

* This English manuscript is a translation of a paper originally published in *Psychiatria et Neurologia Japonica*, Vol.125, No.9, pp. 799-807. This manuscript was translated by the Japanese Society of Psychiatry and Neurology with the assistance of machine translation and was published with the author's confirmation and permission. If you wish to cite this paper, please use the original paper as the reference.

The JSPN Award for Special Contributions to Psychiatric Research Lecture

The Effectiveness of Guidelines for Dissemination and Education in Psychiatric Treatment (EGUIDE)" Project: A Nationwide Dissemination, Education, and Evaluation Study

Ryota HASHIMOTO, EGUIDE project members

Department of Pathology of Mental Diseases, National Institute of Mental Health,
National Center of Neurology and Psychiatry

Psychiatria et Neurologia Japonica 125: 799-807, 2023

Abstract

Medication and psychosocial therapy are the two main components in psychiatric care; however, there is a great deal of variation in clinicians in their practice. Thus, there is a need to disseminate more standardized care. The Effectiveness of Guidelines for Dissemination and Education in psychiatric treatment (EGUIDE) project was launched to disseminate, educate, and validate psychiatric treatment guidelines. The EGUIDE project conducted real world surveys to clarify psychiatric treatment and performed 141 guideline training sessions for schizophrenia and major depressive disorder with approximately 3,500 participants to disseminate, educate, and validate psychiatric treatment guidelines. A one-day training course on each guideline significantly improved understanding of the guidelines and Shared Decision Making (SDM), in which doctors and patients discuss and decide on treatment. Furthermore, the practice of the guidelines was shown to improve continuously over several years after the course compared to the pre-course period. A survey of conditions in psychiatric care reported that guidelines were not widely used. For example, antipsychotic monotherapy is recommended for schizophrenia; however, the monotherapy rate at discharge in Japan is 57% with a wide variation from hospital to hospital, ranging from 0% to 100%. Patients whose primary

physicians had attended the course showed higher rates of receiving the antipsychotic monotherapy recommended for schizophrenia and the antidepressant monotherapy recommended for major depressive disorder than patients whose primary physicians had not attended the course, suggesting the effectiveness of the training. Conducting training courses on a nationwide scale with the aim of equalization of standard psychiatric care in the future is necessary. Bringing together practitioners from across the country who are engaged in such activities and who share the same philosophy regarding psychiatry and medical care will improve dissemination and education for the next generation.

Keywords: EGUIDE project, Guideline for Pharmacological Therapy of Schizophrenia, Guideline for the Treatment of Mood Disorders, equalization, Quality Indicator (QI)

Introduction

Psychiatric research aims to prevent the onset of mental disorders, and help patients improve once they develop such disorders. Psychiatrists have long provided careful treatment to many patients, empathizing with their feelings and doing their utmost for each individual at that moment. However, for problems that could not be solved by this approach alone, numerous studies have been conducted using methodologies such as clinical and basic research. Most studies have been exploratory, with very few being replicated. Clinical practice guidelines represent the culmination of these rare, reproducible research findings. Yet, the reality is that the dissemination of these guidelines remains insufficient. To address this issue, EGUIDE Project

(Effectiveness of GUIDeline for Dissemination and Education in psychiatric treatment) was launched in 2016.¹⁾ This project focuses on the dissemination, education, and verification of psychiatric treatment guidelines. This initiative expanded to 45 universities and 282 medical institutions nationwide (Figure 1). The effectiveness of guideline training sessions was verified, leading to EGUIDE Project receiving the 2021 Psychiatric Care Encouragement Award from the Japanese Society of Psychiatry and Neurology. This paper summarizes the content of the award acceptance lecture.

I. What is EGUIDE Project?

EGUIDE Project promotes dissemination and education by

conducting guideline training sessions nationwide: schizophrenia guideline training (administered by Kitasato University), and depression guideline training (administered by Kyorin University). It measures participants' understanding before and after training and conducts longitudinal surveys on the degree of guideline-based treatment implementation (Figure 2). Furthermore, by measuring clinical quality indicators (QI) over time, the project investigates the actual state of psychiatric care in Japan and verifies the dissemination and educational effectiveness of the guidelines (Figure 2). The guidelines include: *the Guideline for Pharmacological Therapy of Schizophrenia 2022*,¹⁸⁾ developed by the Japanese Society of Neuropsychopharmacology and the Japanese Society of Clinical Neuropsychopharmacology, *the Guideline for the Treatment of Mood Disorders II: Depression (DSM-5)/major depressive disorder 2016*,²⁰⁾ developed by the Japanese Society of Mood Disorders, *the Guideline for the Prevention of Obesity and Diabetes Comorbid with Schizophrenia*,¹⁵⁾ and *the Clinical Practice Guideline for Pregnant and Postpartum Women with Comorbid or Potential Comorbid Mental Disorders*¹⁶⁾ developed by the Japanese Society of Psychiatry and Neurology and others. During training, lectures on

the guideline content are held in the morning, and in the afternoon, participants learn how to apply the guidelines to actual cases through group discussions (Figure 3). While the schizophrenia guidelines recommend monotherapy with antipsychotics, Japan reports a relatively low monotherapy prescription rate of approximately 45% compared with other countries.³⁰⁾ The monotherapy rate in North America and Europe is around 80%, and the average monotherapy rate across 15 Asian countries is 58% (range: 41–78%), with Japan having the second-lowest rate. An example of QI in EGUIDE is the monotherapy rate for antipsychotics in discharge prescriptions for schizophrenia patients. In Japan, this rate is 57%, and significant variation exists among hospitals, ranging from 0 to 100%.⁷⁾ EGUIDE aims to improve this rate to 75%, a level comparable with that of other countries, and promote standardization through its project.

II. What to Do Before Conducting Clinical Guideline Training—Misconceptions About Clinical Guidelines—

In the psychiatric field, where scientific evidence (evidence-based practice) is less familiar, misconceptions about guidelines themselves are common, such as: “Guidelines are better

than clinicians' experience because they are evidence-based,” or “Guidelines that negate clinicians' experience are unreliable and clinically unusable.” As long as these misconceptions persist, their dissemination and education on them become difficult. Therefore, EGUIDE Project training begins with lectures on the following content to deepen understanding of the guidelines themselves.

Guidelines are created to support patients and healthcare providers, and can be used as one factor in decision making within a clinical setting. Thus, they are tools for shared decision making (SDM), where the physician and patient discuss and decide on a treatment plan together. Shared decision making is a process where the patient and clinician share information about available treatment options, discuss them, and collectively make the best choice aligned with the patient's preferences and values. This is particularly emphasized in psychiatric care (Figure 4). Furthermore, guidelines are documents containing recommendations based on scientific evidence, developed through systematic methods that evaluate the merits and demerits of multiple treatment options. Scientific evidence provides probabilistic information for patients with a given condition; it does not perfectly predict individual patient

outcomes, and it is applied differently for different patients. To illustrate this, guidelines are likened to “ingredients,” clinical experience to “cooking skills,” and the psychiatrist to the “chef.” The quality of the dish depends on the chef's skill, even with the best ingredients, helping deepen understanding of guidelines.

III. Dissemination, Education, and Validation Outcomes of EGUIDE Project

EGUIDE Project conducted 141 guideline training sessions nationwide on schizophrenia and major depressive disorder, with a total of approximately 3,500 participants (as of March 2022). Satisfaction levels were high among participants in both schizophrenia and major depressive disorder guideline training sessions.²⁴⁾ Understanding of the training content and degree of guideline implementation clearly improved after the sessions,²⁷⁾²⁹⁾ demonstrating the effectiveness of the training. Regarding guideline implementation, an examination of the practice of Shared Decision Making (SDM), defined as “using treatment guidelines during discussions among patients, families, and healthcare providers to make decisions in clinical practice,” showed that the rate increased from 34% before the training to 60% one year after the training, and

this percentage was maintained at two years post-training. Furthermore, based on feedback from participants regarding their impressions and level of understanding collected throughout the one-year training program, revisions were made to the training materials and content, resulting in a recognized improvement in understanding.²²⁾ Additionally, during the COVID-19 pandemic period, the training transitioned to an online format, yet achieved effectiveness and satisfaction levels nearly equivalent to those of the face-to-face training.¹⁰⁾ Additionally, QI such as the rate of antipsychotic monotherapy in schizophrenia, were found to be higher among patients treated by trainees compared with those treated by non-trainees. However, as understanding and practice of SDM advance, treatment plans may sometimes be reversed in cases where patients prefer combination therapy over monotherapy. Considering the improvement in SDM practice, it should be noted that this may potentially influence the observed improvement in QI.

These dissemination, education, and validation activities form a cycle: starting with guideline development, disseminating and educating through training, validating using QI such as understanding, practice levels, and prescribing behavior, and then revising

the guidelines themselves to improve them based on these findings (Figure 5). Initiated in 2016 primarily by guideline development members from the Japanese Society of Neuropsychopharmacology and The Japanese Society of Mood Disorders, involving 22 medical institutions, it evolved into a joint project as of March 2023, incorporating the Japanese Society of Clinical Neuropsychopharmacology and Japanese Society of Psychiatry and Neurology. It is operated with support from the Japan Agency for Medical Research and Development (AMED). In 2022, the group published *the Guideline for Pharmacological Therapy of Schizophrenia*¹⁸⁾ developed collaboratively with schizophrenic individuals, their families, and multidisciplinary support professionals. Among Japanese guidelines, few involve not only physicians but also individuals with the condition, their families, and support providers as full members in the development process. This initiative is highly regarded as pioneering even within EBM Promotion Project (Minds) of the Japan Healthcare Evaluation Organization, which publishes guideline development manuals. Participation in research is required to attend this training course; however, not all psychiatrists have the opportunity to participate in research.

Therefore, training sessions that do not require research participation are held, organized by academic societies and the Osaka Psychiatric Clinic Association. To promote dissemination, the guidebook: *Understanding Psychiatric Treatment Guidelines Through Cases*,²⁾ which details treatment strategies based on the guidelines using case examples, was published.

While EGUIDE Project has advanced guideline dissemination and education for psychiatrists, psychiatric care is delivered through SDM. Therefore, deepening understanding of the guidelines among patients, families, and supporters is also necessary. The guidelines themselves target psychiatric specialists and so are difficult for patients, families, and supporters to read and understand. Consequently, we are developing a guide tailored for them. For the first guide created: *Guideline for Pharmacological Therapy of Schizophrenia*, consensus was reached through trial and error, deepening mutual understanding with patients, families, and supporters. This resulted in publication of: *Guide for Pharmacological Therapy of Schizophrenia: For Patients, Families, and Supporters*, in 2018.¹⁷⁾ Subsequently: *Guideline for the Treatment of Mood Disorders, the Easy-to-Understand Major Depressive Disorder Treatment Guide for Patients*

and Families was published in 2022.²¹⁾ Although it took several years from guideline publication to guide completion, mutual understanding and collaboration with individuals with mental illness, their families, and supporters progressed. Consequently, the *Guide for Pharmacological Therapy of Schizophrenia 2022: For Patients and Supporters* was published nine months after *the Guideline for Pharmacological Therapy of Schizophrenia 2022*.¹⁹⁾ Psychoeducation workshops for patients using these guides are currently under development, and their effectiveness will be evaluated. We believe that disseminating these workshops, designed for both psychiatrists and patients, as a set will lead to improved psychiatric care practices.

IV. Developing Dissemination Methods Based on Surveys of Psychiatric Care Practices in Japan

EGUIDE Project has investigated prescriptions at discharge and prior to admission for over 23,000 cases of schizophrenia and major depressive disorder, reporting these findings extensively as indicative of at least some aspects of real-world psychiatric care conditions in Japan. While the prescribing practices for schizophrenia were discussed earlier, we also examined discharge prescriptions for depression. We found that the rate of

monotherapy with antidepressants nationwide was approximately 60%, with this rate varying significantly among hospitals (0–100%), indicating a need for standardization.⁹⁾ Although *the Guideline for the Treatment of Mood Disorders* recommend different therapies based on severity levels, no previous survey examined the actual proportion of cases where severity was assessed. EGUIDE Project revealed that the rate of severity documentation in medical records nationwide was approximately 57%, with significant variation ranging from 0 to 100% across hospitals, again indicating a need for standardization.¹³⁾

In schizophrenia, approximately 30% of patients are treatment-resistant and show an inadequate response to antipsychotics. While clozapine treatment is recommended in guidelines, its dissemination remains insufficient. A high rate of treatment-resistant schizophrenia diagnosis documentation correlates with a higher clozapine prescription rate, highlighting the importance of this diagnosis.³¹⁾ Furthermore, while the nationwide rate of monotherapy with antipsychotics for schizophrenia is approximately 57%, it reaches about 90% among treatment-resistant schizophrenia patients prescribed clozapine. The concomitant use of other psychotropic medications is also low,

suggesting that using clozapine for treatment-resistant schizophrenia may lead to more appropriate treatment.²³⁾ Although long-acting injectable antipsychotics are recommended in the guidelines for schizophrenia, when these injectables are used, concomitant antipsychotic use is high, while the concomitant use of other psychotropic drugs is low.²⁶⁾ The discharge prescription rate for anticholinergic drugs, which are sometimes used for the extrapyramidal side effects of antipsychotics, was approximately 30% nationwide. This rate was not only higher than in other countries but also showed marked inter-hospital variation, ranging from 0 to 67%.⁶⁾ Among patients who had been prescribed anticholinergic drugs prior to hospitalization and discontinued them at discharge, a higher rate of antipsychotic monotherapy at discharge and larger proportion of second-generation antipsychotic prescriptions were observed.²⁵⁾

For both schizophrenia and depression, studies investigating the frequency of individual drug prescriptions⁵⁾ identified certain characteristics, such as approximately 30% of prescriptions being for as-needed medications and a lower rate of antipsychotic monotherapy among patients with as-needed prescriptions.⁸⁾¹²⁾ Furthermore, the rate

of sleep medication prescriptions was approximately 60%, indicating an association with polypharmacy involving medications for the primary disease.⁴⁾ Among patients receiving electroconvulsive therapy, lower rates of anxiolytic and sleep medication use at discharge were observed.²⁸⁾

Understanding the actual treatment practices for patients with mental disorders through such real-world data reveals new challenges and necessitates a consideration of strategies for future dissemination. Indeed, EGUIDE Project employs various approaches, such as discussing the reasons for polypharmacy in individual patients during multidisciplinary conferences to reduce the use of multiple psychotropic drugs, and initiatives to reduce the use of on-demand medications. These approaches are shared among facilities to promote further dissemination.

V. Utilizing Guidelines in Clinical Practice

As described above, Japan's psychiatric practice surveys identified the need for standardization by examining national and hospital-specific averages. However, there is no method to evaluate how closely individual patients' treatments adhere to guidelines. This necessitates comprehensively interpreting all guideline-defined clinical questions

(CQs), explaining them to patients, and conducting Shared Decision Making (SDM). While psychiatrists should certainly strive to develop expertise to interpret the guidelines appropriately, it is difficult for patients to understand all matters equally well. Therefore, an indicator (Individual Fitness Score: IFS) was created to show how well a prescription aligns with the guidelines, making it easier for patients to understand.³⁾¹¹⁾ This IFS assigns 100 points to the treatment most compliant with the guidelines. Points are deducted for treatments not recommended by the guidelines, with the lowest possible score being 0 points. The most critical consideration here is that the treatment most compliant with the guidelines differs depending on the specific diagnosis within the category, whether schizophrenia or major depressive disorder, because the recommended treatments vary based on the subtype diagnosis (e.g., schizophrenia: treatment-resistant; depression: mild/moderate, severe/psychotic). For example, in schizophrenia, antipsychotic monotherapy with a second-generation antipsychotic scores 100 points. Combining antipsychotics or psychotropic drugs results in a deduction of 15 to 80 points per additional agent. For treatment-resistant schizophrenia, clozapine therapy scores 100 points, while not

using clozapine results in a deduction of 60 points. As an example of using IFS in clinical practice: When a patient with schizophrenia complains of insomnia and requests a sleeping pill prescription, the IFS score drops from 80 to 65. Since the guidelines state that insomnia requires investigation of its cause, a consultation reveals that the insomnia stems from worsening auditory hallucinations. The antipsychotic dosage is then judged as insufficient and consequently increased (Figure 6). For patients, quantifying their prescription against standardized care makes the difference easier to understand. Receiving an explanation about implementing standardized care is considered to facilitate a deeper understanding of the treatment itself.

Conclusion

When EGUIDE Project began in 2016, understanding of the guidelines themselves was insufficient within the psychiatric field. However, through various activities, including EGUIDE Project, guidelines have now been positioned as standardized care, which I believe has significantly transformed psychiatric care. Furthermore, a major role played by EGUIDE Project was fostering exchanges that transcended university boundaries. Participants came from diverse universities and hospitals. Through group discussions,

they not only learned about standardized care but also gained insights into differences between psychiatric care in their own settings and that of other hospitals, often reporting this as a major source of inspiration. Furthermore, it is frequently noted that during case conferences following the training, junior psychiatrists who previously remained silent began actively contributing, discussing individual cases based on the guidelines while considering specific circumstances. Furthermore, as EGUIDE instructors and facility leaders interact across university boundaries, expertise in clinical practice, education, and research becomes shared. This fosters new individual relationships, leading to new collaborative research projects. Thus, beyond disseminating, educating about, and validating guidelines, EGUIDE also serves as a platform for building horizontal and vertical connections among people, enabling colleagues to unite and strive together for mutual improvement. Moving forward, we aim to continue and further develop EGUIDE Project, steadily advancing psychiatric care step by step, with the ultimate goal of changing the world. We sincerely request your cooperation and encourage interested parties to participate.

No conflicts of interest related to this paper require disclosure.

Acknowledgments: We express our gratitude to the patients who cooperated, EGUIDE Project participants, and all related personnel who provided support.

References

- 1) EGUIDE プロジェクトホームページ (<https://byoutai.ncnp.go.jp/eguide/>) (参照 2023-03-14) (in Japanese)
- 2) EGUIDE プロジェクト: ケースでわかる! 精神科治療ガイドラインのトリセツ. 医学書院, 東京, 2020 (in Japanese)
- 3) Fukumoto, K., Kodaka, F., Hasegawa, N., et al.: Development of an individual fitness score (IFS) based on the depression treatment guidelines of in the Japanese Society of Mood Disorders. *Neuropsychopharmacol Rep*, 43 (1); 33-39, 2023
- 4) Furihata, R., Otsuki, R., Hasegawa, N., et al.: Hypnotic medication use among inpatients with schizophrenia and major depressive disorder: results of a nationwide study. *Sleep Med*, 89; 23-30, 2022
- 5) Hashimoto, N., Yasui-Furukori, N., Hasegawa, N., et al.: Characteristics of discharge prescriptions for patients with schizophrenia or major depressive disorder: real-world evidence from the Effectiveness of Guidelines for Dissemination and Education (EGUIDE) psychiatric treatment project. *Asian J Psychiatr*, 63; 102744, 2021
- 6) Hori, H., Yasui-Furukori, N., Hasegawa, N., et al.: Prescription of anticholinergic drugs in patients with schizophrenia: analysis of antipsychotic prescription patterns and hospital characteristics. *Front Psychiatry*, 13; 823826, 2022
- 7) Ichihashi, K., Hori, H., Hasegawa, N., et al.: Prescription patterns in patients with schizophrenia in Japan: first-quality indicator data from the survey of "Effectiveness of Guidelines for Dissemination and Education in psychiatric treatment (EGUIDE)" project. *Neuropsychopharmacol Rep*, 40 (3); 281-286, 2020
- 8) Ichihashi, K., Kyou, Y., Hasegawa, N., et al.: The characteristics of patients receiving psychotropic pro re nata medication at discharge for the treatment of schizophrenia and major depressive disorder: a nationwide

- survey from the EGUIDE project. Asian J Psychiatr, 69; 103007, 2022
- 9) Iida, H., Iga, J., Hasegawa, N., et al.: Unmet needs of patients with major depressive disorder—findings from the "Effectiveness of Guidelines for Dissemination and Education in psychiatric treatment (EGUIDE)" project: a nationwide dissemination, education, and evaluation study. Psychiatry Clin Neurosci, 74 (12); 667-669, 2020
- 10) Iida, H., Okada, T., Nemoto, K., et al.: Satisfaction with web-based courses on clinical practice guidelines for psychiatrists: findings from the "Effectiveness of Guidelines for Dissemination and Education in psychiatric treatment (EGUIDE)" project. Neuropsychopharmacol Rep, 43 (1); 23-32, 2023
- 11) Inada, K., Fukumoto, K., Hasegawa, N., et al.: Development of individual fitness score for conformity of prescriptions to the "Guidelines for Pharmacological Therapy of Schizophrenia". Neuropsychopharmacol Rep, 42 (4); 502-509, 2022
- 12) Kyou, Y., Yasui-Furukori, N., Hasegawa, N., et al.: The characteristics of discharge prescriptions including pro re nata psychotropic medications for patients with schizophrenia and major depressive disorder from the survey of the "Effectiveness of Guidelines for Dissemination and Education in psychiatric treatment (EGUIDE)" project. Ann Gen Psychiatry, 21 (1); 52, 2022
- 13) Muraoka, H., Kodaka, F., Hasegawa, N., et al.: Characteristics of the treatments for each severity of major depressive disorder: a real-world multi-site study. Asian J Psychiatr, 74; 103174, 2022
- 14) 日本医療機能評価機構 EBM 普及推進事業 Minds 事務局: 「統合失調症薬物治療ガイドライン(EGUIDE プロジェクト)」の取り組みから—講習会による診療ガイドライン普及のこころみ—. 2020 (https://minds.jcqh.or.jp/s/dissemination_and_evaluation_3) (参照 2023-03-14) (in Japanese)
- 15) 日本精神神経学会, 日本糖尿病学会, 日本肥満学会監, 統合失調症に合併する肥満・糖尿病の予防ガイド 2020 (https://www.jspn.or.jp/modules/advocacy/index.php?content_id=86) (参照 2023-03-14) (in Japanese)
- 16) 日本精神神経学会, 日本産科婦人科学会監, 精神疾患を合併した, 或いは合併の可能性のある妊産婦の診療ガイド. 2022

(https://www.jspn.or.jp/modules/advocacy/index.php?content_id=87) (参照 2023-03-14) (in Japanese)

17) 日本神経精神薬理学会: 統合失調症薬物治療ガイド—患者さん・ご家族・支援者のために—. 2018 (http://www.jsnp.org.jp/csrinfo/img/szgl_guide.pdf) (参照 2023-03-14) (in Japanese)

18) 日本神経精神薬理学会, 日本臨床精神神経薬理学会: 統合失調症薬物治療ガイドライン 2022 (http://www.jsnp.org.jp/csrinfo/03_2.html) (参照 2023-03-14) (in Japanese)

19) 日本神経精神薬理学会, 日本臨床精神神経薬理学会, 統合失調症薬物治療ガイド 2022 ワーキンググループ作成: 統合失調症薬物治療ガイド 2022—患者と支援者のために—. 2023 (http://www.jsnp.org.jp/csrinfo/img/szgl_guide_all2022.pdf) (参照 2023-03-14) (in Japanese)

20) 日本うつ病学会制作: 日本うつ病学会治療ガイドライン II. うつ病(DSM-5)/大うつ病性障害 2016
(<https://www.secretariat.ne.jp/jsmd/iinkai/katsudou/kibun.html>) (参照 2023-03-14) (in Japanese)

21) 日本うつ病学会当事者のためのガイド小委員会編: 当事者・家族のためのわかりやすいうつ病治療ガイド. 認定 NPO 法人地域精神保健福祉機構, 千葉, 2022 (in Japanese)

22) Numata, S., Nakataki, M., Hasegawa, N., et al.: Improvements in the degree of understanding the treatment guidelines for schizophrenia and major depressive disorder in a nationwide dissemination and implementation study. *Neuropsychopharmacol Rep*, 41 (2); 199-206, 2021

23) Ochi, S., Tagata, H., Hasegawa, N., et al.: Clozapine treatment is associated with higher prescription rate of antipsychotic monotherapy and lower prescription rate of other concomitant psychotropics: a real-world nationwide study. *Int J Neuropsychopharmacol*, 25 (10); 818-826, 2022

24) Ogasawara, K., Numata, S., Hasegawa, N., et al.: Subjective assessment of participants in education programs on clinical practice guidelines in the field of psychiatry. *Neuropsychopharmacol Rep*, 42 (2); 221-225, 2022

25) Okada, T., Hori, H., Hasegawa, N., et al.: Second-generation antipsychotic monotherapy contributes to the discontinuation of anticholinergic drugs in hospitalized patients with schizophrenia. *J Clin Psychopharmacol*, 42 (6); 591-593, 2022

- 26) Onitsuka, T., Okada, T., Hasegawa, N., et al.: Combination psychotropic use for schizophrenia with long-acting injectable antipsychotics and oral antipsychotics: a nationwide real-world study in Japan. *J Clin Psychopharmacol*, 43 (4); 365-368, 2023
- 27) Takaesu, Y., Watanabe, K., Numata, S., et al.: Improvement of psychiatrists' clinical knowledge of the treatment guidelines for schizophrenia and major depressive disorders using the "Effectiveness of Guidelines for Dissemination and Education in psychiatric treatment (EGUIDE)" project: a nationwide dissemination, education, and evaluation study. *Psychiatry Clin Neurosci*, 73 (10); 642-648, 2019
- 28) Tsuboi, T., Takaesu, Y., Hasegawa, N., et al.: Effects of electroconvulsive therapy on the use of anxiolytics and sleep medications: a propensity score-matched analysis. *Psychiatry Clin Neurosci*, 77 (1); 30-37, 2023
- 29) Yamada, H., Motoyama, M., Hasegawa, N., et al.: A dissemination and education programme to improve the clinical behaviours of psychiatrists in accordance with treatment guidelines for schizophrenia and major depressive disorders: the Effectiveness of Guidelines for Dissemination and Education in psychiatric treatment (EGUIDE) project. *BJPsych Open*, 8 (3); e83, 2022
- 30) Yang, S. Y., Chen, L. Y., Najooan, E., et al.: Polypharmacy and psychotropic drug loading in patients with schizophrenia in Asian countries: fourth survey of Research on Asian Prescription Patterns on antipsychotics. *Psychiatry Clin Neurosci*, 72 (8); 572-579, 2018
- 31) Yasui-Furukori, N., Muraoka, H., Hasegawa, N., et al.: Association between the examination rate of treatment-resistant schizophrenia and the clozapine prescription rate in a nationwide dissemination and implementation study. *Neuropsychopharmacol Rep*, 42 (1); 3-9, 2022



図1 主なEGUIDEプロジェクト参加施設
 囲みの大学は、EGUIDEプロジェクトメンバーが所属する地域の基幹病院。
 (文献1より引用)

Figure 1: Major EGUIDE Project-participating facilities
 Universities indicated in boxes correspond to core hospitals in regions where
 EGUIDE Project members are affiliated.
 (Adapted from Reference 1)

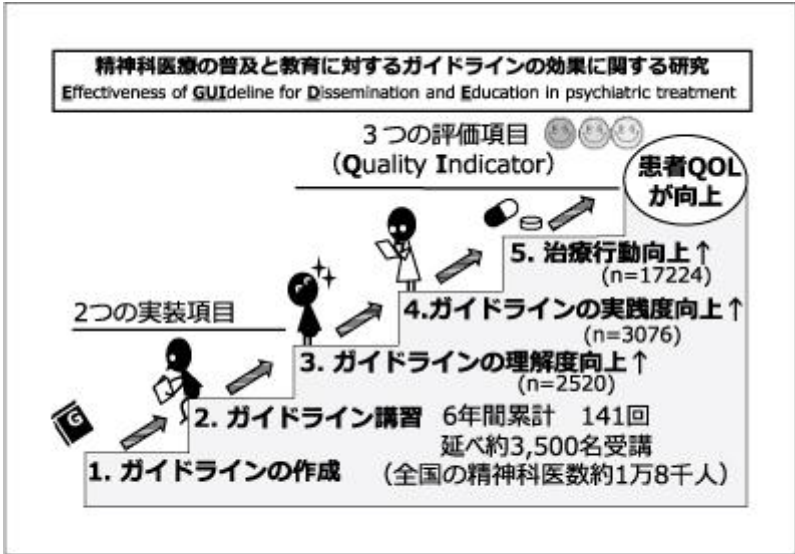


図2 EGUIDE プロジェクト概要
(文献1より改変引用)

Figure 2: EGUIDE Project overview
(Adapted from Reference 1)

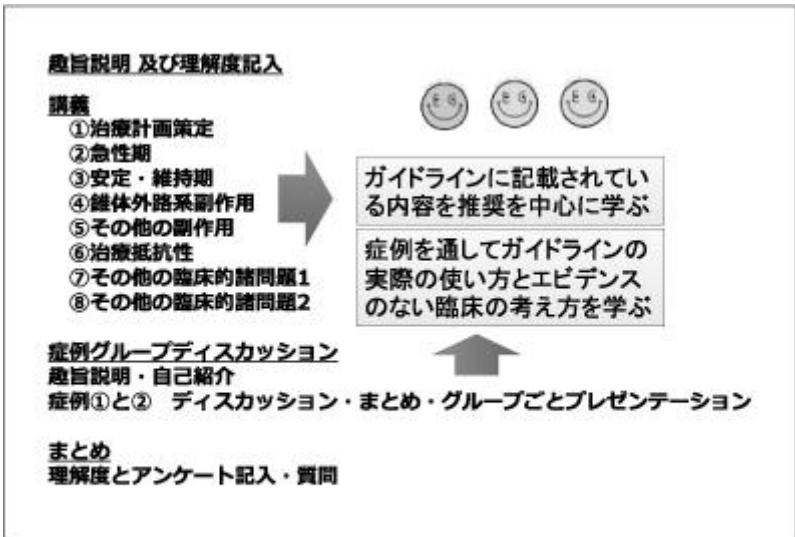


図3 ガイドライン講習の内容
(文献1より改変引用)

Figure 3: Content of guideline training
(Adapted from Reference 1)

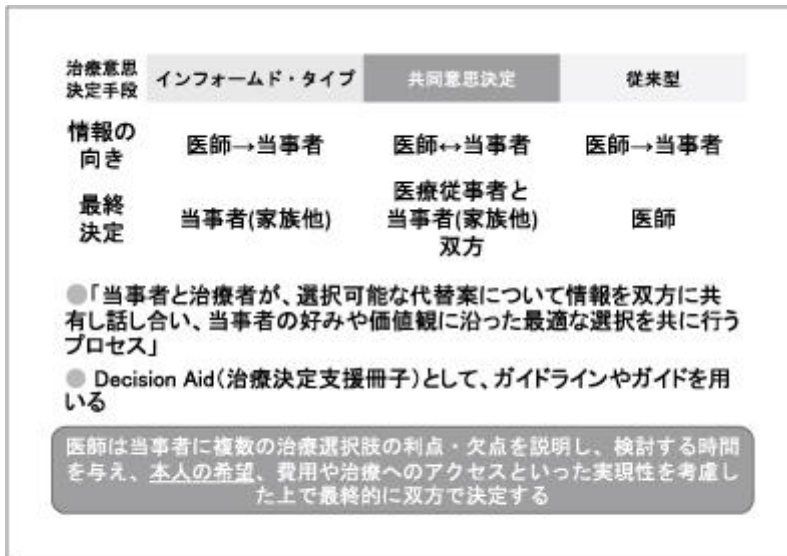


図4 共同意思決定 (shared decision making : SDM)
(EGUIDE プロジェクト 2022 年度講習資料より引用)

Figure 4: Shared Decision Making (SDM)
(Adapted from EGUIDE Project 2022 training materials)



図5 EGUIDE プロジェクトにおける発展的サイクル
(文献1より改変引用)

Figure 5: Developmental cycle in EGUIDE Project
(Adapted from Reference 1)

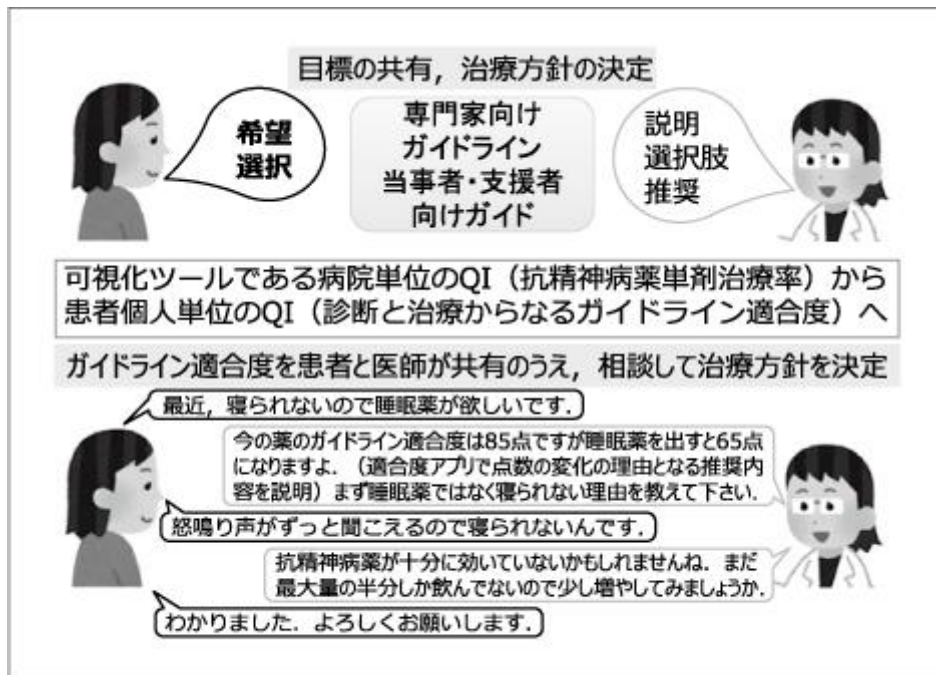


図6 EGUIDE プロジェクトによる普及の将来像

Figure 6: Future vision for dissemination through EGUIDE Project