


Research Progress of Shared Decision-Making in Schizophrenia with Anxiety

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Abstract: Shared decision-making (SDM) has been practiced fairly frequently in general medicine, but less so in mental disorders, especially in closed psychiatric wards, and its positive predictor has recently been recognized in the field of mental health. Studies have shown that patients with severe mental disorders want a say in their care and their desire to participate in clinical decision-making is even higher than those treated by general medical services. This review aims to explore the research progress of SDM for patients with schizophrenia with anxiety in a collectivist culture (such as Chinese culture) and to provide a reference for the implementation of SDM in closed psychiatric wards.

Keywords: shared decision-making, schizophrenia with anxiety, research progress mental disorders

Introduction

Mental disorders have been regarded as a major health problem worldwide, associated with severe and painful functional disabilities and a heavy economic and social burden.¹ The prevalence of mental disorders has increased significantly in recent years. Schizophrenia is one of the most common mental disorders,² which is a neurodevelopmental disorder with a genetic predisposition, and stress is related to its cause.³ It affects more than 20 million people worldwide⁴ and is one of the leading causes of mental disability.⁵ Cognitive impairment is a widespread characteristic of schizophrenia.⁶ “Anxiety disorders” are one of the major psychiatric disorders characterized by persistent psychogenic anxiety, somatic anxiety, and sleep disturbance.⁷ The “anxiety” in this paper refers to more than 50% schizophrenic patients experience affective symptoms.⁸ However, anxiety disorders are so prevalent in modern society that they rank sixth among non-fatal negative health outcomes,⁹ which are distinguished as normal worries by their severity and interference with daily life. Study data show that long-term antipsychotic treatment can induce the synthesis and decomposition of serotonin (5-HT) in schizophrenia,¹⁰ causing anxiety and fear. The remission of schizophrenia with anxiety symptoms is about 30%.¹¹ Associated with anxiety is not conducive to the rehabilitation of psychological and social functions of schizophrenia patients, and it is easy to make the disease repeated and even unexpected,¹² aggravating the burden on patients, families and society.¹³ In addition, anxiety is relatively persistent over time, which may lead to anxiety and depressive disorders in adulthood.¹⁴ Therefore, early intervention and care for schizophrenia patients with anxiety are very necessary. Patients with schizophrenia have low scores for social competence, showing a genetic correlation between schizophrenia and two social-related traits, namely loneliness and social anxiety.¹⁵ Given a large number of people in need and the humanitarian imperative to alleviate distress, scalable mental health interventions are urgently needed to lighten this burden.¹⁶ Hence, One of the effective treatments for schizophrenia is the SDM,¹⁷ a patient-centered nursing concept^{18,19} and focusing on patient values and preferences.²⁰ SDM is considered the most ethical and appropriate decision-making method,²¹ which puts emphasis on the autonomy of patients.²² SDM is designed to provide patients with structured information for effective communication between medical professionals.²³ However, the concept of SDM depends on Western values,²⁴ paying attention to independence, personal autonomy and empowerment. In this way, the implementation may be more

challenging in non-Western countries where family decision-making and interdependence are valued. Although the number of studies on mental health SDM is increasing in non-Western countries,²⁵ it is still not as many as expected, and most of them are preliminary studies,²⁶ which prompts the urgent need to explore the causes. For example, contemporary mental health services are gradually adopting a more patient engagement approach, in which psychiatric nurses and physicians are the key professionals in the provision of mental health care, but their views of SDM are rarely explored in depth.²⁴

Research Status of SDM in Closed Psychiatric Wards

SDM has been launched earlier abroad, and medical institutions regard SDM as a professional requirement, to respect the needs of patients for accurate two-way communication.²⁷ Related fields involve a wide range of disciplines, which have been effectively developed in cardiovascular disease management decisions,²⁸ surgical decisions,²⁹ gynecological treatment decisions,³⁰ psychiatric medication³¹ and other aspects. Many scholars have studied SDM in the field of psychiatric specialities, such as severe mental disorders³² and schizophrenia,³³ discussing the implementation of SDM intervention measures in patients with schizophrenia.^{34–36} The results show that SDM alleviates patient decision-making difficulties, improves treatment compliance, and deepens an understanding of the disease and treatment satisfaction.

Due to the severity of the disease and serious mental symptoms such as aggression and violence, most of these patients are hospitalized in closed psychiatric wards, and are not accompanied by family members but by all nursing and accompanying staff. However, the implementation of SDM for schizophrenia with anxiety in fully closed psychiatric wards has not been reported. Wesseldijk-Elferink et al¹⁷ conducted qualitative research on the implementation of SDM in semi-closed psychiatric wards. Romero³⁷ proposed that SDM is the best patient-centered approach to reduce racial and ethnic health disparities. Both have implications for the application of SDM in schizophrenia patients with anxiety in fully closed psychiatric wards. At present, SDM is widely used in patients with mental disorders abroad, but there is little research on SDM in the field of mental disorders in China. Due to cultural differences between the East and the West, patients have different attitudes towards SDM. Through multicenter randomized controlled studies abroad, it has been found that patients with schizophrenia have a higher sense of decision participation and exhibit better treatment outcomes during hospitalization,³⁸ In China, family decision-making has long been dominant, and patients tend to rely on their families to make treatment decisions, rarely making decisions without the participation of their families.³⁹ Therefore, understanding cultural characteristics is of great significance for making SDM more feasible and acceptable culturally.

Attitudes of Schizophrenia Patients with Anxiety Towards SDM

Since most patients want to understand treatment options, adopting a shared communication style relies on a complex set of experience and intuition, training and evidence to reach clinical decision-making, which suggests that more effort must be made to adopt SDM in routine settings.⁴⁰ Therefore, when providing patients with various education and interventions to implement SDM effectively, it is important to discuss the priorities of various behavioral changes and then develop personalized patient health education auxiliary tools that provide evidence-based and patient-centered health education. In addition, the effective participation of patients is the key to the implementation of SDM.⁴¹ Since different patients have different value preferences and background characteristics, they may make different choices and value judgments when making clinical decisions. SDM as the future possible treatment and care for patients has a positive impact, eventually leading to better health outcomes. Of most schizophrenic patients with anxiety, more than half of them did not take antipsychotic drugs as prescribed,⁴² which increased the incidence of violent suicide attempts and the rate of recurrence and prognosis.⁴³ Therefore, they prefer a range of different treatment options,⁴⁴ including cognitive behavioral therapy, mindfulness or combination, etc.⁴⁵ and patients can feel greater benefits in the process of participation than in the actual decision-making responsibility. Nevertheless, it is particularly challenging to choose the right treatment, because these choices involve a complex trade-off between quality of life and clinical efficiency side effects. Therefore, the most common approach to treatment decision-making is SDM combining scientific evidence and empirical expertise. SDM is like building a person-centered approach, an important element of an evidence-based and recovery-oriented mental health care system.

Barriers to Participation in SDM by Schizophrenia Patients with Anxiety

SDM faces greater challenges in mental health than in other health fields,⁴⁶ and the most specific is the patient therapeutic care decision-making competency. SDM succeeds in establishing a good relationship in clinical encounters, including sharing information and supporting patients to consider and express their preferences and opinions. However, most patients are reluctant to participate in decision-making and acquiesce in decisions made by mental health professionals. This is mainly due to their long-term experience and expectations of paternalistic decision-making models. For example, Chinese culture advocates obedience, considers experts and professors as respected authorities and believes that the decision of treatment depends on the doctor. Under this traditional pressure, therefore, patients are more likely to play a silent role in the decision-making process,⁴⁷ not immediately telling what they think. This may be mistaken for the common decision that is lack of interest. Moreover, in traditional families, parents are often characterized by excessive migration and show extreme attention and overprotective behavior towards their children's illnesses,⁴⁸ which may frustrate patients who are trying to participate in decision-making. In closed rooms, doctors often telephone families to obtain information and consent, which can reduce patient involvement to some extent. When a doctor advises a patient to be discharged, for example, the patient can only be discharged with family consent, and some families want the patient to stay longer. In addition, since public prejudice against severe mental disorders leads to low self-esteem and confidence, patients often do not want to participate in the clinical decision-making process. These patients' experience delays in seeking mental health services and show passive attitudes in counseling, because everyone does not want to be associated with mental disorders.⁴⁹ Over time, they dare not express their ideas or even have no idea of their own. Additional variability may be caused by several factors: assessment of SDM mode decision-making relationship between the severity of disease treatment and access to mental health services. These factors emphasize the focus on patient preference and the importance of participation in decision-making.

Attitudes of Medical Staff Towards SDM

Many mental health professionals have a positive attitude towards SDM.⁵⁰ They agree that it can improve patients' information for health knowledge, improve their perception of risk, and the prognosis of setting realistic expectations and goals, and patient participation means fewer medical disputes. Patients will share the responsibility when they are involved in the decision-making process and given informed consent. Previous evidence⁵¹ consistently and that international cultural recognition of SDM may reflect the spread of advanced care models through globalization, which may be associated with widespread expectations of high-quality care. In China, the change in attitudes can be attributed to the introduction of informed consent, the increase in public health knowledge, and the demand for health services. Notably, a culture of acceptance will promote the practice of SDM in China. As patient awareness of direct SDM involvement continues to increase, mental health professionals should strive to engage more patients in clinical decision-making, where increasing the understanding of SDM among medical professionals is a critical first step to enhance the implementation of SDM in clinical practice. Most nursing staff of the professional medical care team, after discussing with the doctor, communicate the patient information in a way that is easy to understand, especially when SDM must be performed in a short period. The nurse is the closest key in the process of SDM implementation⁵² because they have many opportunities to participate in the SDM process with patients from different clinical departments. Although most studies have reported positive effects of SDM in more severely impaired patients, mental health professionals are concerned about adopting SDM when patients are in the acute phase. However, some evidence suggests that SDM can also be adopted in these conditions. Findings support that one of the strongest factors for the adoption of SDM is the level of global functioning, rather than the severity of symptoms.⁵³ The current distrust of treatment relationships in Chinese health services may prompt the adoption of SDM.²⁵ A number of mental health professionals mentioned that uncertain treatment relationships motivated them to use SDM, as they considered SDM a reasonable method to build trust relationships and improve medical communication skills in China.

Barriers to Medical Staff Participation in SDM

Inexperienced mental health professionals and their lack of familiarity with SDM can be considered as a barrier to SDM implementation in psychiatric settings. To reduce unnecessary misunderstandings, mutual trust is a prerequisite for the adoption of SDM, and medical staff should provide relevant information and communicate more with patients while describing their feelings of uncertainty about their relationship with patients.⁴⁵ On the one hand, medical staff feel the trust of most patients; on the other hand, the relationship between medical staff and patients is superficial due to the market-oriented nature of these services. Sometimes some patients think that they have already paid and should be provided with corresponding services. However, medical staff will feel disrespected and reluctant to communicate more with patients. Sometimes patients may not adhere to antipsychotics due to unpleasant subjective experiences, whereas mental health professionals tend to make involuntary treatment orders within a legal framework and attribute non-compliance to impaired insight,⁵⁴ which hinders the practice of SDM. Most mental health professionals express a supportive attitude towards the improvement of the treatment relationship and the interests of all stakeholders.²⁵ However, they consider this approach challenging and unachievable even in China's current mental health services. Results of a comparative study⁵⁵ indicate that Chinese and European patients and mental health professionals tend to adopt SDM for patients with severe mental disorders, while China has a lower preference. It is recommended that SDM cannot be implemented without considering the cultural background because SDM is based on the patient's family members. The comprehensive concept of autonomy and values of doctors and nurses, as well as the theme of SDM, is associated with the treatment of patients. Doctors play an important role in the implementation process, nurses act as a bridge of communication, and doctors are the final decision-makers. However, some doctors do not have the concept or habit of SDM, and some of them persuade patients to accept the recommended treatment. Although some doctors acknowledge the detrimental effect of persuasion on patient autonomy, they believe that persuasion is a necessary condition for making high-quality decisions.⁵⁶ Because mental health professionals believe that patient preference may be established based on a lack of understanding of health conditions and treatment approaches and that persuasion strategies are guideline-based empowerment decisions that fully leverage the ability of experts to make optimal decisions for patients. They also argue that many informed consents are achieved by ritually reciting benefits and risks and registering in writing with little or no patient involvement. In addition, the implementation of SDM may enhance the already heavy workload, because it requires extra time for effective communication and discussion. Even though it is thought to be a time limit in the practice of SDM, medical staff do not have time to explain and discuss with patients. This is the reality and thus the common decision is only a dream.

SDM Improves Treatment Compliance of Schizophrenic Patients with Anxiety

The implementation of SDM in patients with schizophrenia with anxiety is limited, but a study has reported that SDM has a positive effect on saving medical costs and improving treatment adherence with the use of antipsychotics by reducing unnecessary prescriptions.⁵⁷ Non-compliance is a major barrier and a sign of difficulty in patient recovery. Many mental health professionals say that the primary motivation for engaging patients in SDM is to improve patient treatment compliance and decision satisfaction. SDM is a collaborative process involving the communication and exchange of information between patients and medical staff in the process of making treatment decisions. Over the past few years, there has been a growing focus on communication styles in healthcare, and available data support that SDM has a positive effect on satisfaction with treatment adherence and quality of life among people with mental disorders. The results of Li Yanli et al,³⁴ Ran Qin et al³⁵ and Forma et al⁵⁸ further proved that SDM can improve the awareness of patients with mental disorders, alleviate their decision-making difficulties, and improve their treatment compliance.

SDM Improves the Satisfaction of Schizophrenic Patients with Anxiety

SDM is a patient-centered medical care delivery model focusing on the delivery of high-quality patient-based clinical care with an emphasis on improving patient satisfaction. Previous studies conducted in Western countries have shown that patient involvement in the decision-making of antipsychotic treatment can improve patients' awareness of the

disease, satisfaction, treatment compliance, and quality of life.²⁴ SDM is a recognized method that can incorporate personal preferences into treatment decisions, thereby increasing patients' commitment to decision-making. This is an interactive process in which family members and health professionals exchange information,⁵⁹ discuss treatment options, and finally make an agreed decision. The promotion of SDM can help caregivers more deeply explore the ideas and expectations of patients and their families. Moreover, SDM has been discussed from the perspective of evidence-based practice and nurse-patient interaction in the nursing literature.⁶⁰ Nurses involved in SDM can have higher job satisfaction and more effectively control their work. In addition, patient care can be improved in hospitals with SDM, leading to better treatment satisfaction,⁶¹ less coercive intervention, and wider adoption of combined crisis plans. For example, chronic diseases, orthopedics, lung cancer, prostate cancer, smoking, etc. were reported in the National Guidelines Library (AHRQ),⁶² and SDM improved overall patient satisfaction in the shared method webinar held by AHRQ,²⁰ which was further proved by Mundal I et al.⁶³

Conclusions

The US National Institute for Health and Clinical Excellence guidelines recommend that clinicians consult with patients early on how to share information, especially concerning medication.⁶⁴ However, many mental health professionals believe that the implementation of SDM in mental health is influenced by several factors in the specific context of China, such as the background experience of mental health professionals, their beliefs in patient related characteristics and disease-related factors, and understanding cultural characteristics are of great significance for SDM to be more feasible and acceptable culturally. At present, there are few studies on SDM in the field of mental disorders in China. In the future, this type of evidence needs to be continuously explored, more high-quality randomized controlled trials of SDM should be conducted in the mental health field. Trained psychiatric nurses can provide decision-making counseling, structured training and emotional and information support for patients and their families, and gradually play an irreplaceable role in SDM. As a strong supplement to professional SDM providers, and can promote more active participation in SDM for patients with mental illness in closed wards.

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Disclosure

The authors report no conflicts of interest in this work.

References

1. Aljunaidy MM, Adi MN. Architecture and mental disorders: a systematic study of peer-reviewed literature. *HERD*. 2021;14(3):320–330. doi:10.1177/1937586720973767
2. Bühler A, Carl M. Zebrafish tools for deciphering habenular network-linked mental disorders. *Biomolecules*. 2021;11(2):324. doi:10.3390/biom11020324
3. Gomes FV, Zhu X, Grace AA. Stress during critical periods of development and risk for schizophrenia. *Schizophr Res*. 2019;213:107–113. doi:10.1016/j.schres.2019.01.030
4. World Health Organization (2018). *Schizophrenia*, Available from: <https://www.who.int/newsroom/fact-sheets/detail/schizophrenia>. Accessed October 30, 2024.
5. Zhou Y, Li Y, Meng Y, et al. Neuregulin 3 rs10748842 polymorphism contributes to the effect of body mass index on cognitive impairment in patients with schizophrenia. *Transl Psychiatry*. 2020;10(1):62. doi:10.1038/s41398-020-0746-5
6. Wang DM, Zhu RR, Tian Y, et al. Association between MnSOD activity and cognitive impairment in unmedicated first-episode schizophrenia: regulated by MnSOD Ala-9Val gene polymorphism. *Antioxidants*. 2022;11(10):1981. doi:10.3390/antiox11101981
7. Zhao H, Zhou M, Liu Y, et al. Recent advances in anxiety disorders: focus on animal models and pathological mechanisms. *Anim Models Exp Med*. 2023;6(6):559–572. doi:10.1002/ame2.12360
8. Emsley RA, Oosthuizen PP, Joubert AF, et al. Depressive and anxiety symptoms in patients with schizophrenia and schizophreniform disorder. *J Clin Psych*. 1999;60(11):747–751. doi:10.4088/jcp.v60n1105
9. Lopes Sakamoto F, Metzker Pereira Ribeiro R, Amador Bueno A, Oliveira Santos H. Psychotropic effects of L-theanine and its clinical properties: from the management of anxiety and stress to a potential use in schizophrenia. *Pharmacol Res*. 2019;147:104395. doi:10.1016/j.phrs.2019.104395

10. Kanchanatawan B, Sirivichayakul S, Thika S, et al. Physio-somatic symptoms in schizophrenia: association with depression, anxiety, neurocognitive deficits and the tryptophan catabolite pathway. *Metab Brain Dis.* 2017;32(4):1003–1016. doi:10.1007/s11011-017-9982-7
11. Veras AB, Cougo S, Meira F, et al. Schizophrenia dissection by five anxiety and depressive subtype comorbidities: clinical implications and evolutionary perspective. *Psychiatry Res.* 2017;257:172–178. doi:10.1016/j.psychres.2017.07.048
12. Jiahui N, Miao S, Wong F, et al. Analysis of the immediate and delayed effects of continuous care based on WeChat platform on the prognosis of patients with schizophrenia. *Shanghai Nurs.* 2022;22(6):5.
13. Hongli Z. Status and research progress of home rehabilitation of patients with schizophrenia in the community. *Shanghai Nurs.* 2016;16(2):4.
14. Pop-Jordanova N. Different clinical expression of anxiety disorders in children and adolescents: assessment and treatment. *Pril.* 2019;40(1):5–40. doi:10.2478/prilozi-2019-0001
15. Bralten J, Mota NR, Klemann CJHM, et al. Genetic underpinnings of sociability in the general population. *Neuropsychopharmacology.* 2021;46(9):1627–1634. doi:10.1038/s41386-021-01044-z
16. Charlson F, van Ommeren M, Flaxman A, Cornett J, Whiteford H, Saxena S. New WHO prevalence estimates of mental disorders in conflict settings: a systematic review and meta-analysis. *Lancet.* 2019;394(10194):240–248. doi:10.1016/S0140-6736(19)30934-1
17. Wesseldijk-Elferink IJM, Hendriks AW, van den Heuvel SCGH. Shared decision making in a semi-secluded chronic psychiatric ward: the reflective lifeworld experiences of patients with schizophrenia or schizoaffective disorders and nursing staff. *Arch Psychiatr Nurs.* 2021;35(5):519–525. doi:10.1016/j.apnu.2021.07.007
18. Faiman B, Tariman JD. Shared decision making: improving patient outcomes by understanding the benefits of and barriers to effective communication. *Clin J Oncol Nurs.* 2019;23(5):540–542. doi:10.1188/19.CJON.540-542
19. Pinto NM, Patel A, Delaney RK, et al. Provider insights on shared decision-making with families affected by CHD. *Cardiol Young.* 2021:1–8. doi:10.1017/S1047951121004406.
20. Shared decision making for chronic conditions and long-term care planning, 2016, Available from: www.ahrq.gov/sites/default/files/wysiwyg/professionals/education/curriculum-tools/shareddecisionmaking/webinars/sharewebinar716-slides.pdf. Accessed October 30, 2024.
21. Wubben N, van den Boogaard M, van der Hoeven JG, Zegers M. Shared decision-making in the ICU from the perspective of physicians, nurses and patients: a qualitative interview study. *BMJ Open.* 2021;11(8):e050134. doi:10.1136/bmjopen-2021-050134
22. Keij SM, van Duijn-Bakker N, Stiggelbout AM, Pieterse AH. What makes a patient ready for Shared decision making? A qualitative study. *Patient Educ Couns.* 2021;104(3):571–577. doi:10.1016/j.pec.2020.08.031
23. Dechairo-Marino AE, Collins Raggi ME, Mendelson SG, Highfield MEF, RG H Jr. Enhancing and advancing shared governance through a targeted decision-making redesign. *J Nurs Adm.* 2018;48(9):445–451. doi:10.1097/NNA.0000000000000647
24. Huang C, Plummer V, Lam L, Cross W. Perceptions of shared decision-making in severe mental illness: an integrative review. *J Psychiatr Ment Health Nurs.* 2020;27(2):103–127. doi:10.1111/jpm.12558
25. Huang C, Lam L, Zhong Y, Plummer V, Cross W. Chinese mental health professionals' perceptions of shared decision-making regarding people diagnosed with schizophrenia: a qualitative study. *Int J Ment Health Nurs.* 2021;30(1):189–199. doi:10.1111/inm.12771_1
26. Di Fiore T, Zito A, Berardinelli A, et al. Staff perceptions of decision-making in a shared governance culture. *J Nurs Adm.* 2018;48(11):561–566. doi:10.1097/NNA.0000000000000680
27. Kuo AM, Thavalathil B, Elwyn G, Nemeth Z, Dang S. The promise of electronic health records to promote shared decision making: a narrative review and a look ahead. *Med Decis Making.* 2018;38(8):1040–1045. doi:10.1177/0272989X18796223
28. Fowler FJ Jr, Sepucha KR, Stringfellow V, Valentine KD. Validation of the SDM process scale to evaluate shared decision-making at clinical sites. *J Patient Exp.* 2021;8:23743735211060811. doi:10.1177/23743735211060811
29. Javaid M, Fritz M, O'Brien M, Clark S, Mitchell S, Sanchez SE. Use and perceptions of shared decision-making by general surgery faculty and trainees. *J Surg Res.* 2022;276:323–330. doi:10.1016/j.jss.2022.03.009
30. Ossin DA, Carter EC, Cartwright R, et al. Shared decision-making in urology and female pelvic floor medicine and reconstructive surgery. *Nat Rev Urol.* 2022;19(3):161–170. doi:10.1038/s41585-021-00551-4
31. Mahmoodi N, Sargeant S. Shared decision-making - Rhetoric and reality: women's experiences and perceptions of adjuvant treatment decision-making for breast cancer. *J Health Psychol.* 2019;24(8):1082–1092. doi:10.1177/1359105316689141
32. Tao W, Yuanyuan F, Ruilian Q. Progress in the application of shared decision-making in patients with severe mental disorders. *Chinese Nurs J.* 2022;57(18):2205–2211. doi:10.3761/j.issn.0254-1769.2022.18.005
33. Kuanyu C, Wenhuan X, Yan G. Progress in medication adherence in patients with schizophrenia. *Shanghai Nurs.* 2020;20(11):54–57. doi:10.3969/j.issn.1009-8399.2020.11.014
34. Yanli L, Weiling L, Shaoying C. The influence of doctor-patient decision making on PANSS score, AHRs score and disease recognition in patients with schizophrenia. *China Med Sci.* 2021;11(16):129–131+165. doi:10.3969/j.issn.2095-0616.2021.16.036
35. Qin R, Chentao Z, Yi F, Zheng L, Qingwei L. Effect of doctor-patient shared decision-making patterns on the acceptance of long-acting injection treatment in patients with schizophrenia. *J Tongji Univ.* 2022;43(04):572–578. doi:10.12289/j.issn.1008-0392.21459
36. Yanli L, Weiling L, Shaoying C, Dan W. Application of doctor-patient co-decision intervention in patients with schizophrenia with persistent auditory hallucinations. *J Qilu Nurs.* 2020;26(09):53–55. doi:10.3969/j.issn.1006-7256.2020.09.015
37. Romero S, Raue P, Rasmussen A. *Depressed Latinx Older Adults' Shared Decision-Making Preferences*. Springer; 2021. doi:10.31234/osf.io/6z25r
38. Hamann J, Holzhüter F, Stecher L, Heres S. Shared decision making PLUS – a cluster-randomized trial with inpatients suffering from schizophrenia (SDM-PLUS). *BMC Psychiatry.* 2017;17(1):78. doi:10.1186/s12888-017-1240-3
39. Hawley ST, Morris AM. Cultural challenges to engaging patients in shared decision making. *Patient Educ Couns.* 2017;100(1):18. doi:10.1016/j.pec.2016.07.008
40. Analysis E. Liberating the NHS: no decision about me without me Further consultation on proposals to secure shared decision making. 2012.
41. Brembo EA, Eide H, Lauritzen M, van Dulmen S, Kasper J. Building ground for didactics in a patient decision aid for hip osteoarthritis. Exploring patient-related barriers and facilitators towards shared decision-making. *Patient Educ Couns.* 2020;103(7):1343–1350. doi:10.1016/j.pec.2020.02.003
42. Kaminskiy E, Zisman-Ilani Y, Morant N, Ramon S. Barriers and enablers to shared decision making in psychiatric medication management: a qualitative investigation of clinician and service users' views. *Front Psychiatry.* 2021;12:678005. doi:10.3389/fpsy.2021.678005
43. Liamputtong P. *Handbook of Research Methods in Health Social Sciences*. Springer; 2019.

44. Good medical practice. 2019. Available from: <https://mmc.gov.my/wp-content/uploads/2019/12/GMP-Final-Edited-Amended-Version.pdf>. Accessed October 30, 2024.
45. Lee K-H.A randomized controlled trial of mindfulness in patients with schizophrenia. *Psychiatry Res.* 2019;275:137–142. doi:10.1016/j.psychres.2019.02.079
46. Xiaolang C, Yuqiu Z, Chunyu Z, et al. Current status and progress of shared decision-making in schizophrenia. *J PLA Nurs.* 2022;39(02):64–67. doi:10.3969/ji.ssn.1008-9993.2022.02.016
47. Chung FF, Wang PY, Lin SC, Lee YH, Wu HY, Lin MH. Shared clinical decision-making experiences in nursing: a qualitative study. *BMC Nurs.* 2021;20(1):85. doi:10.1186/s12912-021-00597-0
48. Souraya S, Hanlon C, Asher L. Involvement of people with schizophrenia in decision-making in rural Ethiopia: a qualitative study. *Global Health.* 2018;14(1):85. doi:10.1186/s12992-018-0403-4
49. Ch A, Vp B, Li C, et al. Shared decision-making in serious mental illness: a comparative study. *Patient Educ Couns.* 2020;103(8):1637–1644. doi:10.1016/j.pec.2020.03.009
50. Kinchen E. Holistic nurse practitioner care including promotion of shared decision-making. *J Holist Nurs.* 2021;8980101211062704. doi:10.1177/08980101211062704.
51. Resch K, Enzenhofer E. Collecting data in other languages: strategies for cross-language research in multilingual societies. *Sage Handbook Qualitative Data Collection.* 2018;2018:131–146.
52. Alex J, Ramjan L, Salamonson Y, Ferguson C. Nurses as key advocates of self-care approaches to chronic disease management. *Contemp Nurse.* 2020;56(2):101–104. doi:10.1080/10376178.2020.1771191
53. Szmukler G. "Capacity", "best interests", "will and preferences" and the UN convention on the rights of persons with disabilities. *World Psychiatry.* 2019;18(1):34–41. doi:10.1002/wps.20584
54. Luciano M, De Rosa C, Sampogna G, et al. How to improve clinical practice on forced medication in psychiatric practice: suggestions from the EUNOMIA European multicentre study. *Eur Psychiatry.* 2018;54:35–40. doi:10.1016/j.eurpsy.2018.07.002
55. Luciano M, Sampogna G, Del Vecchio V, et al. When does shared decision making is adopted in psychiatric clinical practice? Results from a European multicentric study. *Eur Arch Psychiatry Clin Neurosci.* 2020;270(6):645–653. doi:10.1007/s00406-019-01031-y
56. Çetin N, Aylaz R. The effect of mindfulness-based psychoeducation on insight and medication adherence of schizophrenia patients. *Arch Psychiatr Nurs.* 2018;32(5):737–744. doi:10.1016/j.apnu.2018.04.011
57. Lin CY, Renwick L, Lovell K. Patients' perspectives on shared decision making in secondary mental healthcare in Taiwan: a qualitative study. *Patient Educ Couns.* 2020;S0738-3991(20). doi:10.1016/j.pec.2020.05.030
58. Forma F, Koep E, White J, Belland A, Waters H, Martin C. Impact of treatment-related discussions on healthcare resource use and costs among patients with severe mental illness. *Curr Med Res Opin.* 2021;37(10):1799–1809. doi:10.1080/03007995.2021.1943341
59. Hamann J, Heres S. Why and how family caregivers should participate in shared decision making in mental health. *Psychiatr Serv.* 2019;70(5):418–421. doi:10.1176/appi.ps.201800362
60. Kearney GP, Johnston JL, Hart ND, Cullen KM, Gormley GJ. Revised paper ASIM-D-21-00055R1: "Consulting properly rather than acting": advocating for real patient involvement in summative OSCEs. *Adv Simul.* 2022;7(1):16. doi:10.1186/s41077-022-00213-4
61. Mathijssen EGE, van den Bemt BJB, Wielsma S, van den Hoogen FHJ, Vriesevink JE. Exploring healthcare professionals' knowledge, attitudes and experiences of shared decision making in rheumatology. *RMD Open.* 2020;6(1):e001121. doi:10.1136/rmdopen-2019-001121
62. Evidence-based practice center (EPC). Available from: <https://www.ahrq.gov/>. Accessed October 30, 2024.
63. Mundal I, Lara-Cabrera ML, Betancort M, De Las Cuevas C. Exploring patterns in psychiatric outpatients' preferences for involvement in decision-making: a latent class analysis approach. *BMC Psychiatry.* 2021;21(1):133. doi:10.1186/s12888-021-03137-x
64. National Collaborating Centre for Mental Health. Psychosis and Schizophrenia in adults: treatment and management[M/OL]. 2021.<http://www.ncbi.nlm.nih.gov/books/NBK248060/>. Accessed October 30, 2024.

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