



Implementing the Use of a Brief Cognitive Assessment on Individuals Diagnosed With Schizophrenia in an Acute Psychiatric Facility



Michael G. Marek ^{*,1,2}

Robert Morris University

ABSTRACT

Cognitive impairments are prevalent in schizophrenia. The use of a brief cognitive assessment allows for early detection and improves functional outcomes. The purpose of this quality improvement study was to implement the Montreal Cognitive Assessment (MoCA) into the nursing admission assessment for patients who are diagnosed with schizophrenia or related disorders. Nurses administered the MoCA in 67.3% of eligible patients. The high acuity and uncooperative states were the major barriers to screening. The majority of nurses reported confidence in their ability to perform the screening and believed that the results triggered clinical actions to address psychosocial or cognitive deficits.

© 2015 Elsevier Inc. All rights reserved.

BACKGROUND

Schizophrenia is a severe mental illness that affects 1% of the population and costs the United States tens of billions of dollars annually (American Psychiatric Association [APA], 2013; Bilder et al., 2011). Cognitive impairments are found in approximately 75% of individuals diagnosed with schizophrenia (Fisekovic et al., 2012). The global cognitive deficit of individuals with schizophrenia is an average of 1 to 2 standard deviations (SD) below the healthy controls (Bilder et al., 2011). In addition, individuals with schizophrenia are more likely to be impaired in areas of verbal memory, attention, speed of processing, and executive function, with deficits up to 2.5 SD below control subjects (Bilder et al., 2011). Although cognitive impairments are prevalent in schizophrenia, the origin of cognitive impairments remains controversial (Bora, 2015). The leading hypothesis for the etiology of schizophrenia and its associated cognitive impairments, postulates that it is a neurodevelopmental that arises from early, possibly fetal brain abnormalities of genetic and/or environmental origin. These abnormalities then remain dormant until they interact with normal brain maturation processes such as, those of the frontal lobes (Reichenberg, 2010).

Neurodevelopmental theorists state that the genetic and non-genetic risk factors that can cause abnormal development of the brain can then lead to problems in acquiring cognitive abilities throughout development (Bora, 2015). Not only do some individuals with schizophrenia have a history of pre-morbid intellectual difficulties from childhood and low functioning throughout their life, but individuals with

schizophrenia may experience functional decline during early years of the illness even after normal early development (Bora, 2015). There is a growing consensus regarding the importance of including cognitive impairments as a diagnostic criterion for schizophrenia in the Diagnostic and Statistical Manual of Mental Disorders (DSM) and the International Classification of Diseases (ICD) (Bora, Pantelis, & Yücel, 2010). Inclusion of this criterion would increase awareness of the importance of cognitive impairments in schizophrenia and lead to routine administration of a brief cognitive assessment on individuals with schizophrenia (Bora et al., 2010).

Cognitive impairment is a core feature of schizophrenia and is an important predictor of functional outcomes, such as social problem solving, activities of daily living (ADL), life satisfaction, and working or educational ability (Beekman et al., 2013). Early detection and intervention for cognitive impairment are important in individuals with schizophrenia because schizophrenia is associated with cognitive impairments preceding the onset of illness and becoming more prominent in the first years after diagnosis (Johansson et al., 2014). Schizophrenia is most commonly diagnosed between late adolescence and into early adulthood, which places patients at risk for cognitive dysfunction during an age range when screening for cognitive impairments is unlikely (APA, 2013).

In a systematic review study conducted by Johansson et al. (2014) it was determined that there are several interventions that target cognitive functioning and that improve cognitive flexibility and memory span. Cognitive screening and remediation are interventions that may be more effective if used at an early or prodromal stage, with at-risk children or adolescents (Johansson et al., 2014). Burnazovic-Ristic et al. (2012) state that using a screening tool such as, brief cognitive assessments, will allow for quantification of treatment effects in schizophrenia and are relevant for patient management, research, and the evaluation of healthcare systems. Davidson et al. (2005) demonstrated a correlation between cognitive screening and treatment effects by

* Corresponding Author: Michael G. Marek, DNP, CRNP, PMHNP-BC, 615 Fountain Street, Sewickley, PA, 15143.

E-mail address: Mgiom13@gmail.com.

¹ Michael G. Marek, Student of the x of Nursing, Robert Morris University, Moon Township, Pennsylvania, USA.

² Michael G. Marek, Snowden at Fredericksburg, Mary Washington Healthcare, Fredericksburg, Virginia, USA.

administering cognitive assessments on individuals experiencing their first episode of schizophrenia or related psychosis ($n = 533$) at the beginning of their treatment and then again at 3 months after initializing treatment. Study findings revealed that evaluating cognitive functions can assist with assessing the treatment progress in individuals with schizophrenia and that those individuals who were on either Risperdal or Haldol cognitively performed better while on medication (Davidson et al., 2005). As result, it was concluded that early recognition and treatment of cognitive impairments is important because disability commonly occurs within 6 months of initial diagnosis of schizophrenia (Davidson et al., 2005).

In a retrospective data review, Dagg et al. (2014) confirmed that a brief cognitive assessment is a reliable tool to measure the effectiveness of treatment. Medical records of patients ($n = 121$), whose primary diagnoses were schizophrenia and schizoaffective disorder, were reviewed to identify their Montreal Cognitive Assessment (MoCA) scores, demographic data, and any additional testing scores (Dagg et al., 2014). The study results showed that cognitive impairments that are measured by the MoCA were correlated with education level, severity of illness, negative symptoms, and could be a significant predictor of patients' length of stay at the facility (Dagg et al., 2014).

The administration of a full neuropsychological battery remains the "gold standard" for evaluating cognitive impairments in schizophrenia (Bilder et al., 2011). The advantage of using a full neuropsychological battery is that it identifies the strengths and weakness across the multiple functional domains (Bilder et al., 2011). Neuropsychological tests, such as the Measurement and Treatment Research to Improve Cognition in Schizophrenia (MATRICS), are time consuming (more than 60 minutes long), expensive, and generally unavailable in most facilities (Bilder et al., 2011).

Brief cognitive assessments, such as the Brief Assessment of Cognition in Schizophrenia (BACS), the Brief Cognitive Assessment (BCA), and the Brief Cognitive Assessment Tool for Schizophrenia (B-CATS), have been developed to evaluate cognitive function in individuals with schizophrenia. The clinical usage, reliability, and validity of these assessments are not well established, and they are rarely used in a clinical setting. The BACS takes 35 minutes to complete with additional time needed to score the test (Dagg et al., 2014). This required amount of time is onerous when assessing individuals with schizophrenia (Bilder et al., 2011; Dagg et al., 2014). The poor attention span that is seen with schizophrenia can make it difficult to properly assess the individual (Dill et al., 2014; Johansson et al., 2014). Although the BCA and B-CATS require less time to complete (12 to 15 minutes), the scores are based on cognitive domains and need to be converted into z-scores. This means that in a clinical setting there is no direct total score or cut-off score that is available for a fast and easy assessment of the individual's cognitive function. Lastly, the BCA and B-CATS' usability are further limited due-to their copyrights and the need to actually purchase the tests (Dagg et al., 2014).

Even though it is important to screen for cognitive impairments in individuals with schizophrenia, it can become difficult to reach this population due-to their lack of insight into their disorder and general health (Chen et al., 2011). Individuals with schizophrenia are more likely to require healthcare, however they are less likely to receive healthcare services (Chen et al., 2011). In addition, once individuals with schizophrenia gain access to outpatient healthcare systems, they are less likely to receive high quality treatment (Chen et al., 2011). Individuals with schizophrenia are more likely to receive inpatient treatment than to receive or continue outpatient treatment (Ascher-Svanum et al., 2011). The risk for inpatient psychiatric admission is greater among individuals with schizophrenia than those individuals with bipolar disorder, depression, and other psychiatric disorders (Ascher-Svanum et al., 2011). According to Kopala et al. (2004), 54% of individuals with schizophrenia receive their initial diagnosis while admitted to an inpatient psychiatric facility.

Since individuals with schizophrenia do not seek routine health care, it is important to provide treatment when they first present to a facility or clinician (Chen et al., 2011). Therefore, when an individual is admitted to an inpatient facility it is important to provide complete and total care, including a cognitive assessment (Allen & Serper, 2002). Nurses often perform screening assessments in an inpatient setting that leads to more extensive testing and intervention as part of team performance. Commonly, social workers or physicians, rather than nurses, complete the screening for the detection of cognitive impairments in patients. However, Berlowitz et al. (2008) demonstrated that in an inpatient setting it is feasible to have the nursing staff administer a cognitive assessment resulting in improved accuracy over the current procedure of having patients complete a subjective cognitive assessment. In addition, the study results led to an increase in nursing staff satisfaction (Berlowitz et al., 2008). In the study debriefing, the nursing staff stated that having nurses give the cognitive assessment led to more-accurate information being obtained about the patient's functional status and that it facilitated the treatment planning (Berlowitz et al., 2008).

The primary aim of this study was to conduct a feasibility assessment and process evaluation of a quality improvement project implementing evidence-based brief cognitive assessment into the nursing admission assessment process for individuals diagnosed with schizophrenia. Specifically, this study sought to address the following question: Will mental health nurses, with proper training, reliably administer a brief cognitive assessment to all individuals that are diagnosed with schizophrenia or related disorders?

METHODS

This study was intended to pilot the implementation of a nursing led approach to cognitive impairment screening by administering the MoCA on individuals with schizophrenia who are admitted to an acute care setting. The facility institutional review board (IRB) provided approval for the study prior to deployment. The study setting was a 40-bed acute psychiatric care facility located in eastern Virginia. This facility consists of three units, two adult units and one adolescent unit. The acute adult unit and 1-east adult unit were the two units participating in the intervention and were chosen as they are designated for patients with psychosis. At the time of this study there were 19 nurses employed at this facility. Seventeen of the nurses were registered nurses (RN), and two were licensed practical nurses (LPN). The registered nurses working on these units have at least 2 years of mental health nursing experience and have received formal training in psychiatric crisis management and use of restraints in addition to CPR certification. The nurses must have at least an associate degree in nursing. There is no requirement for psychiatric nursing certification. Both units included in this study were designed with eight rooms, each with two beds per room. While both units admitted acute psychotic patients, patients requiring a higher intensity of care due-to a higher risk for violence and mania were more likely to be admitted to the acute adult unit as compared to 1-east unit. The staffing pattern for acute adult is one charge nurse (RN), a medication nurse (RN or LPN), and two mental health technicians (MHTs). The staffing for 1-east unit consists of one charge nurse/medication nurse (RN) and two MHTs. Only registered nurses complete an admission assessment at this facility.

The Montreal Cognitive Assessment (MoCA) was the brief cognitive assessment tool that was used in this study (see Appendix E for an example of the MoCA). The MoCA is a brief cognitive assessment that was specifically developed for detecting mild forms of cognitive impairments and dementia (Alves et al., 2012). The MoCA takes approximately 10–15 minutes to administer and score (Alves et al., 2012). According to Bedirian et al. (2005), the MoCA is open access without copyright restrictions, and any discipline can administer it. In addition, the MoCA has been translated in to 36 different languages, and it is used in more than 100 countries (Dagg et al., 2014). The MoCA is a 30-point screening tool that defines cognitive impairment as any score below 26 points

Download English Version:

<https://daneshyari.com/en/article/315608>

Download Persian Version:

<https://daneshyari.com/article/315608>

[Daneshyari.com](https://daneshyari.com)