Dear Editor,

Schizophrenia is a debilitating psychotic illness that affects approximately 1% of the population. Within the Canadian forensic psychiatric system, patients are detained under a provincial Review Board after being found not criminally responsible (NCR) on account of a mental disorder. Here, the prevalence rate of schizophrenia is 53% [1]. Even with the use of psychotropic medication, it is estimated that approximately only 25% of patients fully recover from the illness [2]. The presence of active psychotic symptoms increases the risk of violent behaviour [3]. Thus, psychological interventions have been developed to be employed in conjunction with medication to assist in managing or even reducing symptomatology.

It is well established that schizophrenia is associated with deficits in metacognition. This refers to cognitive abilities that allow individuals to think about their own thinking. Patients with schizophrenia have a greater tendency to jump to conclusions [4-6], be more resistant to changing their beliefs when presented with disconfirmatory evidence [7-9], and have difficulty interpreting and understanding other people’s mental states [10,11]. These deficits are thought to contribute to the development of positive symptomatology [12-15]. Thus, addressing the role these beliefs play in the development of hallucinations and delusions may lead to changes in the ways patients think about their symptoms and perhaps even lead to a reduction in the symptoms themselves.

Cognitive behavioural therapy for psychosis (CBTp) is a widely implemented psychological intervention for the treatment of schizophrenia-spectrum disorders. The primary goal of CBTp is to assist patients in objectively evaluating their delusional beliefs and hallucinatory experiences. This allows patients to think about their experiences more flexibly so that they may attribute them to symptoms of their illness, rather than maintaining the belief that these experiences are true depictions of reality [16]. Meta-analytic studies have found that CBTp is effective in reducing positive symptomatology, with small to medium effect sizes [17].

Implications for forensic settings

Numerous protocols have been established for delivering CBTp [16,18,19]. Given the prevalence of schizophrenia within forensic settings, it is important to establish the validity of these protocols within this context. Forensic settings introduce a host of challenges that make the implementation of CBTp more difficult. Schizophrenia is associated with neurocognitive deficits [20], but some research suggests that violent patients with schizophrenia present with greater neurocognitive impairments than do non-violent patients with schizophrenia. O’Reilly et al. compared violent and non-violent forensic inpatients with schizophrenia. Violent patients performed more poorly than did non-violent patients on various measures of neurocognition, with moderate to large effect sizes. These findings suggest that forensic patients with schizophrenia with a history of violence may have more severe neurocognitive deficits than do those without a history of violence [21]. This is particularly relevant when working with pa-
tients who have been found NCR, as the offenses are often violent in nature.

In addition to the above, comorbidity is quite common in this population, including co-occurring personality disorders and substance use disorders [1]. There is evidence to suggest that personality disorders are associated with deficits in metacognition [22,23], though there are conflicting findings [24,25]. Thus, patients with comorbid schizophrenia and a personality disorder may be particularly impaired in metacognition when compared to patients with schizophrenia alone.

Taken together, forensic patients may not only have greater difficulty understanding the material taught in CBTp but also experience more severe deficits in metacognition than do general psychiatric patients. It is possible that forensic patients may be less responsive to CBTp because of these factors, highlighting the need for further research in this area.

Adapting CBTp for forensic settings

As part of the Forensic Psychiatry Program at St. Joseph’s Healthcare Hamilton, we implemented an 11-week, group CBTp protocol for inpatients and outpatients found NCR. In order to be referred to this group, patients must have a primary diagnosis of a psychotic disorder or have exhibited positive symptoms either in the past or currently. The protocol was based on the CBTp manual authored by Wright et al. but adapted for an 11-week, group format [26]. Topics covered included identification of values and what interferes with accomplishing valued goals, psychoeducation about psychosis and conceptualizing the development of mental illness, emotion regulation, managing negative symptoms (with a focus on behavioural activation), coping with distressing thoughts and delusional beliefs, and coping with hearing voices.

The following adaptations were made. The number of sessions dedicated to each topic was reduced. While it would have undoubtedly been beneficial to spend more time on individual topics, this needed to be balanced with the patients’ tolerance for the duration of the group. The case conceptualization stage was significantly simplified by structuring these sessions according to the Metacognitive Training Program (MCT) to accommodate a group-level format [27]. Lastly, a greater amount of time was dedicated to teaching the CBT model than what was originally recommended in the manual.

Patients were generally open and receptive to the content and provided positive feedback about the group at its completion. The primary reason for drop-out was decompensation and low motivation to engage in treatment.

Lessons learned

After the implementation of the group, there are a number of recommendations that can be made. Firstly, it is recommended that the structure of the group be modified. The first half of the group focused on fundamental concepts (e.g., psychoeducation, emotion regulation, thinking styles) and did not specifically address managing psychotic symptoms. This led to confusion among patients as to the overarching purpose of the group. Further, to reduce the number of sessions, less time was spent on these fundamental topics than was needed. Patients had difficulty understanding the content, which affected their ability to understand the material taught in later sessions that built on these concepts.

Given the above limitations, it is recommended that CBTp be offered in two parts. Part one would consist of more general concepts taught in CBT, including psychoeducation about illness, emotion regulation, the roles of fear and avoidance, and problematic thinking styles. Part two would consist of concepts specific to CBTp, whereby patients use the knowledge and skills obtained in part one and apply them to managing their positive and negative symptoms, such as disputing delusional beliefs, coping with voices, and increasing behavioural activation. Additionally, addressing values and how symptoms interfere with valued goals would be better addressed in part two, when patients have a greater understanding of what their symptoms are.
There are several limitations that are important to highlight. Because this was not a clinical trial or formal program evaluation, patient characteristics were not collected for the purpose of analysis. As a result, it cannot be stated definitively that the patients who participated in this group exhibited the same clinical characteristics described in previous research with forensic psychiatric samples (e.g., comorbid diagnoses, neurocognitive deficits). As such, it is possible that the above recommendations are beneficial in both forensic and non-forensic settings. Indeed, any adaptations that improve patients’ abilities to understand the material are likely to be effective regardless of the setting. Additionally, clinical outcomes were not measured, and there was no comparison group. As a result, statements regarding treatment efficacy cannot be made. Rather, the purpose of this paper was to conduct a qualitative evaluation of the CBTp program offered at SJHH.

In conclusion, it is feasible to implement CBTp in a forensic setting. Several adaptations need to be made to accommodate this population’s level of functioning, motivation, and tolerance for psychosocial interventions, however. Future research should consider delivering CBTp using a phased process, whereby patients first learn fundamental concepts associated with CBT more generally, which can later be followed by strategies that address specific symptoms of psychosis.

References

1. Latimer J, Lawrence A. The Review Board Systems in Canada: Overview of Results from the Mentally Disordered Accused Data Collection Study. Ottawa, Canada: Department of Justice Canada; 2006.


**Corresponding author**

Kyrsten Grimes, Department of Psychological Clinical Science, University of Toronto Scarborough, 1265 Military Trail, Toronto, ON M1C 1A4, Canada - email: kyrsten.grimes@mail.utoronto.ca