TREATMENT

The role of nurse practitioners in outpatient mental health care: a case series

AUTHORS:

Mellanie Kant, MN, NP-PHC; Melanie Stuckey, PhD; Cindy Pritchard, RN(EC), BScN, NP-PHC, CPMHN(C) and Carole Gionet, BSc., BScN., NP cert., CPMHN (C), MN. All authors were affiliated with Ontario Shores Centre for Mental Health Sciences, Whitby, Ontario.

ABSTRACT

The Canadian mental healthcare system is fragmented, difficult to navigate, and does not fully address the mental, physical, and social needs of people with complex mental illness. Nurse practitioners (NP) have the competencies to address these needs such that their integration into mental healthcare could address service gaps and improve care delivery. This report describes the roles of NPs in three outpatient programs of a tertiary level mental healthcare facility. Despite the unique populations, all NPs provided services to address gaps in the healthcare system by conducting timely assessments, providing holistic care, facilitating transitions, and contributing meaningfully to client recovery. These cases demonstrate that NPs have essential roles within mental health care teams that aim to deliver high quality, accessible and cost-effective care. The advancement of a formal role for NPs in mental health could bridge service gaps and enable clients to receive more comprehensive care than possible in the current healthcare system.

Introduction

Mental health is a vital component of health and well-being. One in five Canadians will develop a mental illness in their lifetime,[1] but two-thirds of these will not receive the required mental health services.[2,3] In addition to mental health services, people with mental illness often require increased physical health services due to common lifestyle factors and side effects of medications.[4] Those who receive services at psychiatric institutions report that their physical health issues are often not addressed;[5] hence, clients are left on their own to navigate the healthcare system to obtain services to meet their holistic needs. Nurse Practitioners (NPs) have the knowledge and skill to address both physical issues and complex mental illness. Based on the Canadian Nurse Practitioner Core Competency Framework[6] (Table 1), NPs can assess, diagnose, and provide therapeutic management for both mental and physical issues. Since their role includes health promotion, they have the skills to properly educate their clients to live according to a healthy lifestyle to mitigate the physical side effects of mental illness. Finally, NPs collaborate, consult and refer, enabling them to connect with other health and social care practitioners when needed to ensure all client needs are addressed.

The percentage of NPs working in psychiatric mental health in 2010 was 1.4%,[7] which is inadequate for the number of Canadians requiring these services. Utilization of NPs to their full capacity in mental healthcare has the potential to improve access to more holistic services than currently offered. This case study describes the role of three NPs in three separate outpatient programs at a tertiary level mental healthcare facility in Ontario servicing a provincial catchment. Each NP selected a case to provide an example of their work, and program level demographics were analyzed for the three programs (Table 2, Figures 1&2). The purpose of the case description is to provide a more in depth understanding of the potential role for NPs to contribute to interdisciplinary mental healthcare teams so as to improve

Table 1. CNA Core Competency Framework[6]

NP Competency	Categories
Professional role, responsibility and accountability	· Clinical practice
Health assessment and diagnosis	· Collaboration, consultation and referral
Therapeutic management	· Research
Health promotion and prevention of illness and injury	· Leadership

Table 2. Minimum, maximum and median age of outpatients from the three programs (ACTT, TAY, ADOL) at admission.

Program	Minimum Age	Maximum Age	Median Age	Total n
ACTT	19	66	42	100
ADOL	11	24	18	402
TAY	18	25	22	396

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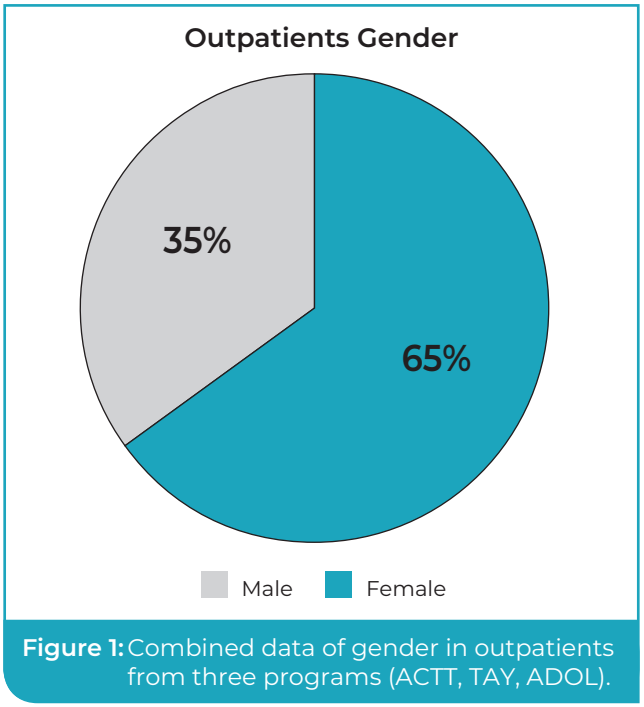

Figure 1: Combined data of gender in outpatients from three programs (ACTT, TAY, ADOL).

delivery of services to people with complex and serious mental illness.† Ethical review was waived by the local research ethics board and all clients provided voluntary informed consent for publication of their cases. Client information was anonymized and confidentiality was maintained according to organizational policies and legal obligations.

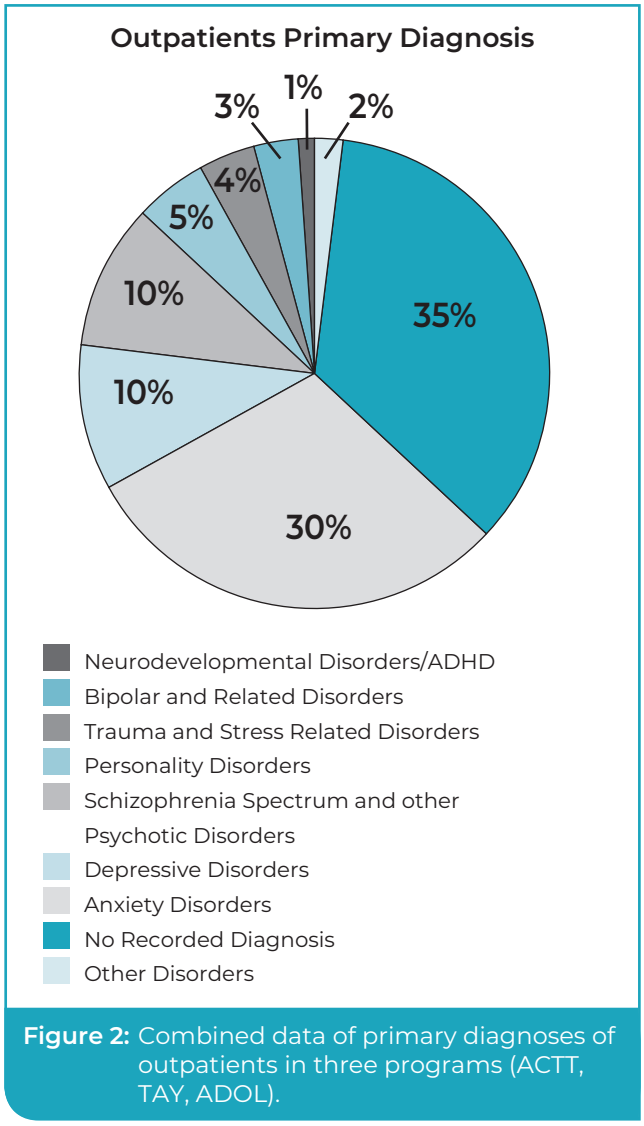

Figure 2: Combined data of primary diagnoses of outpatients in three programs (ACTT, TAY, ADOL).

† Serious and complex mental illnesses, including but not limited to major depression, bipolar disorder, schizophrenia, anxiety disorders, eating disorders, personality disorders and post-traumatic stress disorder (PTSD), require specialty treatment that cannot be managed in primary care alone.

CASES

Case 1:
NP working in the community-based Assertive Community Treatment Team (ACTT).

The ACTT program was implemented as an evidence-based practice to manage complex clients in the community and decrease emergency room visits and readmissions to hospital by reducing symptoms, increasing social functioning and promoting improved quality of life.[8] The ACT team serves clients aged 18-65y (average age 41y, 60% male), the majority of whom are diagnosed with schizophrenia or other psychotic disorders (90%), with complexity at a LOCUS (Table 3) level 4 (54%), which indicates medical monitoring in non-residential settings.

Table 3. LOCUS/CALOCUS level definitions

Locus Level	Recommended Care
Level 1	Recovery, maintenance, and health management
Level 2	Low-intensity community-based services
Level 3	High-intensity community-based services
Level 4	Medically monitored non-residential services
Level 5	Medically monitored residential services
Level 6	Medically managed residential services

In December 2016, a NP role was introduced as a full time, onsite most responsible provider (MRP). This is a relatively novel role for NPs in mental health care such that research regarding their impact is lacking. Previous to this, a psychiatrist was MRP and available part time via telemedicine to meet with clients and manage their medication regimens. As MRP, the NP became responsible for completing comprehensive, evidence based psychiatric assessments, follow-up visits, medication prescribing and treatment management, that was holistic, individual and family-centered specific to client's recovery goals. A psychiatrist continued to be available one day per week for consultation on cases outside the NP scope of practice or for physician specific tasks in accordance with the Mental Health Act (e.g. Community Treatment Orders, Consent and Capacity Board Hearings). The NP was able to meet with the clients as frequently as their condition warranted and would assess clients in their homes, shelters or at the ACT office enabling timely access to assessments for clients at risk.

An example case is that of a 64 year-old male with a diagnosis of schizoaffective disorder, bipolar type, from the age of 28yr, and with mild impairment in memory and processing speed. He currently resides in the community with his female partner and is supported financially through long-term income protection from his former employment. From 2010-2016 he had multiple involuntary hospitalizations for manic and psychotic episodes. He has a past history of medication non-adherence as well as limited insight into his psychiatric conditions. In February, 2015, he was accepted to the ACT team and the NP became his MRP in 2016 when she was added to the team. She provided regular follow-up visits 1-2 times/month as well as reassessment as needed during times of decompensation.

The client developed chronic Parkinsonism as a side effect of pharmacological management of his psychiatric disorder, and also suffered from chronic gastroesophageal reflux disease, hyperlipidemia, chronic obstructive pulmonary disease (COPD), and Cluster B personality disorder. The NP expedited a referral for neurology consult for diagnostic clarification and medication management regarding the Parkinsonism, reducing the

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18-24 month wait time through his general practitioner to 3 months, during which time psychiatric medications were adjusted by the NP to manage symptoms. Additionally, the NP provided health teaching regarding nutrition, physical activity, sleep hygiene, and smoking cessation to help manage his hyperlipidemia and COPD, and to reduce the risk of cardio-metabolic diseases. Since the client has a psychiatric history of lack of insight and medication non-adherence, the NP arranged to have medications blister packed by pharmacy and ordered ACT staff to increase their adherence monitoring and face to face support provided to the client.

To further support the client, the NP facilitated referrals and collaborations with a number of community partners to ensure efficient care and adequate support. For example, the client was provided with an internal referral to psychology in December, 2017 for a cognitive assessment that assisted the client in getting his driver's license reinstated. The NP also collaborated with a community pharmacist on smoking cessation and with the client's primary care provider to ensure co-ordination and continuity of care. The client's psychiatric status remained stable; however he continued to require intensive supports through the ACT team and was not discharged from services by the end of the study period. The NP remains his MRP and continues to provide holistic healthcare to support his complex needs while enabling him to remain in the community and work toward his recovery goals.

Case 2:
NP working in the Transitional Aged Youth (TAY) Outpatient Program.

The TAY program bridges the gap between paediatric and adult psychiatric services and attends specifically to the complex needs of emerging adults. The program serves people aged 18-24y (average age 20y, 30% male, 70% female), the majority of whom have a diagnosis of anxiety (39%) or depressive disorders (23%), and complexity at a LOCUS level 2 (54%), which indicates low intensity community-based services. A NP was introduced to the TAY team as MRP in 2015 to work within an inter-professional team that provides psychotherapy and transition support. Importantly, the NP provides initial psychiatric assessments, diagnosis and treatment of mental health and addiction disorders, which often enables earlier access to services.

An example is the case of a 23 year-old male whose current diagnoses are bipolar II disorder and generalized anxiety disorder. He resides with his parents and two siblings. He completed a Bachelor of Arts, and is employed full-time in a job related to his course of study. The client sustained a concussion while playing hockey in early adolescence, began experiencing symptoms of anxiety and depression in grade 10 and attempted suicide in grade 11. Although mood symptoms improved through high school, once in university, symptoms were exacerbated which significantly impacted his academic, interpersonal and occupational

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functioning. At age 19y, he started to experience episodes of hypomania followed by depressive episodes. He was assessed by a psychiatrist at age 21y and was diagnosed with bipolar II disorder and generalized anxiety disorder. He was subsequently referred to the TAY outpatient program for psychotherapy and psychiatric management by the NP. He waited approximately 6 months for service.

Upon acceptance into the TAY outpatient program, he was assessed by the NP for an initial psychiatric consult. The NP recommended pharmacological treatment and participation in a 16-week course of individual cognitive behavioural therapy (CBT) which is a form of psychotherapy that focuses on changing negative cognitive distortions through examination of their influence on feelings and behaviours. CBT is an evidence based psycho-social intervention for depression and anxiety disorders.[9] Upon review of his medications, since past trials with escitalopram and lurasidone were unsuccessful, the NP prescribed lithium, titrated the medication to therapeutic dose range and completed monitoring bloodwork, including lithium level, at baseline and regular intervals.

Follow-up was weekly with a clinician for group therapy, every two weeks with the NP until medication stabilized, and every four weeks with the NP thereafter. The NP completed health teaching regarding risk of lithium toxicity, nutrition, physical activity and sleep hygiene. Metabolic monitoring was completed every four weeks. Psychiatric symptoms were monitored with outcome specific scales.

The client was discharged in June 2017 at the age of 23yr after successfully completing and responding to therapy. Since the client's family physician retired, the NP referred the client to a local community health centre for ongoing follow up and pharmacological treatment and his care was transferred to a primary care physician at the centre. The NP decreased wait time for psychiatric assessment, facilitated treatment, and ensured that the patient had a practitioner for long-term community follow-up.

Case 3:
NP working in the Adolescent Outpatient Program (ADOL).

The ADOL program provides mental health assessment and treatment for young people aged 12-17y (average age, 15y, 35% Male, 65% Female). The majority of clients have a diagnosis of anxiety (74%), and complexity at a CALOCUS (LOCUS modified for children and adolescents) level 2 (59%), which indicates low intensity community-based services. Since 2013, the NP's role as MRP is to provide psychiatric assessments, diagnosis and treatment of mental illness while working with an inter-professional team for individual and group psychotherapy.

An example client is a 13 year-old male with an unremarkable childhood who began to experience symptoms of anxiety and depression in grade 7, which emerged in the context of his best friend moving away and extensive online and in-person bullying by his peers. By the middle of grade 7, the client

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“With support of the NP working collaboratively with other ADOL team members the client was able to show significant clinical improvement and was discharged from the ADOL program.”

was refusing to go to school and received an incomplete for grade 7. He began self-harming and developed suicidal ideation. At the end of grade 7, he attempted suicide after an argument with his mother. His mother took him to the local Emergency Room where he was assessed and released. He was referred to a community-based youth service for individual counseling, which was unsuccessful and residential services were recommended; however, his mother refused, so a referral was made to this Adolescent Outpatient program. At the time of referral, the client was experiencing anxiety resulting in difficulties making decisions, poor energy, insomnia, restlessness and irritability occurring daily prior to school. He avoided participating in extracurricular activities for fear of bullying and judgement by his peers. He reported using marijuana recreationally. He experienced panic attacks at the thought of going to school.

The client met with the NP for psychiatric assessment at the age of 13y. The NP referred the client to a School Day Program that combined mental health and academic programming as well as individual therapy (CBT) with a social worker. While on the wait list for both the School Day Program and CBT, he saw the NP, at first weekly and then monthly, for supportive therapy. The NP encouraged behavioral activation, exposure-based therapy and provided health teaching regarding sleep hygiene, nutrition and physical activity.

The client’s family doctor had initiated sertraline; however, the dose had not been titrated to therapeutic levels. The NP increased the dose to therapeutic levels of 125mg QPM, which improved symptoms as measured by the Generalized Anxiety Disorder 7-item scale. Upon completion of individual therapy with a social worker and the School Day Program, the NP, client, and his mother collaboratively developed a discharge plan that included tapering off sertraline. With support of the NP (i.e. ongoing monitoring of psychotropic medications, risk assessments, mood and function) working collaboratively with other ADOL team members (i.e. psychiatrist, social worker and psychologist), the client was able to show significant clinical improvement and was discharged from the ADOL program.

Table 4. Summary of NP cases in each of the three outpatient clinics (ACTT, TAY and ADOL).

Cases	ACTT	TAY	ADOL
Demographics	64 yr Male	23 yr Male	13 yr Male
Psychiatric Diagnoses	Schizoaffective disorder, bipolar type and personality disorders (borderline & antisocial). Onset at age 28 yr.	Bipolar II disorder and generalized anxiety disorder.	Generalized anxiety disorder and social anxiety disorder.
Co-morbid Diagnoses	GERD, hyperlipidemia & COPD	None	None
Relevant History	Past psychiatric history of med non-adherence, limited insight and past hospitalizations for manic & psychotic episodes.	Past psychiatric history of anxiety and depression in adolescence (following a concussion) and one suicide attempt; at age 19 years old, experienced first hypomanic episode.	Past psychiatric history of depression and anxiety and one suicide attempt; at age 13 years old. History of bullying in grade 7 and school avoidance.
Assessment and Treatment	Accepted onto ACTT and seen by staff twice weekly plus phone prompt. Regular follow-up with NP biweekly or as needed in office or client's home/community. NP provided ongoing psychiatric assessment, clinical risk appraisal, managed pharmacological treatment, metabolic monitoring and psychoeducation (e.g. nutrition, physical activity, sleep hygiene and smoking cessation). Also facilitated timely referrals, blister packed medications to promote adherence and collaborated with community partners.	Referred to TAY program at 22 years old and assessed by NP for initial psychiatric consult, who recommended pharmacological treatment and therapy. Treatment included weekly individual CBT and TAY clinician and biweekly follow ups with NP for ongoing psychiatric assessment, medication stabilization and psychoeducation (e.g. nutrition, exercise, sleep hygiene and metabolic monitoring).	Referred to adolescent outpatient program at 13 years old and assessed by a child psychiatrist, who recommended pharmacological treatment and therapy. Client was on a wait list for eight months for a school day treatment program and individual cognitive behavioural therapy (CBT). During this time he saw the NP bi-weekly for supportive therapy and psychiatric care. Treatment included our school day treatment program (daily for two semesters) and weekly individual CBT with social worker and biweekly follow ups with NP for ongoing psychiatric assessment, medication stabilization and psychoeducation (e.g. nutrition, exercise, and sleep hygiene).
Outcomes	Psychiatric status remained stable, however he continued to require intensive supports through the ACT team.	Successfully completed and responsed to treatment, with significant improvement in social, academic and occupational areas of functioning (outcomes monitored using specific scales).	Successfully completed and responded to treatment with significant improvement in social and academic areas of functioning (outcomes monitored using specific scales).

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DISCUSSION

This report described the roles of NPs in three different outpatient programs of a tertiary level mental healthcare facility. These three cases demonstrate the value of including NPs in outpatient mental health teams, which is significant as the mental healthcare system has been identified as fragmented and in need of restructuring to provide more comprehensive care.[3, 10-12] Although the clients presented above had different diagnoses and needs, the NP for each was able to provide holistic treatment, medication management and referral to other services as needed in accordance with their Core Competency Framework.[6] All NPs were able to address service gaps by expediting referral to other practitioners, or by providing continuous service and management during the wait period.[11] They were able to address mental, physical, and social health issues directly and provide education in an effort to prevent future declines or concurrent illnesses and to empower clients to be in control of their own health and wellness.

This paper is limited in that it used a case study design to qualitatively describe the roles of three NPs; however, the purpose of these cases is to demonstrate how NPs may contribute to the provision of more comprehensive care in the mental health care system. Once roles become more formalized, fulsome evaluation of their roles is needed to determine the effects on client outcomes. Studies examining long-term system-level metrics, such as wait times, cost-effectiveness, and satisfaction scores for clients, families, and team members are also warranted to quantify the value of NPs in outpatient mental health programs.

> “NPs working in specialty mental health outpatient programs must maintain their knowledge and skill for primary care, while also independently seeking opportunities to advance their expertise in mental health.”

Despite the potential value of NPs in mental health programs, there are a number of barriers to introducing a formal role to adequately address clients’ needs. A major barrier is the lack of advanced mental health nursing education available in Canada[13] and lack of recognition of NP mental health specialization. As such, NPs working in specialty mental health outpatient programs must maintain their knowledge and skill for primary care, while also independently seeking opportunities to advance their expertise in mental health. The NPs described in the cases above obtained their knowledge through previous work experience in primary care, consultation with their psychiatrist partners, and continuing education offered by pharmacists and the

medical profession. Another barrier is the lack of funding for the position. NPs cannot directly bill the Ontario Health Insurance Plan (OHIP) for services, so they must have a third-party funding agent, such as a hospital.[14] This limits the ability of NPs to work in private practice or small organizations, where their services may be of particular value. The NP role is cost-effective in primary care,[15] and completion of similar analyses for NPs in mental health could provide evidence to facilitate removal of this barrier. Lack of awareness of the NP scope of practice by medical colleagues and the general public has likely hindered the acceptance of NPs in many mental health settings, though their competencies could potentially add value. More research is needed to provide an evidence-base for best practices in including NPs in interprofessional teams.

In conclusion, the cases above demonstrate the potential for NPs to add value to mental health programs. Future work to redefine the NP role to emphasize advocacy, holistic healthcare, and connection, while increasing access to psychiatric specific advanced nursing education, could expedite the advancement of a formal role for NPs in mental health. This has implications for improvements in the Canadian mental health care system.

CORRESPONDING AUTHOR:
Mellanie Kant kantm@ontarioshores.ca

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