

Validity of the ADI-R in an Adult Inpatient Population

K.S. Branch; D.N. Johnson; L.J. Lawer; M.A. McCarthy; L.A. Plummer; E.S. Brodtkin; D.S. Mandell
University of Pennsylvania School of Medicine; Penn/CHOP Center for Autism Research

Background

- Diagnosing ASD in adults can be challenging
 - Limited data on its presentation
 - No best practices for diagnosing adults
- This may be especially true in severely impaired adults
- Current diagnostic tools, such as the ADI-R, have not been validated for use in adults with serious mental illness

Objectives

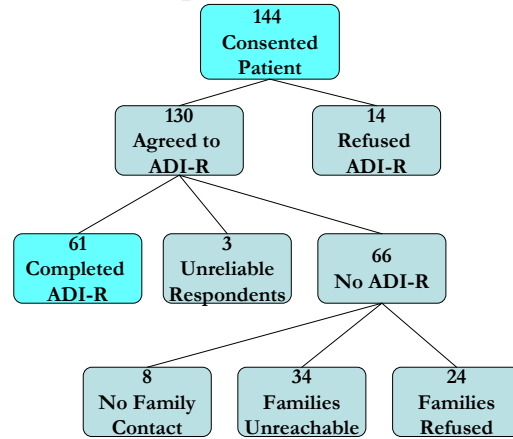
- To examine the validity and utility of the ADI-R in an adult inpatient psychiatric population

Methods

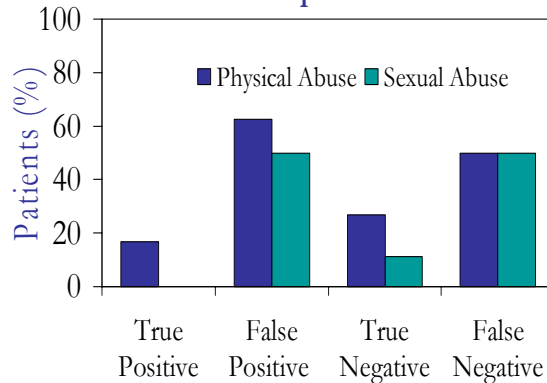
- Sample of 144 patients committed to the non-forensic section of one state hospital in Pennsylvania
- Stratified sample of patients consented to in-depth chart reviews, clinical interviews/neurobehavioral batteries, and permission to contact families to complete ADI-R and Conflict Tactics Scale - Parent Child version
- Case conferences held with clinical interview team, ADI-R clinician and psychiatrists to determine likelihood of ASD

Results

Sample Recruitment



Patients' Experience of Abuse



Consensus Diagnosis

ADI-R Compared with Clinician Consensus

	True Pos. (n= 6)	False Pos. (n=8)	True Neg. (n=45)	False Neg. (n=2)	Sig.
Direct Gaze	50%	75%	13.3%	0%	.004
Social Smiling	83.3%	87.5%	8.9%	0%	<.001
Range of Expressions	66.7%	50%	8.9%	0%	.005
Imaginative Play w/ Peers	83.3%	87.5%	20%	50%	.001
Interest in Children	83.3%	75%	11.1%	0%	<.001
Friendships	100%	75%	13.3%	50%	<.001
Offering to Share	83.3%	37.5%	11.1%	50%	.002
Social Overtures	33.3%	62.5%	8.9%	50%	.005
Inappropriate Facial Expressions	66.7%	62.5%	24.4%	50%	.078
Social Responses	83.3%	87.5%	11.1%	50%	<.001
Gestures	83.3%	87.5%	2.2%	0%	<.001
Imitation of Actions	100%	75%	22.2%	50%	<.001
Imitative Social Play	100%	87.5%	8.8%	0%	<.001
Reciprocal Conversation	100%	100%	48.8%	50%	.013
Stereotyped Utterances/Echolalia	16.7%	37.5%	24.4%	0%	.248
Inappropriate Question/Statements	16.7%	37.5%	27.3%	0%	.458
Pronominal Reversal	16.7%	12.5%	4.4%	0%	.695
Neologisms	0%	37.5%	11.1%	50%	.201
Unusual Preoccupation	50%	25%	0%	0%	<.001
Verbal Rituals	33.4%	12.5%	13.3%	0%	.798
Compulsions/Rituals	33.3%	12.5%	13.3%	0%	.009
Stereotyped Motor Mannerisms	16.7%	12.5%	2.2%	0%	.103
Preoccupied w/ Parts of Objects	33.3%	50%	13.3%	50%	.002
A- Abnormality in Social Interaction	100%	75%	0%	50%	<.001
B- Abnormality in Communication	100%	100%	6.7%	0%	<.001
C- Restricted, Repetitive Behaviors	33.3%	37.5%	0%	50%	<.001
D-Abnormality Before 36 Mos.	83.3%	50%	8.9%	50%	<.001

Limitations

- Unable to complete ADI-R for 57.6% of participants
- Important developmental information often not available due to:
 - Parent recall (age of participant)
 - Family member other than parent serving as informant

Conclusions

- ADI-R is a useful diagnostic tool in an adult inpatient population
 - Level of Agreement: $\kappa = .454$, $p < .001$
- Information on stereotyped/repetitive speech and motor mannerisms may not be useful in differentiating ASD from schizophrenia in institutionalized populations
- The presence of abuse may interfere with the accuracy of the ADI-R

Implications

- Diagnostic assessments for adult inpatient psychiatric populations should include a detailed developmental history, including questions about abuse
- Questionnaires derived from the ADI-R may be useful in differentiating ASD from other psychiatric disorders in adults