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An empirical evaluation of the Arizona sexual experience scale and a simple one-item screening test for assessing antipsychotic-related sexual dysfunction in outpatients with schizophrenia and schizoaffective disorder

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Abstract

We examined the reliability and construct validity of the 5-Item Arizona Sexual Experience Scale (ASEX) in patients with schizophrenia or schizoaffective disorder. In addition, we assessed the performance of two 1-item screening questions to detect sexual dysfunction as defined by a cut-off scoring criteria of sexual dysfunction for the ASEX. One question was a general question about any side effects. The second question asked specifically about sexual dysfunction. Altogether 247 participants with a DSM-IV diagnosis of schizophrenia or schizoaffective disorder provided data at a single interview. Results indicated that the ASEX has good internal consistency and construct validity for the patients with schizophrenia and schizoaffective disorder. The point-biserial correlations and logistic regression found a high degree of agreement between the one-item specific screening question for sexual dysfunction and the ASEX. Overall, sensitivity (85%), specificity (63.7%), and positive (83%) and negative (67.1%) predictive values for the specific one-item screening question were satisfactory. The single general side effect question performed poorly (sensitivity=11.3%; specificity=92.5%; positive predictive value=76%; negative predictive value=33%).

The current findings demonstrate the highly acceptable psychometric properties of the ASEX in patients with schizophrenia or schizoaffective disorder. In addition, a specific one-item screening question is of clinical utility in patients with schizophrenia or schizoaffective disorder.

Keywords: Schizophrenia; Sexual dysfunction; Rating scale; Screening; ASEX

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1. Introduction

Sexual side effects are common among antipsychotic-treated persons with schizophrenia (Cutler, 2003; Ghadirian et al., 1982; Kotin et al., 1976). Until recently, however, the clinical relevance of these sexual side effects was unclear. Two current lines of investigation now indicate (a) an association between antipsychotic-related sexual side effects and quality of life and treatment satisfaction in schizophrenia (Byerly et al., submitted for publication) and (b) that some second-generation antipsychotics (e.g., quetiapine) may possess a reduced sexual side effect liability compared to other antipsychotic medications (e.g., first-generation agents and the second-generation agents risperidone and olanzapine) (Byerly et al., submitted for publication; Bobes et al., 2003; Knegtering et al., 2004).

Since antipsychotic-associated sexual side effects are linked to quality of life outcomes, and the risk of these side effects may depend on the specific antipsychotic agent, there is a need for efficient, sensitive screening tools which can be easily administered by clinicians for initial detection of sexual dysfunction and for valid, reliable instruments to evaluate sexual dysfunction in schizophrenia patients. To date, however, no multi-item instruments that specifically evaluate sexual dysfunction have been validated in patients with schizophrenia and no screening tool has been developed or tested in these patients.

The 5-Item Arizona Sexual Experience Scale (ASEX) is commonly used to assess sexual dysfunction (McGahuey et al., 2000). The ASEX was designed to be self- or clinician-administered. It can be used in heterosexual and homosexual populations and it is appropriate for use in those with and without sexual partners. These attributes are important for persons with schizophrenia who are less likely to have a sexual partner at time of cross-sectional assessment compared to controls (Fortier et al., 2003; Miller and Finnerty, 1996). Unlike the more traditional and lengthy scales for assessing sexual dysfunction (Reynolds et al., 1988; Taylor et al., 1994), the ASEX can be completed fairly quickly. Based on our experience, the ASEX usually requires approximately 5 min to complete in persons with schizophrenia. Based on samples of patients with depressive or anxiety disorders (McGahuey et al., 2000) or end-stage renal disease (Soykan, 2004), the ASEX has good internal reliability and construct validity. The ASEX is a logical choice as a tool to evaluate sexual dysfunction in schizophrenia patients, but it has not yet been tested in patients with schizophrenia.

The purpose of the current study was (1) to examine the reliability and validity of the ASEX in outpatients with schizophrenia and schizoaffective disorder, and (2) using the ASEX as a "gold standard," to independently evaluate the sensitivity, specificity, and positive and negative predictive values of two simple 1-item screening questions to detect sexual dysfunction in the same outpatients with schizophrenia and schizoaffective disorder.

2. Methods

2.1. Study design and subjects

A cross-sectional design with data from 247 participants was used to address the research objectives of this study. Data were collected over a 4-year period from December 2000 to November 2003, by a one-time, cross-sectional survey of sexual functioning. Subjects were recruited from the Dallas County public mental health outpatient clinics. Most patients were recruited through study flyers and a small portion of patients was referred by treating clinicians. When potential patients initially contacted our group, they were informed that participation entailed a brief survey that evaluated their experience with their current psychiatric medications. To reduce the potential of selection bias, study staff avoided any reference to side effects of medications until patients were entered and began study ratings. Eligibility criteria for inclusion into the study included (a) DSM-IV diagnosis of schizophrenia or schizoaffective disorder as established by the outpatient clinic physician; (b) currently taking a single antipsychotic (olanzapine, quetiapine, or risperidone); and (c) a minimum age requirement of 18 years. Patients were excluded, however, if they had a general medical condition or history of a surgical procedure known to cause sexual dysfunction. Due to the minimal risk of a brief survey and lack of retained identifying information, an informed consent waiver was obtained from the University's Institutional Review Board.