5-7) 3.9 1.5 4(2-5) **** 0.73 sybiantic symptoms 6.0 1.6 6(4-7) 3.6 1.6 4(2-5) **** 0.73 sybiantic symptoms 6.0 1.5 7(5-7) 3.9 1.5 4(2-5) **** 0.73 sybiantic symptoms 6.0 1.5 7(5-7) 3.9 1.5 4(2-5) **** 0.73 sybiantic symptoms 6.0 1.5 7(5-7) 3.9 1.5 4(3-5) **** 0.73 sybiantic symptoms 6.0 1.5 6(5-7) 3.9 1.5 4(3-5) **** 0.73 sybiantic symptoms 6.0 1.5 6(5-7) 3.9 1.5 4(3-5) **** 0.69 sybiantic symptoms 6.0 1.5 6(5-7) 3.9 1.5 4(3-5) **** 0.69 sybiantic symptoms 6.0 1.5 6(5-7) 3.9 1.5 4(3-5) **** 0.69 sybiantic symptoms 6.0 1.5 6(5-7) 3.9 1.5 4(3-5) **** 0.69 sybiantic symptoms 6.0 1.5 6(5-7) 3.9 1.5 4(3-5) **** 0.69 sybiantic symptoms 6.0 1.5 6(5-7) 3.9 1.5 4(3-5) **** 0.69 sybiantic symptoms 6.0 1.5 6(5-7) 3.9 1.5 4(3-5) **** 0.69 sybiantic symptoms 6.0 1.5 6(5-7) 3.9 1.5 4(3-5) **** 0.69 sybiantic symptoms 6.0 1.5 6(5-7) 3.9 1.5 4(3-5) **** 0.69 sybiantic symptoms 6.0 1.5 6(5-7) 4.0 1.5 4(3-5) **** 0.69 sybiantic symptoms 6.0 1.5 6(5-7) 4.0 1.5 4(3-5) **** 0.69 sybiantic symptoms 6.0 1.5 6(5-7) 4.0 1.5 4(3-5) **** 0.69 sybiantic symptoms 6.0 1.5 6(5-7) 4.0 1.5 4(3-5) **** 0.69 sybiantic symptoms 6.0 1.5 6(5-7) 4.0 1.5 6(3-7) 4.0 | Items | Mean | SD | Median (IQR) | Mean | SD | Median (IQR) | d | Ellect Size (r) | Mean | SD |
| sychiatric symptoms 6.0 1.5 7(5-7) 3.9 1.5 4(3-5) **** 0.73 sychiatric symptoms 5.6 1.6 7(5-7) 3.9 1.5 4(3-5) **** 0.73 sychiatric symptoms 5.6 1.6 6(5-7) 3.8 1.5 4(3-5) **** 0.73 sichage 5.7 1.6 6(5-7) 3.8 1.5 4(3-5) *** 0.73 sischage 5.7 1.6 6(5-7) 3.8 1.5 4(3-5) *** 0.73 sischage 5.6 1.6 6(5-7) 3.8 1.5 4(3-5) *** 0.73 sessent and fiture predictions 5.7 1.6 6(5-7) 3.8 1.5 4(3-5) *** 0.73 sessent and fiture predictions 5.7 1.6 6(5-7) 3.8 1.5 4(3-5) *** 0.73 sessent and fiture predictions 5.5 1.6 6(5-7) 3.8 1.5 4(3-5) ***< | Psychological test results | 4.7 | 1.7 | 4 (4–6) | 3.0 | 1.6 | 3 (1–4) | * * * | 0.65 | -0.23 | 0.28 |
| sychiatric symptoms 5 15 7(5-7) 39 16 4(3-5) **** 0.72 shares 5 16 (4-7) 36 16 4(2-5) *** 0.72 discharge 5 16 (4-7) 36 15 4(3-5) *** 0.72 discharge 5 17 (4-7) 36 15 4(2-5) *** 0.73 discharge 5 16 (4-7) 36 15 4(2-5) *** 0.73 discharge 5 16 (4-7) 38 15 4(2-5) *** 0.73 discharge 5 16 (4-7) 39 15 4(3-5) *** 0.73 discharded 6 7 39 16 4(3-5) *** 0.69 bone-visit nursing 5 16 (4-7) 39 16 4(3-5) *** 0.73 g bone-visit nursing 5 16 (4-7) | Signs of worsening psychiatric symptoms | 0.9 | 1.5 | 7 (5-7) | 3.9 | 1.5 | | * * * | 0.73 | -0.21 | 0.23 |
| standage sta | Coping strategies for psychiatric symptoms | | 1.5 | 7 (5-7) | 3.9 | 1.6 | 4 (3–5) | * * * | 0.72 | -0.21 | 0.23 |
| insighted by the production of the production of the product of the product systems and butter predictions by the product systems by the productions by the productions by the productions by the product systems by the productions by the product systems | Life skills and strengths | 5.6 | 1.6 | 6 (4–7) | 3.6 | 1.6 | | * | 0.72 | -0.21 | 0.23 |
| lischarge lischa | Hopes for life after discharge | 5.7 | 1.6 | 6 (5-7) | 3.8 | 1.5 | - 1 | * * | 0.70 | -0.20 | 0.24 |
| d support systems 5.9 1.5 7(5-7) 4.0 1.5 4(3-5) **** 0.73 signs and behaviors 5.6 1.6 6(5-7) 3.8 1.5 4(3-5) **** 0.71 signs and behaviors 5.7 1.6 6(5-7) 3.9 1.5 4(3-5) **** 0.69 that and behaviors 5.8 1.6 6(5-7) 3.9 1.5 4(3-5) **** 0.69 bome-visit nursing agencies 5.1 1.6 6(4-7) 3.7 1.5 4(3-5) **** 0.69 all nurses want to be continued in home-visit nursing 5.6 1.6 6(4-7) 3.9 1.6 4(3-5) **** 0.69 all nurses want to be continued in home-visit nursing 5.6 1.6 6(4-7) 3.9 1.6 4(3-5) **** 0.69 all nurses want to be continued in home-visit nursing 5.7 1.7 6(4-7) 3.9 1.6 4(3-5) **** 0.69 all nurses want to be continued in home-visit nursing 5.7 1.7 6(4-7) 3.9 1.6 4(3-5) **** 0.69 all comorbidities 5.7 1.6 6(3-7) 3.9 1.6 4(3-5) **** 0.69 all comorbidities 5.7 1.7 6(4-7) 3.7 1.7 4(3-5) **** 0.69 all comorbidities 5.8 1.6 6(4-7) 3.7 1.7 4(3-5) **** 0.69 all comorbidities 5.9 1.6 6(4-7) 3.7 1.7 4(3-5) **** 0.69 all comorbidities 5.0 1.6 6(4-7) 3.7 1.7 4(3-5) **** 0.69 all comorbidities 5.1 1.7 6(4-7) 3.7 1.7 4(3-5) **** 0.69 all comorbidities 5.2 1.7 6(4-7) 3.7 1.7 4(3-5) **** 0.69 all comorbidities 5.7 1.5 6(3-7) 3.9 1.6 4(3-5) **** 0.69 all comorbidities 5.7 1.5 6(3-7) 4.1 1.6 4(3-5) **** 0.67 all comorbidities 5.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1 | Prediction of life after discharge | 5.4 | 1.7 | 6 (4–7) | 3.6 | 1.5 | 4 (2–5) | * * * | 69.0 | -0.20 | 0.24 |
| bome-visit nursing agencies 5.6 1.6 6(5-7) 3.8 1.5 4(3-5) **** 0.71 sesament and future predictions 5.6 1.6 6(5-7) 3.9 1.5 4(3-5) **** 0.69 home-visit nursing agencies 5.7 1.6 6(5-7) 3.9 1.6 4(3-5) **** 0.69 home-visit nursing agencies 5.7 1.6 6(4-7) 3.9 1.6 4(3-5) **** 0.69 and concerns 5.6 1.6 6(4-7) 3.9 1.6 4(3-5) **** 0.69 home-visit nursing agencies 5.6 1.6 6(4-7) 3.9 1.6 4(3-5) **** 0.69 home-visit nursing 5.6 1.6 6(4-7) 3.9 1.6 4(3-5) **** 0.69 home-visit nursing 5.5 1.7 6(4-7) 3.9 1.6 4(3-5) **** 0.69 home-visit nursing 5.5 1.7 6(4-7) 3.9 1.6 4(3-5) **** 0.69 home-visit nursing 5.5 1.7 6(4-7) 3.9 1.6 4(3-5) **** 0.69 home-visit nursing 5.5 1.7 6(4-7) 3.9 1.6 4(3-5) **** 0.69 home-visit nursing 5.5 1.7 6(4-7) 3.9 1.6 4(3-5) **** 0.69 home-visit nursing 5.7 1.5 6(4-7) 3.9 1.6 4(3-5) **** 0.69 home-visit nursing 5.7 1.5 6(4-7) 3.7 1.7 4(3-5) **** 0.69 home-visit nursing 5.8 1.6 6(4-7) 3.7 1.7 4(3-5) **** 0.69 home-visit nursing 5.8 1.6 6(4-7) 3.7 1.7 4(3-5) **** 0.69 home-visit nursing 5.8 1.6 6(4-7) 3.7 1.7 4(3-5) **** 0.69 home-visit nursing 5.8 1.6 6(4-7) 3.7 1.7 4(3-5) **** 0.69 home-visit nursing 5.8 1.6 6(4-7) 3.7 1.7 4(3-5) **** 0.69 home-visit nursing 5.8 1.6 6(4-7) 3.7 1.7 4(3-5) **** 0.69 home-visit nursing 5.8 1.6 6(4-7) 4.0 1.5 4(3-5) **** 0.69 home-visit nursing 5.8 1.6 6(4-7) 4.0 1.5 4(3-5) **** 0.69 home-visit nursing 5.8 1.6 6(4-7) 4.0 1.5 4(3-5) **** 0.69 home-visit nursing 5.8 1.6 6(4-7) 4.0 1.5 4(3-5) **** 0.69 home-visit nursing 5.8 1.6 6(4-7) 4.0 1.5 4(3-5) **** 0.69 home-visit nursing 5.8 1.6 6(4-7) 4.0 1.5 4(3-5) **** 0.69 home-visit nursing 5.8 1.6 6(4-7) 4.0 1.5 4(3-5) **** 0.69 home-visit nursing 5.8 1.6 6(4-7) 4.0 1.5 4(3-5) **** 0.69 home-visit nursing 5.8 1.8 1.8 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 | Family relationships and support systems | 5.9 | 1.5 | | 4.0 | 1.5 | 4 (3–5) | * * | 0.73 | -0.19 | 0.21 |
| sesment and future predictions 5.7 1.5 6(5-7) 3.9 1.5 4(3-5) *** 0.69 through the predictions 5.7 1.5 6(5-7) 3.8 1.5 4(3-5) *** 0.69 throw of the more-visit nursing services 5.5 1.7 6(4-7) 3.9 1.6 4(3-5) *** 0.69 and concerns 5.5 1.7 6(4-7) 3.9 1.6 4(3-5) *** 0.69 throw of the disease 5.5 1.7 6(4-7) 3.8 1.5 4(3-5) *** 0.69 throw of the disease 5.5 1.7 6(4-7) 3.8 1.5 4(3-5) *** 0.69 throw of the disease 5.5 1.7 6(4-7) 3.9 1.6 4(3-5) *** 0.69 throw of the disease 5.7 1.6 6(5-7) 3.9 1.6 4(3-5) *** 0.69 throw of the disease 5.7 1.6 6(5-7) 3.9 1.6 4(3-5) *** 0.69 throw of the disease 5.7 1.6 6(4-7) 3.9 1.6 4(3-5) *** 0.69 throw of the disease 5.7 1.6 6(4-7) 3.9 1.6 4(3-5) *** 0.69 throw of the disease 5.7 1.7 6(4-7) 3.9 1.6 4(3-5) *** 0.69 throw of the disease 5.7 1.7 6(4-7) 3.7 1.7 4(3-5) *** 0.69 throw of the disease 5.7 1.7 6(4-7) 3.7 1.7 4(3-5) *** 0.69 throw of the disease 5.7 1.5 6(4-7) 3.7 1.7 4(3-5) *** 0.69 throw of the disease 5.7 1.5 6(4-7) 3.7 1.7 4(3-5) *** 0.69 throw of the disease 5.7 1.5 6(4-7) 4.0 1.5 4(3-5) *** 0.69 throw of the disease 5.7 1.5 6(4-7) 4.0 1.5 4(3-5) *** 0.69 throw of the disease 5.7 1.5 6(4-7) 4.0 1.5 4(3-5) *** 0.69 throw of the disease 5.7 1.5 6(4-7) 4.0 1.5 4(3-5) *** 0.69 throw of the disease 5.7 1.5 6(4-7) 4.4 1.7 4(3-5) *** 0.69 throw of the disease 5.7 1.5 6(4-7) 4.4 1.5 4(3-5) *** 0.69 throw of the disease 5.7 1.5 6(4-7) 4.4 1.5 4(3-5) *** 0.69 throw of throw of the disease 5.7 1.5 6(4-7) 4.4 1.5 6(4 | Interpersonal relationships | 5.6 | 1.6 | 6 (5–7) | 3.8 | 1.5 | 4 (3–5) | * * * | 0.71 | -0.19 | 0.22 |
| bome-visit nursing agencies 5.6 1.6 6(5-7) 3.8 1.5 4(3-5) *** 0.69 home-visit nursing agencies 5.7 1.6 6(5-7) 3.9 1.6 4(3-5) *** 0.69 home-visit nursing agencies 5.7 1.7 6(4-7) 3.7 1.5 4(3-5) *** 0.69 home-visit nursing 5.6 1.6 6(4-7) 3.8 1.5 4(3-5) *** 0.69 home-visit nursing 5.6 1.6 6(4-7) 3.8 1.5 4(3-5) *** 0.69 home-visit nursing 5.7 1.7 6(4-7) 3.8 1.5 4(3-5) *** 0.69 home-visit nursing 5.8 1.6 6(5-7) 3.9 1.6 4(3-5) *** 0.69 home-visit nursing 5.7 1.7 6(4-7) 3.9 1.6 4(3-5) *** 0.69 home-visit nursing 5.7 1.5 6(4-7) 3.9 1.6 4(3-5) *** 0.69 home-visit nursing 5.7 1.5 6(4-7) 3.7 1.7 4(3-5) *** 0.69 home-visit nursing 5.7 1.5 6(4-7) 3.7 1.7 4(3-5) *** 0.69 home-visit nursing 5.7 1.5 6(4-7) 3.7 1.7 4(3-5) *** 0.69 home-visit nursing 5.7 1.5 6(4-7) 3.9 1.6 4(3-5) *** 0.69 home-visit nursing 5.7 1.5 6(4-7) 4.0 1.5 4(3-5) *** 0.69 home-visit nursing 5.7 1.5 6(4-7) 4.0 1.7 4(3-5) *** 0.69 home-visit nursing 6.0 1.6 6(4-7) 4.0 1.5 4(3-5) *** 0.69 home-visit nursing 6.0 1.5 1.5 6(4-7) 4.0 1.5 4(3-5) *** 0.69 home-visit nursing 6.0 1.5 1.5 6(4-7) 4.0 1.5 4(3-5) *** 0.69 home-visit nursing 6.0 1.5 1.5 6(4-7) 4.0 1.5 4(3-5) *** 0.69 home-visit nursing 6.0 1.5 1.5 6(4-7) 4.0 1.5 4(3-5) *** 0.69 home-visit nursing 6.0 1.5 1.5 6(4-7) 4.0 1.5 4(3-5) *** 0.69 home-visit nursing 6.0 1.5 1.5 6(3-7) 4.4 1.7 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 | Primary physician's assessment and future predictions | 5.7 | 1.5 | 6 (5-7) | 3.9 | 1.5 | | * * * | 0.69 | -0.19 | 0.23 |
| bome-visit nursing agencies 5.7 1.6 6(5-7) 3.9 1.6 4(3-5) *** 0.69 and concerns 5.5 1.7 6(4-7) 3.7 1.5 4(3-5) *** 0.69 and concerns 5.6 1.6 6(4-7) 3.7 1.5 4(3-5) *** 0.69 and concerns 5.6 1.6 6(4-7) 3.8 1.5 4(3-5) *** 0.69 and concerns 5.6 1.6 6(4-7) 3.8 1.5 4(3-5) *** 0.69 and concerns 5.5 1.7 6(4-7) 3.8 1.6 4(3-5) *** 0.69 and concerns 5.7 1.6 6(4-7) 3.8 1.6 4(3-5) *** 0.69 and concerns 5.7 1.5 6(4-7) 3.8 1.6 4(3-5) *** 0.69 and concerns 5.7 1.5 6(3-7) 3.9 1.6 4(3-5) *** 0.69 and concerns 5.7 1.5 6(3-7) 3.9 1.6 4(3-5) *** 0.69 and conceptidities 5.7 1.5 6(3-7) 3.9 1.6 4(3-5) *** 0.69 and conceptidities 5.4 1.7 6(4-7) 3.7 1.7 4(3-5) *** 0.69 and conceptidities 5.4 1.7 6(4-7) 3.9 1.6 4(3-5) *** 0.69 and conceptidities 5.4 1.7 6(4-7) 3.9 1.6 4(3-5) *** 0.69 and conceptidities 5.7 1.5 6(3-7) 4.0 1.5 4(3-5) *** 0.69 and conceptidities 5.7 1.5 6(3-7) 4.0 1.5 4(3-5) *** 0.69 and conceptidities 5.7 1.5 6(4-7) 4.0 1.5 4(3-5) *** 0.69 and conceptidities 5.7 1.5 6(4-7) 4.0 1.5 4(3-5) *** 0.69 and conceptidities 5.7 1.5 6(4-7) 4.0 1.5 4(3-5) *** 0.69 and conceptidities 5.7 1.5 6(3-7) 4.4 1.7 4(3-5) *** 0.69 and conceptidities 5.7 1.5 6(3-7) 4.4 1.7 4(3-5) *** 0.69 and conceptidities 5.7 1.5 6(3-7) 4.4 1.7 4(3-5) *** 0.69 and conceptidities 5.7 1.5 6(3-7) 4.4 1.7 4(3-5) *** 0.69 and conceptidities 5.7 1.5 6(3-7) 4.4 1.7 4(3-5) *** 0.69 and conceptidities 5.7 1.5 6(3-7) 4.4 1.7 4(3-5) *** 0.69 and conceptidities 5.7 1.5 6(3-7) 4.4 1.7 4(3-5) *** 0.69 and conceptidities 5.7 1.5 6(3-7) 4.4 1.7 4(3-5) *** 0.69 and conceptidities 5.7 1.5 6(3-7) 4.4 1.7 6(3 | Characteristics of thoughts and behaviors | 5.6 | 1.6 | 6 (5–7) | 3.8 | 1.5 | 4 (3–5) | * * * | 69.0 | -0.19 | 0.24 |
| and concerns 5.5 1.7 6(4-7) 3.7 1.5 4(3-5) *** 0.69 tal nurses want to be continued in home-visit nursing 5.6 1.6 6(4-7) 3.8 1.6 4(3-5) *** 0.69 se lated to the disease 5.5 1.7 6(4-7) 3.8 1.6 4(3-5) *** 0.69 se lated to the disease 5.7 1.6 6(5-7) 3.8 1.6 4(3-5) *** 0.69 se lated to the disease 5.8 1.6 6(5-7) 3.9 1.6 4(3-5) *** 0.69 se lated to the disease 5.7 1.6 6(5-7) 3.9 1.6 4(3-5) *** 0.69 se lated to the disease 5.8 1.6 6(5-7) 3.9 1.6 4(3-5) *** 0.69 se lated to the disease 5.4 1.7 6(4-7) 3.7 1.6 4(3-5) *** 0.66 se lated to the disease 5.4 1.7 6(4-7) 3.7 1.6 4(3-5) *** 0.67 se lated to the disease 5.4 1.7 6(4-7) 3.7 1.6 4(3-5) *** 0.67 se lated to the disease 5.4 1.7 6(4-7) 3.7 1.6 4(3-5) *** 0.67 se lated to the disease 5.4 1.7 6(4-7) 3.7 1.6 4(3-5) *** 0.67 se lated to the disease 5.6 1.6 6(4-7) 3.7 1.6 4(3-5) *** 0.67 se lated to the disease 5.6 1.6 6(4-7) 3.7 1.6 4(3-5) *** 0.67 se lated to the disease 5.6 1.6 6(4-7) 3.7 1.7 4(3-5) *** 0.67 se lated to the disease 5.6 1.6 6(4-7) 3.7 1.6 4(3-5) *** 0.67 se lated to the disease 5.7 1.5 6(5-7) 4.0 1.5 4(3-5) *** 0.67 se lated to the disease 5.8 1.6 6(4-7) 4.0 1.5 4(3-5) *** 0.67 se lated to the disease 5.9 1.4 7(5-7) 4.4 1.6 4(3-5) *** 0.67 se lated to the disease 5.1 1.5 1.5 1.5 1.5 1.5 1.5 1.5 | Troubles with previous home-visit nursing agencies | 5.7 | 1.6 | 6 (5–7) | 3.9 | 1.6 | 4 (3–5) | * * * | 69.0 | -0.19 | 0.23 |
| tal nurses want to be continued in home-visit nursing 5.6 1.6 6 (4—7) 3.9 1.6 4 (3–5) *** 0.69 selated to the disease 5.5 1.7 6 (4—7) 3.8 1.5 4 (3–5) *** 0.69 selated to the disease 5.7 1.6 6 (5—7) 3.9 1.6 4 (3–5) *** 0.69 selated to the disease 5.7 1.6 6 (5—7) 3.9 1.6 4 (3–5) *** 0.69 selated to the disease 5.7 1.6 6 (5—7) 3.9 1.6 4 (3–5) *** 0.69 selated to the disease 5.7 1.6 6 (5—7) 3.9 1.6 4 (3–5) *** 0.69 selated to the disease 5.7 1.5 6 (5—7) 3.9 1.6 4 (3–5) *** 0.69 selated to the disease 5.7 1.5 6 (4—7) 3.7 1.7 4 (3–5) *** 0.69 selated to the disease 5.6 1.6 6 (4—7) 3.7 1.6 4 (3–5) *** 0.69 selated to the disease 5.6 1.6 6 (4—7) 4.0 1.7 4 (3–5) *** 0.67 selated to the disease 5.6 1.6 6 (4—7) 4.0 1.7 4 (3–5) *** 0.67 selated to the disease 5.6 1.6 6 (4—7) 4.0 1.5 4 (3–5) *** 0.67 selated to the disease 5.6 1.6 6 (4—7) 4.0 1.5 4 (3–5) *** 0.67 selated to the disease 5.6 1.6 6 (4—7) 4.0 1.5 4 (3–5) *** 0.67 selated to the disease 5.6 1.6 6 (4—7) 4.0 1.5 4 (3–5) *** 0.67 selated to the disease 5.7 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 | Personalities, interests, and concerns | 5.5 | 1.7 | 6 (4-7) | 3.7 | 1.5 | 4 (3–5) | * * * | 69.0 | -0.19 | 0.24 |
| selated to the disease 5.6 1.6 6(5-7) 3.8 1.5 4(3-5) *** 0.68 | Nursing care that hospital nurses want to be continued in home-visit nursing | 5.6 | 1.6 | 6 (47) | 3.9 | 1.6 | 4 (3–5) | * * | 69.0 | -0.19 | 0.24 |
| g bone-visit nursing 5.5 1.7 6 (4-7) 3.8 1.6 4 (3-5) **** 0.67 se 5.7 1.6 6 (5-7) 3.9 1.6 4 (3-5) **** 0.69 5.8 1.6 6 (5-7) 4.0 1.5 4 (3-5) **** 0.69 al comorbidities 5.4 1.7 6 (4-7) 3.7 1.7 4 (3-5) **** 0.66 5.4 1.7 6 (4-7) 3.7 1.7 4 (3-5) **** 0.66 treatment 5.6 1.6 6 (4-7) 3.7 1.6 4 (3-5) **** 0.69 treatment 5.6 1.6 6 (4-7) 3.7 1.6 4 (3-5) **** 0.69 treatment 5.6 1.6 6 (4-7) 4.0 1.7 4 (3-5) **** 0.69 to the disease 5.7 1.5 6 (5-7) 4.0 1.7 4 (3-5) **** 0.67 odes at onset 5.8 1.6 6 (4-7) 4.0 1.7 4 (3-5) **** 0.67 odes at onset 5.9 1.4 7 (3-7) 4.4 1.7 4 (3-5) **** 0.65 ones leading to hospitalization 5.9 1.4 7 (3-7) 4.4 1.7 4 (3-6) **** 0.66 ones leading to hospitalization 5.9 1.4 7 (3-7) 4.4 1.7 4 (3-6) **** 0.66 one selection of the disease 5.7 1.5 6 (3-7) 4.4 1.7 4 (3-6) **** 0.66 one selection of the disease 5.7 1.5 6 (3-7) 4.4 1.7 4 (3-6) **** 0.66 one selection of the disease 5.7 1.5 7 (3-7) 4.4 1.7 4 (3-6) **** 0.66 one selection of the disease of the diseas | History of upbringing related to the disease | 5.6 | 1.6 | 6 (5–7) | 3.8 | 1.5 | | * | 0.68 | -0.19 | 0.24 |
| se contractment 5.7 1.6 6(5-7) 3.9 1.6 4(3-5) *** 0.69 5.7 1.6 6(5-7) 4,0 1.6 4(3-5) *** 0.69 5.8 1.6 6(5-7) 4,0 1.5 4(3-5) *** 0.69 5.9 1.1 6(4-7) 3.7 1.7 4(3-5) *** 0.68 5.4 1.7 6(4-7) 3.7 1.7 4(3-5) *** 0.66 5.4 1.6 6(4-7) 3.7 1.7 4(3-5) *** 0.66 5.5 1.6 6(4-7) 3.7 1.6 4(3-5) *** 0.69 5.6 1.6 6(4-7) 4,0 1.7 4(3-5) *** 0.69 5.6 1.6 6(4-7) 4,0 1.7 4(3-5) *** 0.67 5.6 1.6 6(4-7) 4,0 1.5 4(3-5) *** 0.67 5.6 1.6 6(4-7) 4,0 1.5 4(3-5) *** 0.67 5.6 1.6 6(4-7) 4,0 1.5 4(3-5) *** 0.67 5.6 1.6 6(4-7) 4,0 1.5 4(3-5) *** 0.65 5.6 1.6 6(4-7) 4,0 1.5 4(3-5) *** 0.65 5.7 1.5 6(4-7) 4,0 1.5 4(3-5) *** 0.65 5.8 1.5 1.5 6(5-7) 4,1 1.6 4(3-5) *** 0.65 5.9 1.4 7(5-7) 4,1 1.6 4(3-6) *** 0.65 5.9 1.4 7(5-7) 4,1 1.6 4(3-6) *** 0.65 5.9 1.5 1.5 6(5-7) 4,1 1.6 4(3-6) *** 0.65 5.9 1.5 1.5 6(5-7) 4,1 1.6 4(3-6) *** 0.65 5.9 1.5 1.5 6(5-7) 4,1 1.6 1.6 4(3-6) *** 0.65 5.9 1.5 1.5 6(5-7) 4,1 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1. | History of discontinuing home-visit nursing | 5.5 | 1.7 | 6 (4-7) | 3.8 | 1.6 | | * * * | 0.67 | -0.19 | 0.24 |
| both treatment 5.8 1.6 6(5-7) 4.0 1.6 4(3-5) *** 0.69 al comorbidities 5.7 1.5 6(5-7) 4.0 1.5 4(3-5) *** 0.68 al comorbidities 5.4 1.7 6(4-7) 3.7 1.7 4(3-5) *** 0.66 and constraints 5.4 1.7 6(4-7) 3.7 1.7 4(3-5) *** 0.66 and constraints 5.4 1.6 6(4-7) 3.7 1.7 4(3-5) *** 0.66 and constraints 5.6 1.6 6(4-7) 4.0 1.5 4(3-5) *** 0.67 and constraints 5.6 1.6 6(4-7) 4.0 1.5 4(3-5) *** 0.67 and constraints 6.0 1.5 6(4-7) 4.0 1.5 4(3-5) *** 0.67 and constraints 6.0 1.5 1.5 6(4-7) 4.0 1.5 4(3-5) *** 0.65 and constraints 6.0 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 | Awareness of the disease | 5.7 | 1.6 | 6 (5-7) | 3.9 | 1.6 | | * * | 69.0 | -0.18 | 0.23 |
| al comorbidities 5.7 1.5 6 (5-7) 4.0 1.5 4 (3-5) *** 0.68 home-visit nursing 5.4 1.7 6 (4-7) 3.7 1.7 4 (3-5) *** 0.66 home-visit nursing 5.4 1.7 6 (4-7) 3.7 1.7 4 (3-5) *** 0.66 5.4 1.6 6 (4-7) 3.7 1.7 4 (3-5) *** 0.65 treatment 5.6 1.6 6 (4-7) 4.0 1.7 4 (3-5) *** 0.66 toft disease 5.7 1.5 6 (5-7) 4.0 1.7 4 (3-5) *** 0.66 5.8 1.6 6 (4-7) 4.0 1.5 4 (3-5) *** 0.67 d d d d d d d d d d d d d | Awareness of medication treatment | 5.8 | 1.6 | 6 (5–7) | 4.0 | 1.6 | 4 (3–5) | * * * | 69.0 | -0.18 | 0.22 |
| home-visit nursing 5.4 1.7 6 (4—7) 3.7 1.7 4 (3—5) **** 0.66 5.4 1.6 6 (4—7) 3.7 1.7 4 (3—5) **** 0.65 5.6 1.6 6 (4—7) 3.7 1.6 4 (3—5) **** 0.65 1.6 (4—7) 3.7 1.6 4 (3—5) **** 0.65 1.6 (4—7) 3.9 1.6 4 (3—5) **** 0.65 2.6 1.6 6 (3—7) 4.0 1.7 4 (3—5) **** 0.67 3.9 1.6 4 (3—5) **** 0.67 3.9 1.6 4 (3—5) **** 0.67 3.9 1.6 4 (3—5) **** 0.67 3.9 1.6 4 (3—5) **** 0.67 3.9 1.6 4 (3—5) **** 0.67 3.9 1.6 6 (4—7) 4.0 1.5 4 (3—5) **** 0.67 3.9 1.6 6 (4—7) 4.0 1.5 4 (3—5) **** 0.67 3.9 1.4 7 (5—7) 4.4 1.7 4 (3—5) **** 0.66 3.9 1.4 7 (5—7) 4.4 1.7 4 (3—6) **** 0.66 3.9 1.4 7 (5—7) 4.4 1.6 4 (3—5) **** 0.66 3.9 1.5 7 (5—7) 4.4 1.6 4 (3—5) **** 0.66 3.9 1.5 7 (5—7) 4.4 1.6 4 (3—6) **** 0.68 3.9 1.6 5 (4—7) 6.7 1.5 6 (4—7) 3.9 1.6 5 (4—7) 8.** 0.68 3.0 1.6 5 (4—7) 8.** 0.68 | Nursing care for physical comorbidities | 5.7 | 1.5 | 6 (5–7) | 4.0 | 1.5 | | * * * | 89.0 | -0.18 | 0.22 |
| home-visit nursing 5.4 1.6 6 (4-7) 3.7 1.6 4 (3-5) *** 0.65 treatment 5.6 1.6 6 (4-7) 3.9 1.6 4 (3-5) *** 0.65 treatment 5.6 1.6 6 (4-7) 3.9 1.6 4 (3-5) *** 0.66 treatment 5.6 1.6 6 (5-7) 3.9 1.6 4 (3-5) *** 0.67 tofthe disease 5.7 1.5 6 (5-7) 4.1 1.6 4 (3-5) *** 0.67 tofthe disease 5.7 1.5 6 (4-7) 4.0 1.5 4 (3-5) *** 0.67 tofthe disease 5.5 1.6 6 (4-7) 4.0 1.5 4 (3-5) *** 0.67 tofthe disease 5.5 1.6 6 (4-7) 4.0 1.5 4 (3-5) *** 0.67 tofthe disease 5.5 1.6 6 (4-7) 4.0 1.5 4 (3-5) *** 0.65 tofthe disease 5.5 1.6 6 (4-7) 4.0 1.6 4 (3-6) *** 0.65 tofthe disease 6.0 1.5 7 (5-7) 4.4 1.7 4 (3-6) *** 0.66 tofthe disease 6.0 1.5 7 (5-7) 4.4 1.6 4 (3-6) *** 0.66 tofthe disease 6.0 1.5 7 (5-7) 4.4 1.6 4 (3-6) *** 0.65 tofthe disease 6.0 1.5 7 (5-7) 4.4 1.6 4 (3-6) *** 0.65 tofthe disease 6.0 1.5 7 (5-7) 4.4 1.6 5 (4-6) *** 0.65 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) *** 0.65 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) *** 0.65 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-6) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 1.5 5 (4-7) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 tofthe disease 6.0 1.5 7 (5-7) 5.0 tofthe disease | Clinical test data | 5.4 | 1.7 | 6 (4-7) | 3.7 | 1.7 | 4 (3–5) | * * * | 99.0 | -0.18 | 0.25 |
| treatment 5.6 1.6 6 (4-7) 4.0 1.7 4 (3-5) *** 0.69 treatment 5.6 1.6 6 (5-7) 3.9 1.6 4 (3-5) *** 0.66 tof the disease 5.7 1.5 6 (5-7) 4.1 1.6 4 (3-5) *** 0.67 des at onset 5.8 1.6 6 (4-7) 4.0 1.5 4 (3-5) *** 0.67 des at onset 5.9 1.6 6 (4-7) 4.0 1.5 4 (3-5) *** 0.67 des at onset 6.0 1.5 6 (4-7) 4.0 1.5 4 (3-5) *** 0.67 des at onset 6.0 1.5 7 (5-7) 4.4 1.7 4 (3-6) *** 0.65 des at onset 6.0 1.5 7 (5-7) 4.4 1.6 4 (3-6) *** 0.66 g hospitalization 5.1 1.5 6 (5-7) 4.0 1.6 4 (3-6) *** 0.65 des at onset 6.2 1.6 6 (4-7) 4.0 1.5 4 (3-5) *** 0.65 des at onset 7.1 1.5 1.5 1.5 1.5 1.5 1.5 1.5 | Patients' perceptions of home-visit nursing | 5.4 | 1.6 | 6 (4-7) | 3.7 | 1.6 | 4 (3–5) | * * * | 0.65 | -0.18 | 0.24 |
| treatment tof the disease t of the disease t of the disease t of the disease t of the disease 5.7 | Use of social resources | 5.6 | 1.6 | 6 (4-7) | 4.0 | 1.7 | 4 (3–5) | * * | 69.0 | -0.17 | 0.21 |
| tof the disease $5.7 1.5 6(5-7) 4.1 1.6 4(3-5) *** 0.67$ odes at onset $5.6 1.6 6(4-7) 4.0 1.5 4(3-5) *** 0.67$ odes at onset $5.5 1.6 6(4-7) 4.0 1.5 4(3-5) *** 0.67$ onces leading to hospitalization $5.9 1.4 7(5-7) 4.4 1.7 4(3-6) *** 0.65$ onces leading to hospitalization $5.9 1.4 7(5-7) 4.4 1.6 4(3-6) *** 0.66$ once leading to hospitalization $5.7 1.5 6(5-7) 4.4 1.6 4(3-6) *** 0.66$ once leading to hospitalization $5.7 1.5 6(5-7) 4.4 1.6 4(3-6) *** 0.66$ once leading to hospitalization $5.7 1.5 6(5-7) 4.4 1.6 4(3-6) *** 0.65$ once leading to hospitalization $5.7 1.5 6(5-7) 4.4 1.6 4(3-6) *** 0.65$ once leading to hospitalization $5.7 1.5 6(5-7) 4.4 1.6 5(4-6) *** 0.65$ | Awareness of inpatient treatment | 5.6 | 1.6 | 6 (5–7) | 3.9 | 1.6 | 4 (3–5) | * * * | 99.0 | -0.17 | 0.23 |
| Sed 1.6 6 (4-7) 4.0 1.5 4 (3-5) *** 0.67 odes at onset 5.6 1.6 6 (4-7) 4.0 1.5 4 (3-5) *** 0.67 odes at onset 5.5 1.6 6 (4-7) 4.0 1.6 4 (3-5) *** 0.65 odes odes at onset 6.0 1.5 7 (5-7) 4.4 1.6 4 (3-6) *** 0.65 odes odes odes odes odes odes odes odes | Progress since the onset of the disease | 5.7 | 1.5 | 6 (5–7) | 4.1 | 1.6 | 4 (3–5) | * * | 0.67 | -0.16 | 0.21 |
| odes at onset 5.6 1.6 6(4-7) 4.0 1.5 4(3-5) *** 0.67 d necs leading to hospitalization 6.0 1.5 7(5-7) 4.4 1.6 4(3-6) *** 0.66 5.7 1.5 6(5-7) 4.4 1.6 4(3-6) *** 0.66 5.8 1.5 7(5-7) 4.4 1.6 4(3-6) *** 0.66 5.9 1.4 7(5-7) 4.4 1.6 4(3-6) *** 0.66 5.1 1.5 6(5-7) 4.3 1.5 4(3-5) *** 0.66 5.2 1.5 6(5-7) 4.4 1.6 4(3-6) *** 0.65 5.3 1.5 6(5-7) 6(5-7) 6(5-7) 6(5-7) 6(5-7) 5.4 1.5 6(5-7) 6(5-7) 6(5-7) 6(5-7) 6(5-7) 5.5 1.5 6(5-7) 6(5-7) 6(5-7) 6(5-7) 6(5-7) 6(5-7) 5.7 1.5 6(5-7) 6 | Self-care | 5.6 | 1.6 | 6 (4-7) | 4.0 | 1.5 | | * * * | 0.67 | -0.16 | 0.20 |
| d 6.4—7) 4.0 1.6 4(3–5) *** 0.65 nees leading to hospitalization 6.0 1.5 7(5–7) 4.4 1.7 4(3–6) *** 0.65 ners leading to hospitalization 6.0 1.5 7(5–7) 4.4 1.6 4(3–6) *** 0.66 ners leading to hospitalization 5.7 1.5 6(5–7) 4.4 1.6 4(3–6) *** 0.66 ners leading to hospitalization 5.7 1.5 6(5–7) 4.4 1.6 4(3–6) *** 0.65 ners leading to hospitalization 5.7 1.5 6(5–7) 4.8 1.6 5(4–6) *** 0.53 ners leading to hospitalization 5.7 1.5 6(5–7) 4.8 1.6 5(4–6) *** 0.53 ners leading to hospitalization 6.0 1.5 7(5–7) 4.8 1.6 5(4–6) *** 0.53 ners leading to hospitalization 6.0 1.5 7(5–7) 4.8 1.6 5(4–6) *** 0.53 ners leading to hospitalization 6.0 1.5 7(5–7) 4.8 1.6 5(4–6) *** 0.53 ners leading to hospitalization 6.0 1.5 1.5 7(5–7) 4.8 1.6 5(4–6) 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 | Time of onset and episodes at onset | 5.6 | 1.6 | 6 (4-7) | 4.0 | 1.5 | 4 (3–5) | * * | 0.67 | -0.16 | 0.22 |
| necs leading to hospitalization 5.9 1.4 7(5-7) 4.4 1.7 4(3-6) *** 0.67 ers 6.0 1.5 7(5-7) 4.4 1.6 4(3-6) *** 0.66 5.7 1.5 6(5-7) 4.3 1.5 4(3-5) *** 0.66 5.7 1.5 6(5-7) 4.4 1.6 4(3-6) *** 0.65 5.7 1.5 6(5-7) 4.4 1.6 4(3-6) *** 0.63 5.7 1.5 7(5-7) 4.8 1.6 5(4-6) *** 0.53 5.7 1.5 7(5-7) 5.0 1.5 5.0 5.0 5.1 5.0 5 | Life in the hospital ward | 5.5 | 1.6 | 6 (4-7) | 4.0 | 1.6 | 4 (3–5) | * * * | 0.65 | -0.16 | 0.21 |
| pers 6.0 1.5 $7(5-7)$ 4.4 1.6 4 (3-6) *** 0.66 5.7 1.5 6 (5-7) 4.3 1.5 4 (3-5) *** 0.66 5.7 1.5 6 (5-7) 4.4 1.6 4 (3-6) *** 0.63 5.7 1.5 6 (5-7) 4.4 1.6 4 (3-6) *** 0.63 5.8 1.5 7 (5-7) 4.8 1.6 5 (4-6) *** 0.53 5.7 1.5 6 (5-7) 6.0 1.5 6 (6-7) 6.0 1.5 6 | Reasons and circumstances leading to hospitalization | 5.9 | 1.4 | (5 | 4.4 | 1.7 | 4 (3-6) | * * | 0.67 | -0.15 | 0.20 |
| g hospitalization 5.7 1.5 6 (5-7) 4.3 1.5 4 (3-5) *** 0.66 -5.7 1.5 6 (5-7) 4.4 1.6 4 (3-6) *** 0.63 -5.7 1.5 7 (5-7) 4.8 1.6 5 (4-6) *** 0.53 -5.7 1.5 6 (5-7) 6.0 1.5 6 (6.7 | Episodes of harm to others | 0.9 | 1.5 | (5 | 4.4 | 1.6 | 4 (3-6) | * * * | 99.0 | -0.15 | 0.21 |
| 5.7 1.5 6(5-7) 4.4 1.6 4(3-6) *** 0.63 - 5.8 1.5 7(5-7) 4.8 1.6 5(4-6) *** 0.53 - 5.7 1.5 6(3-7) 5.0 1.5 5(4.6) *** 0.45 - 5.7 1.5 6(3-7) 5.0 1.5 5(4.6) 5.0 | Physical comorbidities | 5.7 | 1.5 | 6 (5-7) | 4.3 | 1.5 | 4 (3-5) | * * | 99.0 | -0.14 | 0.19 |
| 5.8 1.5 7(5-7) 4.8 1.6 5(4-6) *** 0.53 - 5.7 1.5 6(5-7) 5.0 1.5 5.0 6.5 *** 0.05 | Treatment details during hospitalization | 5.7 | 1.5 | 6 (5-7) | 4. 4. | 1.6 | 4 (3-6) | * * | 0.63 | -0.13 | 0.19 |
| - 2/1 15 6/5 *** 0.46 - | Diagnosis | 5.8 | 1.5 | 7 (5–7) | 4.8 | 1.6 | 5 (4-6) | * * | 0.53 | -0.09 | 0.18 |
| | Prescription details | 5.7 | 1.5 | 6 (5-7) | 5.0 | 1.5 | 5 (4-6) | * * * | 0.46 | -0.07 | 0.16 |

The Wilcoxon signed-rank test was employed to compare the ratings of information needed from hospitals versus information received. The effect size (r) was calculated for each item. The standard significance level was set at 0.05 (***p < 0.001), and the Bonferroni-corrected significance threshold was p < 0.00156. Participants rated two items per question using a 7-point Likert scale (1 = strongly disagree to 7 = strongly agree): i) "Do you need this information from hospitals?" and ii) "Do you receive sufficient information from hospitals?". The adequacy of patient information was calculated as: Adequacy of Patient Information = logio (Patient Information Received by Psychiatric Home-Visit Nurses from hospitals/ Patient Information Required by Psychiatric Home-Visit Nurses from Hospitals). A value of 0 indicates balance between required and received information. Values ranged from -0.85 to 0.85, and simple tabulation was used to analyze the distribution of information adequacy. and psychiatric home-visit nurses revealed significant discrepancies between the information needed by home-visit nurses and the information actually received across all assessed categories. In particular, there was a notable lack of information regarding "psychological test results", "signs of worsening psychiatric symptoms", "coping strategies for psychiatric symptoms", "life skills and strengths", and "hopes for life after discharge". These findings highlight the need to improve the provision of this specific type of information to enhance the quality of psychiatric home-visit nursing services and ensure better continuity of care.

Acknowledgements

We sincerely appreciate the cooperation of the nurses and assistant nurses from the home-visit nursing agencies who participated in this survey.

Funding: This work was supported by a grant from the 28th Home-Visit Nursing and Home Care Research Grant Recipient (FY 2022).

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

References

- 1. Ministry of Health, Labour and Welfare of Japan. Vision for mental health and welfare reform. https://www.mhlw.go.jp/topics/2004/09/dl/tp0902-1a.pdf (accessed January 15, 2025). (in Japanese)
- 2. Ministry of Health, Labour and Welfare of Japan. Establishing a comprehensive community care system including support for mental disorders. https://www.mhlw.go.jp/stf/seisakunitsuite/bunya/chiikihoukatsu.html (accessed January 15, 2025). (in Japanese)
- 3. Baker E, Robinson D, Brautigan R. The effect of psychiatric home nurse follow-up on readmission rates of patients with depression. J Am Psychiatr Nurses Assoc. 1999; 5:111-116.
- 4. Ogata A, Mimura K, Konno E, Fukuda M, Yamamoto T, Fujita E, Hirata K, Kabashima S. Effect of psychiatric home-visit nursing on relapse prevention in schizophrenia. Seishin Igaku (Psychiatry). 1997; 39:131-137. (in Japanese)
- Burns T, Knapp M, Catty J, Healey A, Henderson J, Watt H, Wright C. Home treatment for mental health problems: A systematic review. Health Technol Assess. 2001; 5:1-139.
- Kayama M, Matsushita T, Funakoshi A, et al. Empirical study on the effects of psychiatric home-visit nursing: Analysis based on psychiatric hospitalization days. Seishin Igaku (Psychiatry). 2005; 47:647-653. (in Japanese)
- 7. Funakoshi A, Kayama M, Matsushita T, *et al.* Daily life functioning of patients using psychiatric home-visit nursing services. Jpn J Hospital & Community Psychi. 2006; 49:66-72. (in Japanese)
- 8. e-Stat. Survey on home-visit nursing expenses. https://www.e-stat.go.jp/stat-search/files?page=1&toukei=00 450385&tstat=000001052926 (accessed November 29,

- 2023). (in Japanese)
- Ministry of Health, Labour and Welfare of Japan. Survey on the actual status of psychiatric home-visit nursing and its role in the comprehensive community care system for mental disorders: FY 2020 Disability Welfare Promotion Project Report. https://www.mhlw.go.jp/ content/12200000/000798639.pdf (accessed January 15, 2025). (in Japanese)
- Kayama M, Setoya N, Doyle C. Expanding use of nurse home visiting for community psychiatric care in Japan. Psychiatr Q. 2020; 91:571-576.
- Setoya N, Aoki Y, Fukushima K, Sakaki M, Kido Y, Takasuna H, Kusachi H, Hirahara Y, Katayama S, Tachimori H, Funakoshi A, Kayama M. Future perspective of psychiatric home-visit nursing provided by nursing stations in Japan. Glob Health Med. 2023; 5:128-135.
- Takashima Y, Ishikawa T. Current status of information transmission from hospitals to psychiatric home-visit nurses and factors affecting satisfaction: A cross-sectional survey. Journal of the Japanese Association for Home Care Medicine. 2024; 5:1-9. (in Japanese)
- Takashima Y, Balaquera AP, Betriana F, Ito H, Yasuhara Y, Soriano G, Tanioka T. Psychiatric home-visiting nurses' views on the care information required from psychiatric hospital nurses. J Med Invest. 2024; 71:162-168.
- Cohen J. Statistical power analysis for the behavioral sciences. 2nd ed. Hillsdale, NJ: Lawrence Erlbaum Associates, New York, USA; 1988.
- Department of Health Policy, Japan Nursing Association.
 2021 Nursing staff survey. https://www.nurse.or.jp/nursing/home/publication/pdf/research/98.pdf (accessed November 29, 2023). (in Japanese)
- 16. e-Stat. Health administration report 2022. https://www.e-stat.go.jp/stat-search/files?page=1&toukei=00450027&tstat=000001031469&tclass1=000001207660 (accessed November 29, 2023). (in Japanese)
- 17. Kato T. Actual conditions and issues of interprofessional collaboration between hospital and home-visit nurses. Medical journal of Seirei Hamamatsu General Hospital. 2022; 22:8-14. (in Japanese)
- 18. Inoue T, Hayashi K. Literature review on the challenges of home-visit nursing staff for patients with mental disorders. Ishikawa Journal of Nursing. 2012; 9:121-130. (in Japanese)
- Schwarz CM, Hoffmann M, Smolle C, Borenich A, Fürst S, Tuca AC, Holl AK, Gugatschka M, Grogger V, Kamolz LP, Sendlhofer G. Patient-centered discharge summaries to support safety and individual health literacy: A doubleblind randomized controlled trial in Austria. BMC Health Serv Res. 2024; 24:789.

Received April 10, 2025; Revised June 10, 2025; Accepted June 16, 2025.

Released online in J-STAGE as advance publication June 21, 2025.

*Address correspondence to:

Yoshiyuki Takashima, Faculty of Nursing, School of Medicine, Nara Medical University, 88 Shijocho, Kashihara, Nara 634-0813, Japan.

E-mail: y-takashima@naramed-u.ac.jp