Research in Autism Spectrum Disorders 20 (2015) 39–46

Contents lists available at ScienceDirect

Research in Autism Spectrum Disorders

journal homepage: http://ees.elsevier.com/RASD/default.asp

A pilot study examining the use of the autism diagnostic observation schedule in community-based mental health clinics

Nicole Stadnick*, Lauren Brookman-Frazee, Katherine Nguyen Williams, Gabrielle Cerda, Natacha Akshoomoff

Department of Psychiatry, University of California, San Diego, La Jolla, CA, USA

ARTICLE INFO

Article history:
Received 16 January 2015
Received in revised form 23 June 2015
Accepted 26 August 2015
Available online 2 September 2015

Keywords:
Autism spectrum disorder
Community mental health
Youth
Diagnostic assessment
Autism Diagnostic Observation Schedule

ABSTRACT

Community-based mental health (CMH) services play an important, but relatively understudied role in the identification and treatment of youth with autism spectrum disorder (ASD) who may be receiving care for other psychiatric conditions. Little is known about the role of standardized ASD assessment measures administered by providers working in generalist community-based mental health (CMH) settings. This pilot study extracted data from three CMH clinics to examine the use of the Autism Diagnostic Observation Schedule (ADOS) by 17CMH providers who received ASD assessment training with 62 youth (Mean = 10.69 years) referred for an ASD diagnostic evaluation. Results indicated that 57% of youths assessed ultimately received an ASD diagnosis. All cases given a final ASD diagnosis were classified as "Autism" or "ASD" on the ADOS. Seventy percent of youth who did not receive a final ASD diagnosis were classified as "Non-Spectrum" on the ADOS. In these false positive cases, report narratives indicated that social communication difficulties identified on the ADOS were explained by symptoms of other mental health conditions (e.g., ADHD, anxiety). Future research is needed to examine the utility of the ADOS when used by CMH providers to facilitate CMH capacity to identify ASD.

1. Introduction

Research examining diagnostic practices of Autism Spectrum Disorder (ASD) in community service settings is limited (Akshoomoff, Corsello, & Schmidt, 2006; Corsello, Askshoomoff, & Stahmer, 2013; Daniels et al., 2011; Rosenberg et al., 2009; Wiggins et al., 2006; Williams, Atkins, & Soles, 2009). The research available indicates that delays are common in receiving an initial ASD diagnosis, particularly for children who ultimately receive a diagnosis of Pervasive Developmental Disorder, Not Otherwise Specified (PDD, NOS) or Asperger's Disorder (Centers for Disease Control and Prevention, 2012; Wiggins et al., 2006; Yeargin-Allsopp et al., 2003). In addition, studies suggest that disparities exist in the timing of an initial ASD diagnosis based on socioeconomic status, child race/ethnicity, and child clinical factors (Fountain, King, & Bearman, 2011; Goin-Kochel, Mackintosh, & Myers, 2006; Mandell, Listerud, Levy, & Pinto-Martin, 2002; Mandell et al., 2009). Specifically, lower family socioeconomic status, child racial/ethnic minority background, and a higher functioning ASD diagnosis are significant correlates of delays in receipt of initial ASD diagnosis. Further, there is variability in adherence of community-based

* Corresponding author at: Child and Adolescent Services Research Center 3020 Children's Way (MC 5033), San Diego, CA 92123, USA.
E-mail address: nstadnic@ucsd.edu (N. Stadnick).

http://dx.doi.org/10.1016/j.rasd.2015.08.007
1750-9467/

clinicians to best practice guidelines such as using a standardized ASD diagnostic instrument (Wiggins et al., 2006; Williams et al., 2009).

The Autism Diagnostic Observation Schedule (ADOS) (Lord, Rutter, DiLavore, & Risi, 2001) is considered one of the "gold standard" diagnostic assessment tools for research and clinical use. There is minimal research on the use of the ADOS when administered by community-based mental health (CMH) clinicians with children. From what is known, the ADOS retained strong diagnostic classification properties when administered to preschool and school-aged children in an ASD specialty clinic (Mazefsky & Oswald, 2006) and when community-based psychologists who specialized in developmental disabilities administered the ADOS to toddlers (24–36 months) seen in a developmental evaluation clinic (Corsello, Akshoomoff, & Stahmer, 2013). However, it has been shown that the ADOS was less accurate in identifying children without ASD due to misclassifications on the ADOS when used with preschool and school-aged children in a general developmental/behavioral disorders clinic (Molloy, Murray, Akers, Mitchell, & Courtney-Manning, 2011).

Children with ASD are served through multiple service systems, primarily special education/school, developmental disabilities, and pediatrics. The CMH system, which provides publicly-funded services to address psychiatric problems through psychosocial and pharmacological interventions, also plays an important role in differential diagnosis assessment and treatment for individuals with ASD. Children with ASD served in this system are typically school-aged, have average to above average cognitive functioning (i.e., IQ > 70), have a broader subtype of ASD (e.g., PDD, NOS), and exhibit high rates of co-occurring psychopathology and challenging behaviors (Brookman-Frazee, Drahota, & Stadnick, 2012; Brookman-Frazee, Taylor, & Garland, 2010; Brookman-Frazee et al., 2009; Joshi et al., 2014; Mandell et al., 2005). Also, a high proportion of these youth are from racial/ethnic minority backgrounds (e.g., Levy et al., 2010; Mandell et al., 2007; Williams, Atkins, & Soles, 2009). Due to the high rates of co-occurring psychopathology, reported at 70% or greater, and challenging behaviors that are common in children with ASD (e.g., Joshi et al., 2010; Levy et al., 2010; Simonoff et al., 2008), the CMH system provides ongoing mental health care for these children.

CMH providers are typically generalist in practice (i.e., not specializing in a particular disorder) and may have limited ASD training (Brookman-Frazee, Drahota, Stadnick, & Palinkas, 2012; Brookman-Frazee et al., 2010). In research examining the training needs of CMH providers, clinicians in these settings requested comprehensive training in ASD assessment and diagnosis in addition to training in intervention strategies (Brookman-Frazee et al., 2012c). These CMH providers indicated that they were treating many children for other psychiatric conditions whom they suspected had ASD, but these providers did not feel equipped to accurately assess for ASD. Many ASD symptoms (e.g., repetitive behaviors, avoidance of social situations) are shared with other common psychiatric disorders. These factors may increase the difficulty of an accurate or differential ASD diagnosis (White, Bray, & Ollendick, 2012), particularly for providers with less specialized ASD training.

To address the need for research on building CMH capacity to identify ASD when serving diagnostically and racial/ethnically diverse youth, the current pilot study extracted data from routine care to examine the use of the ADOS when administered by CMH clinicians to children referred for an ASD assessment. Specifically, the proportion of ADOS classifications relative to final provider-assigned diagnosis by CMH clinicians who were trained to incorporate the ADOS in their diagnostic evaluations with children suspected of ASD was examined.

2. Method

This pilot study used extracted, de-identified clinical evaluation reports generated as part of routine clinical care between the Fall of 2008 and the Spring of 2012 in three outpatient CMH clinics from one organization in a large, diverse county. This organization is the largest contractor for publicly funded youth mental health services in the county.

2.1. CMH context

The participating clinics provided diagnostic evaluations, medication evaluations and management, and individual, family, and group therapy to youth ages 2–18 years with a variety of mental health conditions. Youth were eligible to receive services if they met medical necessity for a qualifying psychiatric condition and either qualified for educationally-related mental health services as part of their Individualized Education Plan or received public funding for mental health services (through the state's Medicaid program).

2.2. Procedures

2.2.1. ASD assessment training

Based on increased referrals for differential diagnosis of ASD and other psychiatric disorders, the lead psychologist and medical director of the outpatient CMH clinics coordinated access to specialized training in ASD diagnosis for all interested clinical psychologists and predoctoral psychology trainees. These clinicians received training in ADOS administration by one certified ADOS trainer (co-author: NA). The ADOS training consisted of an 8 hour workshop that included two components (1) four hours of didactic instruction regarding administration of the ADOS and interpretation of results to determine a diagnosis and (2) four hours of live observation of ADOS administration by the trainer and in vivo practice administration by attendees with performance feedback from the trainer. Following the workshop, attendees were provided the opportunity to receive review of administration video recordings and corresponding reports from the ADOS trainer. Unlicensed psychology