Challenges Faced by New Psychiatric–Mental Health Nurse Practitioner Prescribers

ABSTRACT

One of the main challenges that psychiatric–mental health nurse practitioner (PMNHP) students experience is preparing to prescribe medications by demonstrating psychopharmacological competency. To examine the challenges as they relate to this issue, self-reflective journaling narratives were evaluated from two cohorts of Post-Master's PMHNP program graduates, across each of two semesters of pediatric and adult clinical experience. The most prominent challenges reported by students were in regard to medication treatment adherence, decision making, and monitoring symptom-related outcomes. The narratives also demonstrate that reflection, combined with faculty- and preceptor-supported clinical education, assists PMHNP students in developing psychopharmacological competency. All PMHNP students described in this article were nurse practitioners before they began the program. By seeking to augment their competencies and through continued self-reflective learning and practice, they will improve access to mental health care for the populations they serve. [*Journal of Psychosocial Nursing and Mental Health Services, 58*(10), 7-11.]

With upwards of 20% of the population in the United States having a diagnosable mental disorder and <50% receiving adequate treatment (National Institute of Mental Health, 2019), the demand for psychiatric–mental health nurse practitioners (PMHNPs) to provide comprehensive evaluation and management services remains high (Jakucs, 2019). Nurse practitioner (NP) educators, preceptors, and students are challenged to demonstrate evidence of student competence across an array of abilities (e.g., knowledge, skills, attitudes) in working with a specific population by the time of program completion.

Competencies are the specific observable and measurable abilities that are expected within each domain of practice and for each population (American Association of Colleges of Nursing, 2017; National Organization of Nurse Practitioner Faculties [NONPF], 2013). *Competence*, the array of abilities, including the ability to seek and adapt to relevant new information for clinical decision making, develops through clinical experience (Benner, 2001; Dreyfus & Dreyfus, 1980). Self-reflective practice is a core NP competency that promotes the acquisition of a flexible, evidence-based approach to care that is especially relevant in psychopharmacological decision making. Self-reflective practice has been shown to help students of pharmacy challenge their own beliefs and/or biases, question the way they or others practice, and consider better or improved phar-

Emma Mangano, DNP, PMHNP-BC; Yovan Gonzalez, DNP, FNP-BC; and Karan S. Kverno, PhD, PMHNP-BC, PMHCNS-BC, FAANP

macological interventions (Matulewicz et al., 2020).

The expected PMHNP competencies required for psychopharmacological practice include: (1) developing an age-appropriate treatment plan based on evidence-based standards of care and practice guidelines; (2) planning care to minimize complications and promote optimal function and quality of life; (3) considering motivation and readiness to follow the plan; (4) explaining the risks and benefits of treatment to the patient (and family/caregivers, if indicated); (5) appropriately prescribing and managing pharmacological interventions; (6) using individualized outcome measures to evaluate response to treatment; and (7) seeking consultation when appropriate to enhance one's own practice (NONPF, 2013). The purpose of this article is to examine, from the perspectives of a PMHNP educator, PMHNP preceptor/clinical instructor, and recent graduate of an associated Post-Master's PMHNP program, the psychopharmacological treatment challenges of PMHNP students as they prepare to enter practice.

SELF-REFLECTIVE PRACTICE IN PSYCHOPHARMACOLOGY

The competency narrative, a self-reflective journaling assignment, was developed by the educators of the Post-Master's PMHNP program to help students reflect on their progress and process in meeting psychopharmacological treatment competencies. The instructions were to: (a) describe two to three relevant clinical experiences from your practicum; (b) critically appraise the care you provided with regard to the listed PMHNP competencies; and (c) describe what went well, what you found surprising or challenging, any clinical pearls that you learned and want to remember, and what you did or will do to overcome the challenges in future clinical experiences. Students were expected to discuss their competency needs with their clinical preceptors and review them with their faculty-adjunct clinical instructors at midterm and semester's end.

A total of 58 students (2019 and 2020 graduates) completed competency narratives that were retrievable through the course Blackboard. Because students in the program were all NPs seeking additional education and certification as PMHNPs, all had Master of Science in Nursing or Doctor of Nursing Practice degrees and were licensed and certified as NPs. Students were comfortable with initial laboratory measures to establish baseline functioning and rule out medical or substance use problems as the reason for symptoms. Because of their educational and practice backgrounds, they were also comfortable following the national guidelines for monitoring metabolic changes, serum drug levels, and other physical or laboratory outcome measures. What was most challenging to them were three related areas of psychopharmacological practice: (a) treatment adherence, (b) decision making, and (c) monitoring symptom-related outcomes. These topics were addressed by multiple students and their observations are synthesized below.

CHALLENGING PRACTICE ISSUES

Adherence

As a PMHNP student training with a psychiatric liaison team, I encountered many challenges working with an underserved population at a major urban hospital in the United States. The most challenging cases from a psychopharmacological treatment perspective were homeless patients with schizophrenia. Many of these patients had been prescribed oral antipsychotic agents with a self-reported low rate of medication adherence. Some of the reasons reported by patients for not taking their medications included losing their medications, forgetting to take them, being the victims of assault and robbery, substance use, and poor access to mental health services (Y.G.).

In general, students were surprised by the multitude of medications that some of their patients had taken and were challenged to understand and address the reasons for nonadherence. Social and environmental determinants of health, including a history of trauma and difficulty accessing mental health services due to homelessness, lack of transportation, costs, and provider scarcity, were noted barriers to medication adherence. Students observed that patients who stopped taking their medications often had unrealistic beliefs about what the medications were supposed to do and how soon they could expect to feel better; some lacked an understanding of the possible adverse effects, such as weight gain, fatigue, and sexual dysfunction. Sometimes it was the parents who decided not to give a medication to their child due to a belief or stigmatizing view about the illness, observed unwanted side effects (e.g., increased irritability with a stimulant, weight gain with serotonin reuptake inhibitors or serotonin dopamine antagonists), or fears about their child taking a medication over a long period of time. Some students noted that patients had been on many different medications for their disorder(s) due to starting and then stopping them, yet had never been titrated up to the level needed to achieve a therapeutic response. Many students noted that it is often difficult to determine the etiology of certain symptoms, such as insomnia, fatigue, or anxiety, and whether they reflect a mental disorder, side effect, physical illness, or nonadherence to another treatment (e.g., not using CPAP for obstructive sleep apnea). One of the most frustrating reasons for nonadherence for students was when a medication worked well in reducing the most bothersome symptoms but was discontinued by the patient due to a modifiable unpleasant adverse effect (e.g., abnormal movements from a neuroleptic).

Clinical Pearls. Preceptors are essential practice role models for students. It was through the actions and explanations of the preceptors that students gained experience collaborating with

the team, primary care providers, and relevant community mental health agencies to ease transitions in care and reduce risk for nonadherence and relapse. Some students were able to observe the collaborative efforts required for preauthorization and the benefits of using long-acting injectables to reduce risks for neuroleptic nonadherence. Students were frequently provided with opportunities to participate in thorough informed consent processes that engaged patients and families in discussing their concerns, the most likely diagnoses, the risks and benefits of possible pharmacotherapies, recommended duration of treatment, and the expected outcomes. Encouraging patients and families to disclose their concerns about medications helped focus on providing information for decision making and arriving at an acceptable plan. Several students noticed that a teach-back method was effective in evaluating patients' or family members' understanding of the treatment plan.

Decision Making

One of the most difficult cases I encountered as a PMHNP student was a 16-year-old patient recently diagnosed with schizophrenia. The patient had been prescribed a first-line second-generation antipsychotic, but while hospitalized, developed symptoms of catatonia, which included mutism, not responding to environmental stimuli, and meaningless repetitive movements. A lorazepam challenge was recommended by the team. The patient's father agreed to the plan, but the mother did not, citing religious reasons and challenging the diagnosis of schizophrenia. Ethical and legal consultations were sought, and it was determined that one parent's consent could not be honored over the other parent's active disagreement (Y.G.).

Decision making is the shared process, between providers and patients, of developing a mutually agreeable treatment plan. Unlike physical medicine where there are labs and tests and physical findings that lead to the pathophysiology and etiology and, therefore, to the treatment, in psychiatry, the signs and symptoms of psychiatric disorders often overlap and comorbidities are common. To complicate matters, within the first-line antidepressant and neuroleptic drug categories, drugs are equally efficacious, so students were challenged to find another way of making decisions about medications. Students were initially surprised by how many first-line medications are available for the common psychiatric disorders and challenged by how to determine which one to recommend to a particular patient. Students worked with patients to consider tapering off of inappropriate drugs, such as benzodiazepines for treatment of chronic anxiety disorders, cross-titrating from one medication to another, and augmenting or switching formulations to reduce overall pill burden. These decisions were especially difficult when patients did not recall which medications they had used in the past or why they had stopped, and when the medical record was unavailable. Many students observed that treatment failures could be a failure of titrating up to the therapeutic dose, titrating too fast (with adverse effects), or a reminder to reassess the diagnosis. Students noticed that sometimes their ideas for medications were different from their preceptors' ideas.

Clinical Pearls. Students rely on their preceptors to navigate the clinical decision process as they become more comfortable formulating their own recommendations for psychopharmacological treatment. Taking a thorough history of the efficacy of prior treatments for symptoms, consulting with the preceptor or team, and using best practice guidelines were all considered important clinical pearls. As students developed more competency in diagnosis of mental disorders and more familiarity with the best practice guidelines, some began to notice that their preceptors were using habitual selections (e.g., giving citalopram to every patient with major depressive disorder [MDD]) or first-line medications with greater risks for adverse effects when other choices were available, or multiple daily doses when a once daily dose existed. Students observed that different providers at a clinical site had their own style and preferences for prescribing and combining medications and some noticed variability in how closely they followed best guidelines or used off-label prescribing strategies. Finally, as described in the student excerpt above, there may be legal and ethical issues to consider in the clinical decision-making process, which may need to be addressed by an interprofessional collaborative team.

Outcome Evaluation and Monitoring

In psychiatry, the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5*; American Psychiatric Association [APA], 2013) diagnoses are based on syndromes, not etiology or pathophysiology; therefore, symptoms and functional changes must be monitored to evaluate the effectiveness of treatment. Valid and reliable symptom severity rating scales exist for all of the common mental disorders for children, adolescents, adults, and older adults. In addition, adverse event scales, such as the Abnormal Involuntary Movement Scale (Citrome & Saklad, 2020) and the Anticholinergic Risk Scale (Grill et al., 2020), are important in identifying and preventing the worsening of serious psychotropic side effects. Students must learn how to locate, administer, and interpret the publicly available symptom rating scales in best practice guidelines. Most have not had much experience using symptom rating scales in primary care. The challenge is developing a new mindset that symptom severity ratings are one of the best methods for evaluating outcomes in mental health care.

Clinical Pearls. Over the course of the two clinical semesters, students observed what outcome measures were used by their preceptors and made additional suggestions on how to evaluate response to treatment through other symptom and function scales and self-

report logs. Some students found that they liked using the World Health Organization's Disability Assessment Scale and cross cutting symptom measures located in the *DSM-5* (APA, 2013).

DISCUSSION AND IMPLICATIONS

New PMHNPs are challenged to treat the patient, not just the disease. The diagnosis and cluster of symptoms a patient is experiencing is not one size fits all. Some persons with schizophrenia experience predominantly positive symptoms, whereas others have more negative symptoms. MDD may be accompanied by insomnia or hypersomnia, anorexia or hyperphagia, anxious distress, or motor retardation. PMHNPs must consider co-occurring disorders, such as substance use disorders or anxiety disorders, that also share symptoms and require treatment. Further, those with serious mental illnesses have higher mortality rates due to chronic physical illness. These chronic conditions, such as cardiovascular disease and diabetes, must also be considered when prescribing psychotropic medications (World Health Organization, 2019). The decisions are complex and the assessment and treatment must be iterative and flexible, responding to patient concerns, providing psychoeducation, and minimizing risks for adverse effects and other contributing factors (Limandri, 2020). With experience and reflection, new practitioners consolidate the basic principles of psychopharmacology to where they follow them more effortlessly.

Janicak et al. (2011) describe seven principles that are helpful to PMHNP practice: (1) The diagnosis, subject to revisions, is fundamental. More specifically, the diagnostic formulation that considers the symptoms, genetic risks, history and course of illness, temperament, behaviors, and significant life events to form a prioritized differential diagnosis and plan of treatment is fundamental. Failures to respond to treatment as delivered require practitioners to examine alternative etiologies for the signs and symptoms, reanalyze, and reformulate. For example, despite similarities in symptoms of major depressive episodes, the neurophysiological dysfunctions targeted by psychopharmacological treatment in unipolar and bipolar disease are different, but commonly overlooked in practice to the detriment of the patient (Nasrallah, 2015). (2) Pharmacotherapy alone is generally insufficient for complete recovery. Education and psychosocial interventions are almost always needed. Treatment responses are influenced by the meaning of the illness, expectations, and motivations for change. (3) The phase of the illness and the timing of the intervention are critically important in terms of the initial strategy and duration of treatment. Best practice guidelines are useful in adjusting treatment from acute to maintenance phases of illness. (4) The risk-to-benefit ratio must always be considered when developing a treatment strategy. History of drug dependence or other comorbid medical conditions, drug tolerability and efficacy, and major risks (e.g., U.S. Food and Drug Administration Black-box warnings) must be considered and discussed as part of the informed consent process. (5) Prior personal (and possibly family) history of a good or poor response to a specific agent usually dictates the first-line choice for a subsequent episode. (6) It is important to target specific symptoms and monitor their presence over an entire course of treatment. (7) It is necessary to observe for the development of adverse effects throughout the entire course of treatment. The goal of treatment is remission and improved quality of life whenever possible.

CONCLUSION

The need for NPs with PMHNP competencies is great. PMHNPs with additional certification in another of the NP populations (e.g., family, adult-gerontology, pediatric, women's health) have the advantage of the depth of knowledge of treating people with complex comorbid physical and mental conditions. However, consolidation of the PMHNP psychopharmacological competencies requires a shift in thinking and approach. Clinical educators are charged with developing and evaluating the competencies of NP students. Applying the Dryfus model (Persky & Robinson, 2017), at the novice stage of development, educators emphasize the basic scientific knowledge that underpins clinical practice, helping learners prioritize information, place it in context, and discriminate features of clinical situations.

At first, learning is step by step with directions and straightforward cases. Students must take it upon themselves to learn the first-line medications for common psychiatric symptoms, the pharmacokinetics and pharmacodynamics involved in adverse effects, and pharmacokinetic drug–drug interactions. At the advanced beginner stage of development of the PMHNP as prescriber, the educator provides more complex cases that require integration of information and helps students discriminate more subtle points and trends and examine more complex cases. Rather than just recommending treatments, students must assess patient motivations for taking or not taking medications and provide patient education. At a competent stage of development, the student starts to understand how decisions and actions relate to long-term goals, develops conscious and deliberate planning, follows a consistent routine and procedure, can make decisions about new problems, and develops emotional reactions of outcomes of decisions. At this stage, the student is able to think like a provider (Barnes, 2015).

Preceptors are essential for the stage of competency, as they can evaluate competency in practice and facilitate these skills with supportive coaching. Preceptors can provide authentic and complex learning experiences, explaining why decisions are made, while en-

couraging self-reflection with a focus on continuous quality improvement, balancing supervision with autonomy, and holding learners accountable for their decisions. Proficiency, the last stage of development in any clinical field and in the diagnosis and treatment of mental disorders by PMHNPs, takes years of self-reflective learning and practice.

REFERENCES

American Association of Colleges of Nursing. (2017). *Common advanced practice registered nurse doctoral-level competencies*. https://www.aacnnursing.org/Portals/42/Downloads/Essentials/DRAFT-Domains-Descriptors-Competencies-May-2020.pdf

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.).

Barnes, H. (2015). Exploring the factors that influence nurse practitioner role transition. *The Journal for Nurse Practitioners, 11*(2), 178–183. https://doi.org/10.1016/j.nurpra.2014.11.004 PMID:25685113

Benner, P. (2001). *From novice to expert: Excellence and power in clinical nursing practice*. Prentice-Hall.

Citrome, L. L., & Saklad, S. R. (2020). Revisiting tardive dyskinesia: Focusing on the basics of identification and treatment. *Journal of Clinical Psychiatry, 81*(2), e1–e8. https://doi.org/10.4088/JCP.TV18059AH3C PMID:32078259

Dreyfus, S., & Dreyfus, H. (1980). *A five-stage model of the mental activities involved in directed skill acquisition*. https://apps.dtic.mil/dtic/tr/fulltext/u2/a084551.pdf

Grill, P., Marwick, C., De Souza, N., Burton, J. K., Hughes, C., & Guthrie, B. (2020). The burden of psychotropic and anticholinergic medicines use in care homes: Population-based analysis in 147 care homes. *Age and Ageing*. Advance online publication. https://doi.org/10.1093/ageing/afaa122

Limandri, B. J. (2020). Adverse events, drug interactions, and treatment adherence. *Journal of Psychosocial Nursing and Mental Health Services, 58*(2), 9–13. https://doi.org/10.3928/02793695-20200117-02 PMID:32003860

Jakucs, C. (2019, September 11). *Recruiters tap PMHNP role to fill psychiatrist shortage*. https://mediakit.nurse.com/recruiters-tap-pmhnp-role-fill-psychiatrist-shortage/

Janicak, P. G., Marder, S. R., & Pavuluri, M. N. (2011). *Principles and practice of psychopharmacotherapy* (5th ed.). Lippincott, Williams & Wilkins.

Matulewicz, A. T., Hammond, V., Patterson, J. A., Frankart, L. M., & Donohoe, K. L. (2020). Utilizing widely available podcasts to create a reflection activity for pharmacy students. *Currents in Pharmacy Teaching & Learning, 12*(10), 1215–1223. https://doi.org/10.1016/j.cptl.2020.05.003 PMID:32739059

National Institute of Mental Health. (2019). *Mental illness*. https://www.nimh.nih.gov/health/statistics/mental-illness.shtml

National Organization of Nurse Practitioner Faculties. (2013). *Population-focused nurse practitioner competencies*. https://cdn.ymaws.com/www.nonpf.org/resource/resmgr/competencies/populationfocusnpcomps2013.pdf

Nasrallah, H. A. (2015). Consequences of misdiagnosis: Inaccurate treatment and poor patient outcomes in bipolar disorder. *The Journal of Clinical Psychiatry, 76*(10), e1328. https://doi.org/10.4088/JCP.14016tx2c PMID:26528666

Persky, A. M., & Robinson, J. D. (2017). Moving from novice to expertise and its implications for instruction. *American Journal of Pharmaceutical Education, 81*(9), 6065. https://doi.org/10.5688/ajpe6065 PMID:29302087

World Health Organization. (2019). *Premature death among people with severe mental disorders*. https://www.who.int/mental_health/management/info_sheet.pdf

Dr. Mangano is Psychiatric Nurse Practitioner, Adult Psychiatric Emergency Services, The Johns Hopkins Hospital, and Dr. Kverno is Assistant Professor, Johns Hopkins University School of Nursing, Baltimore, Maryland; and Dr. Gonzalez is Primary Care FNP, Roberto Clemente Center/Gotham Gouverneur Health, New York, New York.

The authors have disclosed no potential conflicts of interest, financial or otherwise.

Address correspondence to Karan S. Kverno, PhD, PMHNP-BC, PMHCNS-BC, FAANP, Assistant Professor, Johns Hopkins University School of Nursing, 525 N. Wolfe Street, Baltimore, MD 21205; email: Kkverno1@jhu.edu.

doi:10.3928/02793695-20200915-01