PSYCHIATRIA ET NEUROLOGIA JAPONICA

Statistical Compilation

Characteristics of COVID-19 Patients Admitted to the Municipal Psychiatry Hospitals

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Abstract

[Background and Methods] Municipal hospitals play a central role in treating patients with COVID-19 in their respective districts. For patients with psychiatric disorders, municipal psychiatry hospitals are responsible for this task. To investigate the status of COVID-19 treatment, we conducted a questionnaire survey of member institutions of the Japan Municipal Hospital Association in February 2021.

[Results] Questionnaires were distributed to 40 psychiatry hospitals and 9 psychiatric centers at the general hospitals; 44 returned the completed forms (response rate 89.8%). In total, 481 patients were admitted to the 16 institutions among the 32 that prepared beds designated for the treatment of COVID-19. Of 481 patients, 187 (39.5%) had an ICD-10 diagnosis of F2,174 (36.8) were F0, and 48 (10.1%) were F7. Moreover, 215 (45.5%) were admitted from psychiatry hospitals, 106 (22.4%) from their own home, and 70 (14.8%) from elderly facilities. For COVID-19,32 patients were transferred from general beds to psychiatry beds. Nine patients were admitted under administrative involuntary hospitalization. Indeed, 116 (24.3%) patients were hospitalized not under Act on Mental Health and Welfare, but because of deterioration

of conditions caused by COVID-19 infection. Among these patients, 41 were transferred to general beds.

[Discussion] This study revealed the importance of countermeasures against clusters at psychiatric hospitals and facilities for elderly people. Psychiatry hospitals should have an infection control team. Our study provides useful information to support the future development of designated beds for psychiatric patients with infectious diseases. The survey also revealed that issues exist with implementation of the Mental Health and Welfare Law. Urgent discussions are needed, for which the Infectious Diseases Control Law or the Mental Welfare Law should be prioritized.

Keywords: COVID-19, municipal hospital, psychiatry hospital, infection control team, community psychiatric treatment

Introduction

Two years have already passed since the worldwide outbreak of novel coronavirus infection (COVID-19). In Japan, the epidemic has repeatedly reappeared, and hospitals throughout the country are desperately battling against this infection. We, the municipal hospitals, play a central role in the treatment of COVID-19 in the local community, as was the purpose of our establishment. Japan Municipal Hospital Association (JMHA) launched the "Taskforce on the Role of Municipal Hospital during a COVID-19 Epidemic" and conducted a questionnaire survey of its member hospitals in May 2020, summarizing their experiences in the medical field[16]. According to the survey, there are concerns that the risk of infection increases for psychiatric patients who require intensive care but are unable to follow instructions, as well as concerns about inadequate facilities (e.g., difficulty in isolation in general hospitals, lack of oxygen facilities in psychiatric hospitals), the lack or shortage of psychiatrists in general hospitals, and the shortage of specialists and nurses in the fields of infectious diseases and physical complications in psychiatric hospitals, which points to the fragility of the treatment system.

The Mental Health and Disability Health Division, Department of Health and Welfare for Persons with Disabilities, Social Welfare and War Victims' Relief Bureau, Ministry of Health, Labour and Welfare issued an administrative communication on April 3, 2020, stating that "it is desirable to

secure several psychiatric institutions with infection protection functions such as negative pressure rooms in each prefecture, taking into account local conditions"[9]. In response to this, the establishment of COVID-19-compliant beds (beds for COVID-19) has been promoted in each municipal psychiatric hospital. The Special Committee on Psychiatry of JMHA surveyed the status of hospital beds as of June 19, 2020.[6] Of the 40 member psychiatric hospitals, 19 (47.5%) were ready, 4 (10%) were planning to be ready, and 5 (12.5%) were considering the establishment of such beds. This survey was conducted at the time when the first wave of COVID-19 had subsided, and only a total of 44 patients with positive COVID-19 PCR tests (PCR-positive patients) were accepted at the four facilities. Subsequently, the number of infected patients increased in the second and third waves, and clusters emerged in psychiatric hospitals and elderly care facilities throughout Japan. According to a survey conducted in January 2021 by the Japan Psychiatric Hospitals Association (JPHA) of its member hospitals, 1,012 PCR-positive patients occurred at 531 responding hospitals, of whom 631 (62.4%) could not be transferred, and 93 were in a moderate or severe condition[12]. If psychiatric patients are in a situation where they cannot receive adequate COVID-19 treatment, it is a major problem.

Psychiatric COVID-19 beds are available not only in municipal hospitals, but also in JPHA member hospitals, university hospitals, and hospitals belonging to the National Hospital Organization. However, although there have been reports from single psychiatric hospitals,[2)11)13)] there has been no nationwide survey. We, the Special Committee on Psychiatry of JAMA, conducted a questionnaire survey of member hospitals in February 2021 regarding their response to COVID-19, and obtained several new findings, which we believe will be valuable data for considering the medical care delivery system for psychiatric patients affected by COVID-19.

I. Survey Methods

1. Survey Subjects

Hospital directors of 40 psychiatric hospitals and directors of 9 general hospital psychiatric centers, which are members of the JMHA special committee, were surveyed.

2. Survey Period

February 2021

3. Data Collection Methods and Procedures

An e-mail was sent to the target

subjects with the questionnaire request letter and questionnaire form attached, using the name of the president of The Special Committee on Psychiatry of JMHA as the sender. The purpose and objectives of the survey were described in the request letter, and cooperation for the survey was requested. The questionnaire was prepared as an Excel file, and responses were obtained by e-mail. The questionnaire items are shown in Table 1.

4. Data Analysis Methods

The data were analyzed using descriptive statistics to indicate the number and percentage of respondents for each item.

5. Ethical Considerations

In preparing the paper, consent was obtained from the subjects by sending them an e-mail stating that the names of hospitals and information that could identify individual hospitals would not be disclosed, and that only statistically processed data would be presented. Approval was also obtained from the Ethics Committee of Ishikawa Kokoro Hospital (formerly Takamatsu Hospital), to which the author belongs (Approval No. 2021-10).

II. Results

A total of 44 institutions (39 psychiatric hospitals and 5 psychiatric centers) responded to the survey (response rate: 89.8%).

1. Preparation of COVID-19-Compliant Beds COVID-19 beds

Twenty-eight psychiatric hospitals (71.8%) and four psychiatric centers (80%) had dedicated beds, for a total of 32 facilities (72.7%) that had dedicated beds. Three of them had no information on the number of beds, and one psychiatric center had converted its beds to a general infectious disease ward. Table 2 shows the number of facilities and basic statistics by the number of COVID-19 beds for the 28 facilities, excluding the above-mentioned four. Including the one psychiatric center mentioned above, the number of beds reduced to prepare for COVID-19 beds was 0 at 12 facilities (41.4%), 1-9 beds at 6 facilities (20.7%), 9-19 beds at 1 facility (3.4%), 20-29 beds at 4 facilities (13.8%), 30-39 beds at 3 facilities (10.3%), and more than 40 beds at 3 facilities (10.3%), with a maximum of 53 beds, a median of 3 beds, and a mean of 12.7 beds, for a total of 368 beds.

2. Acceptance of PCR-Positive Patients

Fourteen psychiatric hospitals (50%) and three psychiatric centers (75%), for a total of 17 psychiatric facilities (53.1%), accepted PCR-positive patients. One psychiatric center was converted to

a general infectious disease ward as described above. The number of mentally ill patients received at the remaining 16 facilities was 481, including 475 in psychiatric hospitals and 6 in psychiatric centers, with a median of 16, a mean of 30.1, a minimum of 2, and a maximum of 189.

3. Gender and Age Group

Regarding gender, 221 (45.9%) patients were male and 260 were female.

The age groups of the 478 patients, excluding 3 patients whose details were unknown, were as shown in Figure 1, and increased with age up to the 80s.

4. Diagnostic Categories and Pre-Hospital Residence

Excluding the 5 patients without an F code and the 3 patients with unknown details, 473 patients were classified by diagnostic category (Figure 2). One hundred and eighty-seven patients (39.5%) were classified as F2, 174 (36.8%) as F0, 48 (10.1%) as F7, and none as F5 or F9. The most common place of residence prior to admission was a psychiatry hospital (215 patients, 45.5%), followed by home (106 patients, 22.4%), and a senior care facility (70 patients, 14.8%) (Figure 3).

Table 3 shows the pre-hospital residence by diagnostic category, and Figure 4 shows the ratio of pre-hospital residence by diagnostic category. Of F0 patients, 23.6% were admitted from home, 29.9% from a psychiatric hospital, and 33.9% from an institution for the elderly; of F2 patients, 74.9% were admitted from a psychiatric hospital and only 13.4% from home; of F7 and F8 patients, 50.0% were admitted from an institution for the disabled and 30% were admitted from home.

Thirty-two patients, or 6.8% of the total, were transferred from general COVID-19 beds. The breakdown is shown in Figure 5; 46.9% were F0, 21.9% were F2, and 12.5% were F1.

5. Type of Hospitalization

Table 4 shows the type of hospitalization. The first admission to a psychiatric hospital is indicated as a new admission, and a transfer from a psychiatric hospital is indicated as a transfer. Among the new admissions, 9 patients were admitted under administrative involuntary or emergency administrative involuntary hospitalization, accounting for 3.4% of the total new admissions. A total of 116 patients (24.3%) were hospitalized without Act on Mental Health and Welfare, accounting for 33.7% of all new admissions and 12.6% of transfers from psychiatric hospitals.

6. Number of Patients Transferred Due to Deterioration of COVID-19 Infection.

Eleven facilities responded. The

minimum number of patients was 1 and the maximum 17, with a median of 2 and a mean of 3.7, for a total of 41 patients. This represents 8.5% of the total number of patients.

III. Discussion

After the completion of the survey, the JMHA secretariat contacted the five facilities that had not responded to the questionnaire, and confirmed that no COVID-19 beds had been installed in these facilities. Therefore, as of February 1, 2021, 28 of the 40 municipal psychiatric hospitals and 5 of the 9 psychiatric centers had COVID-19 beds (one of which was converted to a general infectious disease ward), bringing the total number of COVID-19 beds provided for psychiatric patients to 151. According to the annual survey on the number of physicians conducted by the Special Committee on Psychiatry of JMHA, 8 of the 40 municipal psychiatric hospitals had regular internal medicine physicians, and 6 of them had COVID-19 beds. Overall, 23 (82.1%) had 6 or fewer beds and 5 (17.9%) had 10 or more beds, polarizing the group. Three of the 5 facilities with 10 or more beds had regular internal medicine physicians, and the remaining 2 were located in prefectures in the top 10 for the number of COVID-19 infected patients. The reasons for the establishment of more than 10 COVID-19 beds were thought to be that some of the facilities actively tried to accept patients by utilizing regular internal medicine physicians[2)7)], and others had no choice but to increase the number of COVID-19 beds due to the local infection status. The median number of COVID-19 beds was 4, and the median number of expected maximum beds was 5. If the area is not in an area where COVID-19 has spread, the maintenance of psychiatric COVID-19 beds should be 4 to 5 beds. On the other hand, 361 beds were reduced at 17 facilities in order to install COVID-19 beds. The reimbursement system for psychiatry is heavily weighted toward inpatient care, and reducing the number of beds usually results in a deterioration of management. The subsidy for securing vacant beds may have minimized the impact on management, but if the situation is prolonged, there is concern that the subsidy may be reduced. It is necessary to clarify the impact on the management of psychiatric hospitals in the future.

Of the 473 PCR-positive patients accepted by the psychiatry department of the municipal hospital, 215 (45.5%) were from psychiatric hospitals and 70 (14.8%) were from elderly care facilities, indicating the importance of counter-cluster measures in psychiatric hospitals and elderly care facilities. The results of an experiment conducted at a

U.S. state hospital regarding the transmission of COVID-19 in psychiatric hospitals have been reported[14]. The report states that even if Centers for Disease Control and Prevention (CDC) guidelines are followed, a high percentage of patients may become PCR-positive. Therefore, it is necessary to use masks in all environments in which patients are in close proximity before the first positive case occurs. Experience has shown that it is extremely difficult to ensure that people with dementia wear masks at all times, and once COVID-19 is introduced into an institution, it is not easy to prevent the development of clusters. On the other hand, psychiatric hospitals are more prone to outbreaks of infectious diseases than general hospitals, not limited to COVID-19, and are also considered to be an environment that makes it difficult to control such outbreaks[15]. In addition to COVID-19, there is always the risk of nosocomial infections such as influenza, norovirus, tuberculosis, and scabies, and given the age of hospitalized patients, attention should also be paid to drug-resistant bacteria. Based on this experience, we believe that psychiatric hospitals should not only thoroughly implement standard precautions, but also establish infection control teams (ICTs)[4] and collaborate with ICTs in general hospitals to learn about infection control on a daily basis[4]. In other words, it is desirable for psychiatric hospitals to establish a system that enables them to calculate the additional reimbursement for infection prevention.

Next, the number of COVID-19 patients who required urgent psychiatric treatment was low, based on the number of administrative involuntary and emergency administrative involuntary hospitalizations. It is thought that only a small number of infectious disease beds for severely mentally ill patients are needed in the community, and the negative pressure isolation rooms for tuberculosis that are already available in many municipal psychiatric hospitals should be sufficient. The reason why there are few patients with COVID-19 who take measures may be that patients whose mental condition is so poor that they are at risk of self-harm or other harm are less likely to engage in the so-called "Three Cs: Closed spaces, Crowded places, Close-contact settings" and thus have fewer opportunities for infection, but the individual diagnoses and condition profile need to be reexamined. On the other hand, it has been reported from Canada[5], Switzerland[1], and Portugal[3] that the number of psychiatric emergency department visits and hospitalizations decreased due to the COVID-19

pandemic. The reasons for this are thought to include a decrease in visits for less urgent and less severe depression and anxiety[1], and a possible decrease in non-urgent visits due to fear of infection, restrictions on movement, and a moral conscience of not placing an unnecessary burden on social services focused on the pandemic[3]. We believe that the actual impact of COVID-19 on the national psychiatric emergency system should be investigated also in Japan.

Furthermore, based on the diagnosis of patients transferred from COVID-19 beds, it appears that the treatment of infectious diseases in patients with psychiatric disorders may be more important in dealing with dementia than with schizophrenia or other narrowly-defined psychiatric disorders. Considering the fact that the number of patients with dementia is expected to increase in the future, the issue of treatment of physical illnesses in people who cannot follow instructions or maintain rest is an important issue not only for medical care, but also for society. The national government has established an additional charge for dementia care and an additional charge for care of patients at high risk of delirium, but we should consider more than ever before the need for dedicated beds for dementia in general hospitals, i.e., spaces where people with dementia can be treated in peace, and the training of staff skilled in dealing with people with dementia.

There were 116 patients (24.3%) hospitalized not under the Act on Mental Health and Welfare for the Mentally Disabled. There is no regulation in psychiatric hospitals prohibiting hospitalization not in accordance with the Act on Mental Health and Welfare for the Mentally Disabled[8], and these 116 patients were hospitalized in accordance with the Infectious Disease Control Law. Usually, when patients are admitted to psychiatric hospitals, they are admitted in accordance with the Act on Mental Health and Welfare for the Mentally Disabled. A total of 327 patients (14 in emergency administrative involuntary or administrative involuntary hospitalization, 310 in hospitalization for medical care and protection, and 3 in emergency hospitalization) had psychiatric symptoms that should have resulted in involuntary hospitalization before COVID-19 treatment. On the other hand, 35 of the voluntary admissions were persons with mental disorders who agreed to be hospitalized for COVID-19 treatment. In other words, they would not have been hospitalized if they had not been infected with COVID-19. Problems may arise if these voluntarily admitted patients request to be discharged from the hospital. Under

the Infectious Diseases Control Law, a patient who requests to be discharged from the hospital can be recommended for admission, but cannot be forcibly kept in the hospital. However, in the case of voluntary hospitalization, if a designated mental health doctor determines that the patient needs to remain hospitalized for medical treatment and protection, the patient's discharge can be restricted or even changed to a hospitalization for medical care and protection to continue inpatient treatment. This "medical care and protection" is usually taken to mean that medical care and protection are necessary for psychiatric symptoms, but it may be interpreted that COVID-19 treatment also falls under this category. In such a case, even if the Infectious Disease Control Law allows the patient to be discharged upon request, the Act on Mental Health and Welfare for the Mentally Disabled allows the patient to be changed to a hospitalization for medical care and protection and continue inpatient treatment, thus creating a situation where the patient's human rights are restricted because of his/her mental disorder. In order to avoid such difficulties in interpreting the law, we understand that some hospitals did not apply the Act on Mental Health and Welfare for the Mentally Disabled to patients who did not have psychiatric symptoms at the time of admission, and instead admitted them under the Infectious Disease Control Law. However, in consideration of the future, it should be discussed whether this type of hospitalization was correct, and the Ministry of Health, Labor and Welfare should present a clear view. In addition, in preparation for emerging infectious diseases, it may be necessary to clarify the relationship between the Infectious Diseases Act and the Act on Mental Health and Welfare for the Mentally Disabled, and to strengthen the Infectious Diseases Act to clearly state the obligation to treat such patients.

Psychiatric hospitals are supposed to accept COVID-19 patients with mild or asymptomatic symptoms, but naturally some patients may develop moderate disease symptoms, and some hospitals actively treated COVID-19 patients despite being psychiatric hospitals[2)7)13)]. As transfer to a general hospital may be difficult depending on the situation of the spread of infection, and because knowledge is accumulating day by day, and the medical treatment guidelines[10)] have been organized in an easy-to-understand manner, even psychiatric hospitals should cooperate to the extent possible as part of their mission as municipal hospitals when they are expected to treat patients with COVID-19. However, as mentioned above, only 8 out of 40 municipal psychiatric

hospitals have a regular internist. Historically, psychiatric care and general medical care have been considered separately. However, considering the age of patients with chronic mental disorders, the increase in the number of people with dementia, and infectious diseases such as those seen in this case, it may be necessary to make a drastic change, as separating the two no longer meets the needs of the times. What we can actually do now is to strengthen cooperation with general medical care and build a mutually trusting relationship.

Finally, we would like to discuss the limitations of this study. We did not use a medical evaluation of the severity of psychiatric symptoms because we aimed to obtain a rough idea of the characteristics of COVID-19 patients admitted to psychiatric hospitals. The survey was conducted at a time when the third wave of COVID-19 subsided, and the effects of the fourth and fifth waves need to be investigated again. In addition, 30 Japan Psychiatric Hospitals Association member hospitals were reported to have a total of 147 COVID-19 beds[12], so it is necessary to compare the results with those of other hospital groups.

Conclusion

The characteristics of COVID-19 patients accepted at municipal psychiatry hospitals were described. Many of the hospitals surveyed play a central role in the psychiatric emergency system in their communities. While maintaining their functions, some of the hospitals were forced to respond to patients in a way they had never experienced before, resulting in confusion and exhaustion in the field, but the importance of infection control in psychiatric care was learned as a lesson. The risk of emerging infectious diseases is increasing with globalization, and the development of ICT teams in psychiatry hospitals is urgently needed. In addition, it is necessary to make daily efforts to further deepen cooperation with general medical care.

We have no conflicts of interest to disclose in relation to this paper.

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References

1) Ambrosetti, J., Macheret, L., Folliet, A., et al.: Impact of the COVID-19 pandemic on psychiatric admissions to a large Swiss emergency department: an observational study. Int J Environ Res Public Health, 18 (3); 1174, 2021

2) 福田陽明, 邊土名智代, 今井淳司ほか: 東京都立松沢病院における新型コロナウイルス感染症(Coronavirus Disease 2019: COVID-19)患者の受け入れについての中間報告. 精神経誌, 122 (10); 749-756, 2020

3) Gonçalves-Pinho, M., Mota, P., Ribeiro, J., et al.: The impact of COVID-19 pandemic on psychiatric emergency department visits: a descriptive study. Psychiatr Q, 92 (2); 621-631, 2021

4) 川内健史: 精神科病院における ICT の組織化と一般科病院との感染制御に係る地域連携. 日精協誌, 39 (4); 327-331, 2020

5) Kim, H. K., Carvalho, A. F., Gratzer, D., et al.: The impact of COVID-19 on psychiatric emergency and inpatient services in the first month of the pandemic in a large urban mental health hospital in Ontario, Canada. Front Psychiatry, 12; 563906, 2021

6) 北村 立: 自治体病院における新型コロナウイルス感染症への取り組み. 精神医学, 63 (1); 27-35, 2021

7) 厚生労働省医政局地域医療計画課: 第3回第8次医療計画等に関する検討会(オンライン会議)資料4来住参考人提出資料(岡山県精神科医療センター院長). 2021 (https://www.mhlw.go.jp/stf/newpage_21288.html) (参照 2021-11-25)

8) 厚生労働省雇用均等・児童家庭局母子保健課: 母子保健分野における児童虐待予防等の推進について. 2018 (https://www.wam.go.jp/wamappl/bb16GS70.nsf/0/5a69ff22631bcc8a49257028001cf7ed/$FILE/siryou8,9.pdf) (参照 2021-05-15)

9) 厚生労働省社会・援護局障害保健福祉部精神・障害保健課: 精神科を標榜する医療機関における新型コロナウイルス感染症への対応について. 2020 (https://www.mhlw.go.jp/content/000618677.pdf) (参照 2021-03-15)

10) 厚生労働省診療の手引き検討委員会: 新型コロナウイルス感染症(COVID-19)診療の手引き第5版. 2021 (https://www.mhlw.go.jp/content/000785119.pdf) (参照 2021-06-03)

11) 長尾眞理子: 新型コロナウイルス感染症に係る埼玉県立精神医療センターの対応と精神科特別部会緊急アンケート調査結果

の概要について．全自病協雑誌, 59 (11); 1574-1580, 2020

12) 野木 渡: 災害に対する備え(危機管理において病院事務職に期待すること)—新型コロナウイルス感染症(COVID-19)との闘いの中で—．日精協誌, 40 (5); 366-374, 2021

13) 田口寿子, 樋口美佳, 小林桜児ほか: 神奈川県立精神医療センターにおける新型コロナウイルス感染症(COVID-19)への取り組み—医療提供体制の構築と院内感染防止対策について—．精神経誌, 122 (12); 910-929, 2020

14) Thompson, J. W. Jr., Mikolajewski, A. J., Kissinger, P., et al.: An epidemiologic study of COVID-19 patients in a state psychiatric hospital: high penetrance with early CDC guidelines. Psychiatr Serv, 71 (12); 1285-1287, 2020

15) 山内勇人: 精神科領域の感染制御について考える(総論)．日精協誌, 39 (4); 321-326, 2020

16) 全国自治体病院協議会 COVID-19 流行時における自治体病院のあり方タスクフォース: COVID-19 流行時における自治体病院の対応と今後のあり方—パンデミック第1波に対する会員病院のアンケート調査から—. 2020 (https://www.jmha.or.jp/contentsdata/chosa/COVID-19/arikata/COVID-19_houkokusyo.pdf) (参照 2021-04-28)

表1　質問項目

(2021年2月1日現在の数を記載してください.)
1. 新型コロナ専用病床の準備の有無
2. 新型コロナ専用病床について
   - 準備当初の病床数
   - 現在の病床数
   - 想定している最大病床数とその内訳（即応病床か準備病床か）
   - 新型コロナ専用病床を準備するため削減した病床数
3. PCR 陽性入院患者の有無

(以降，入院患者があった場合)
4. 年代ごとの人数
5. 性別ごとの人数
6. 入院前居所ごとの精神科主診断（F コード）の人数
7. 入院時の入院形態ごとの人数
8. 重症化のため総合病院へ転院した人数

Table 1 Questionnaire Items

(Please indicate the number as of February 1, 2021.)

1. Whether or not beds dedicated to COVID-19 are available

2. Number of beds dedicated to COVID-19

Number of beds at the time of preparation

Number of beds at present

Maximum number of beds expected and its breakdown (immediate response beds or prepared beds)

Number of beds reduced in order to prepare beds exclusively for COVID-19

3. Presence or absence of PCR-positive hospitalized patients

(If there have been any hospitalized patients since then)

4. Number of patients by age group

5. Number of patients by sex

6. Number of patients with primary psychiatric diagnosis (F-code) per place of residence prior to admission

7. Number of patients by type of admission at the time of admission

8. Number of patients who were transferred to a general hospital due to serious illness.

表 2　コロナ病床の状況（N＝28 施設）

専用病床数	施設数（%）						基本統計量（床）				
	1〜3 床	4〜6 床	7〜9 床	10〜12 床	13〜15 床	16 床以上	最小値	最大値	中央値	平均値	総計
準備当初の病床	16（57.1）	9（32.1）	0	1（3.6）	0	2（7.1）	1	52	3	5.7	159
2021 年 2 月 1 日の病床	13（46.4）	10（35.7）	0	3（10.7）	0	2（7.1）	1	24	4	5.4	151
想定される最大病床	10（35.7）	9（32.1）	1（3.6）	3（10.7）	1（3.6）	4（14.3）	1	45	5	7.8	218
（うち即応病床）	10（35.7）	11（39.3）	2（7.1）	3（10.7）	0	2（7.1）	1	24	5	5.7	159

Table 2: COVID-19 Beds (N=28 facilities)

Number of dedicated beds Number of facilities (%) Basic statistic (beds)

1-3 beds 4-6 beds 7-9 beds 10-12 beds 13-15 beds 16 or more beds Min Max Median Mean Total

Beds at the beginning of preparation 16 (57.1) 9 (32.1) 0 1 (3.6) 0 2 (7.1) 1 52 3 5.7 159

Beds on February 1, 2021 13 (46.4) 10 (35.7) 0 3 (10.7) 0 2 (7.1) 1 24 4 5.4 151

Maximum possible sickbeds 10 (35.7) 9 (32.1) 1 (3.6) 3 (10.7) 1 (3.6) 4 (14.3) 1 45 5 7.8 218

(of which immediate response beds) 10 (35.7) 11 (39.3) 2 (7.1) 3 (10.7) 0 2 (7.1) 1 24 5 5.7 159

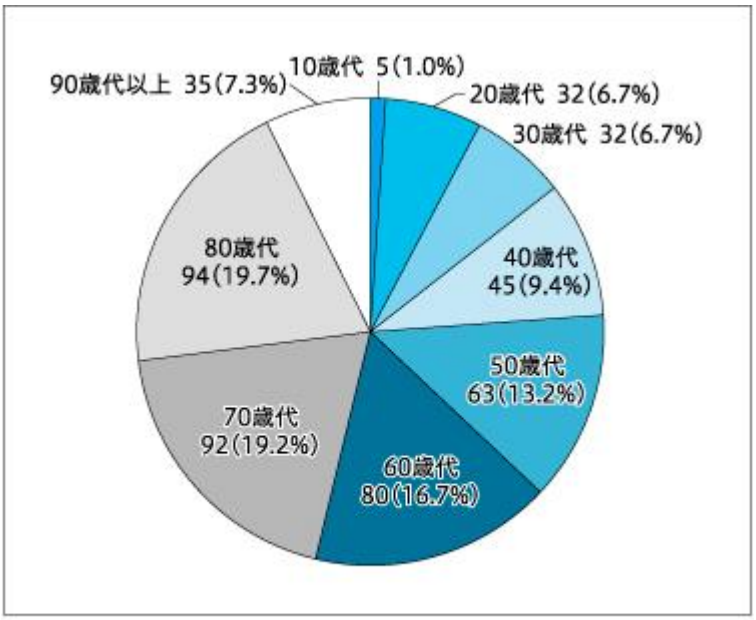

図1　年齢階層（N＝478）
データラベルは年代，人数，％を示している．

Figure 1: Age Groups (N=478)
Data labels indicate age, number of persons, and percent.

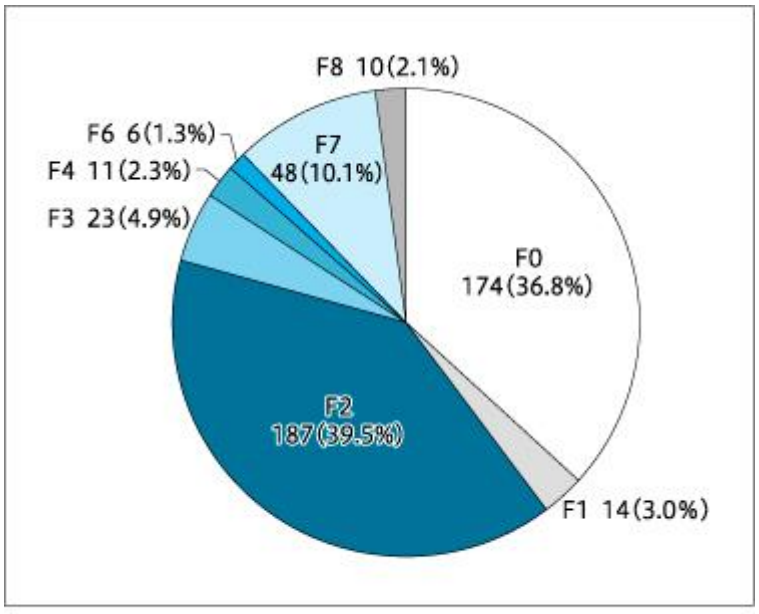

図2　診断カテゴリー（N＝473）
データラベルは分類名，人数，％を示している．

Figure 2 Diagnostic Categories (N=473)
Data labels indicate category name, number of persons, and percent.

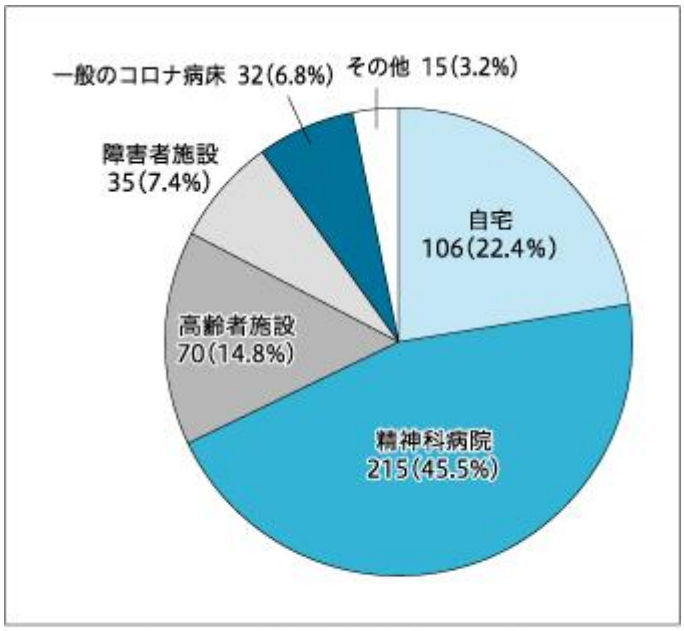

図３　入院前居所（N＝473）
データラベルは分類名，人数，％を示している．

Figure 3: Pre-Admission Residence (N=473)
Data labels indicate category name, number of persons, and percent.

表３　診断カテゴリーと入院前居所

	F0	F1	F2	F3	F4	F6	F7	F8	合計（名）
自宅	41	1	25	8	10	4	14	3	106
精神科病院	52	6	140	12	1	1	2	1	215
高齢者施設	59	1	5	1	0	0	4	0	70
障害者施設	0	0	6	0	0	0	24	5	35
一般のコロナ病床	15	4	7	2	0	0	3	1	32
その他	7	2	4	0	0	1	1	0	15
合計（名）	174	14	187	23	11	6	48	10	473

F5，F9：0 名，F コード以外：5 名，詳細不明：3 名

Table 3: Diagnostic Categories and Pre-Admission Residence

F0 F1 F2 F3 F4 F6 F7 F8 Total (persons)

Home 41 1 25 8 10 4 14 3 106

Psychiatric hospital 52 6 140 12 1 1 2 1 215

Elderly facility 59 1 5 1 0 0 4 0 70

Facilities for the disabled 0 0 6 0 0 0 0 24 5 35
General COVID-19 beds 15 4 7 2 0 0 0 3 1 32
Others 7 2 4 0 0 0 1 1 0 15
Total (persons) 174 14 187 23 11 6 48 10 473
F5, F9: 0 persons, other than F-code: 5 persons, details unknown: 3 persons

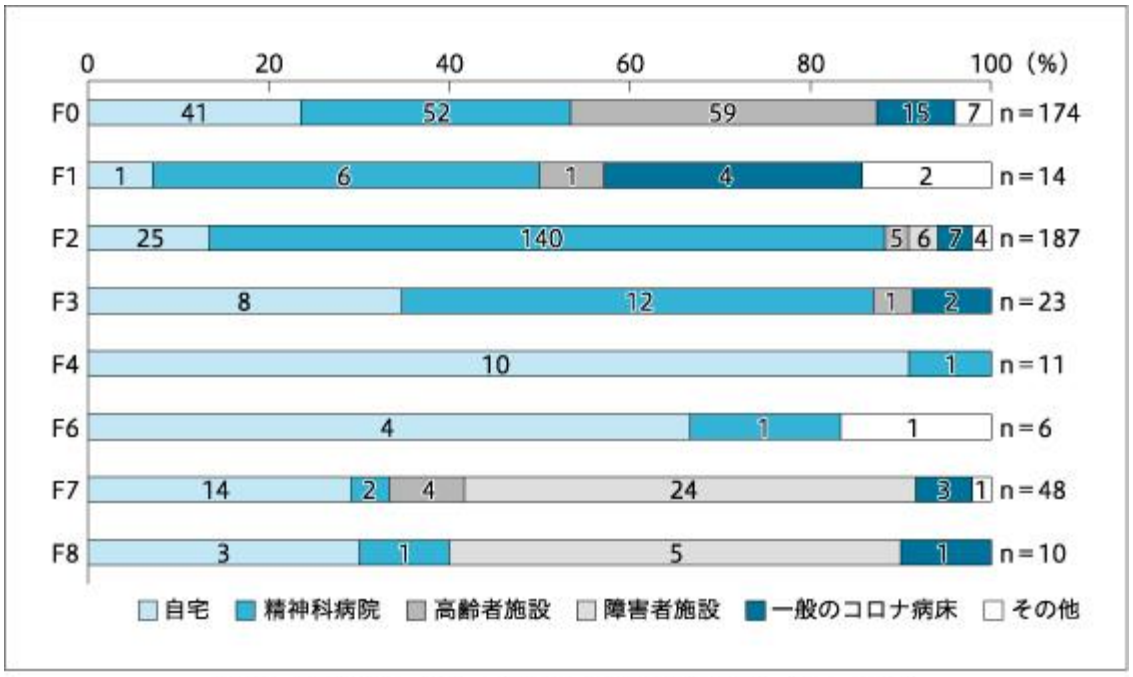

図4　診断カテゴリー別の入院前居所の比率（N＝473）

Figure 4: Percentage of Pre-Hospitalization Residence by Diagnostic Category (N=473)

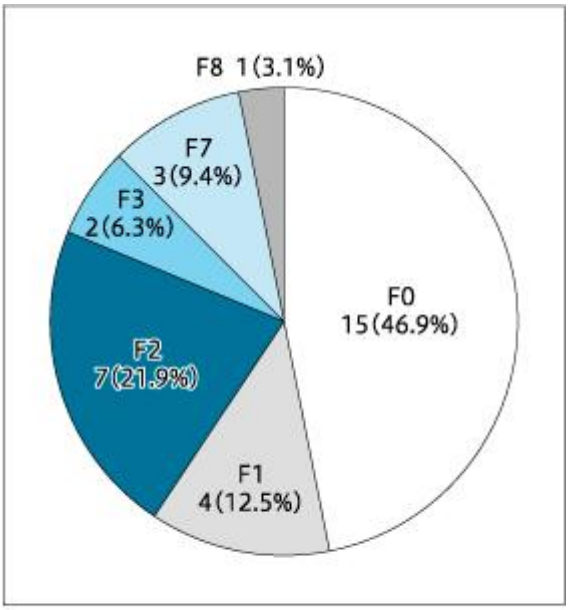

図 5　一般のコロナ病床からの転院者の診断カテゴリー（N＝32）
データラベルは分類名，人数，％を示している．

Figure 5 Diagnostic Categories of Patients Transferred From General COVID-19 Beds (N=32)
Data labels indicate category name, number of persons, and percent.

表 4　入院形態（N＝478）

	措置	緊急措置	医療保護		応急	任意	その他	合計（名）
			家族・後見人	市町村長同意				
新規入院	3	6	138	6	3	19	89	264
転院	5	0	163	3	0	16	27	214
合計（%）	8（1.7）	6（1.3）	301（63.0）	9（1.9）	3（0.6）	35（7.3）	116（24.3）	478（100）

詳細不明の 3 名を除く．入院形態のその他とは，精神保健福祉法によらない入院である．

Table 4 Type of Hospitalization (N=478)

Measure Emergency measure Medical protection Emergency Voluntary Other Total (persons)

Family/Guardian Consent of mayor of municipality

New hospitalization 3 6 138 6 3 3 19 89 264
Transfer 5 0 163 3 0 16 27 214
Total (%) 8 (1.7) 6 (1.3) 301 (63.0) 9 (1.9) 3 (0.6) 35 (7.3) 116 (24.3) 478 (100)
Excluding 3 patients whose details were unknown. The "Other" category of hospitalization refers to hospitalizations not covered by the Act on Mental Health

and Welfare for the Mentally Disabled.