

Is there a digital solution to the challenge of providing Autism Spectrum Condition (ASC) diagnosis to adults and young people?



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Background

Adult and young people's autism services frequently struggle to cope with the demand for diagnostic assessment, resulting in long waiting lists and frustration for all involved. Pressure is therefore on commissioners of services to find more timely and cost-efficient ways of providing diagnostic services. With the increasing impact of the internet in people's everyday lives, interactive videoconferencing (IVC) and telehealth technology may provide an option that can help meet the increasing demand.

Evidence base

Research into this mode of assessment is limited but studies have shown IVC & telehealth to be effective for diagnosis and treatment of psychological and developmental disorders like ASC (Hubley et al., 2016). Studies have found:

- no significant difference in reliability of diagnostic accuracy of online v. face to face (F2F) ASC assessment of children using ADI-R and ADOS-2 (Reese et al, 2013)
- substantial agreement on ADOS-2 classification between assessments delivered face-to-face (F2F) v. assessments delivered remotely with adults (Schutte et al., 2015)
- the use of parental in-home video recordings of children's behaviour has been shown to yield clinically valid diagnostic information to aid clinician diagnosis (Smith et al, 2017; Nazneen et al., 2013)

Method

This poster describes the evaluation of a novel online diagnostic assessment approach conducted by health professionals qualified and experienced in ASC assessment and diagnosis. An audit of referral rates, outcomes and service user satisfaction was undertaken to evaluate two NHS contracts - one for adults and one for C&YP.

Design/Key Points

- Healios' online portal & secure video link used for detailed developmental history, observational assessment.
- For C&YP assessments information is also sought from schools.
- Parents can upload video clips of children at home.
- Two clinicians conduct the assessment using recognised assessment tools:
- Adults: ADI-R with parent/s or RAADS-R with client if no reliable informant available and Observation Assessment.
- C&YP: ADI-R with parent/s, Observation Assessment based on modules 3 or 4 of ADOS-2, feedback from school and potential video recordings of child at home.
- Assessment utilises a whiteboard system to allow both clinician and client to interact.
- Referring local team have access to session summaries.
- Individuals and families receive a detailed report jointly completed by both assessing clinicians and a feedback session with one clinician to discuss the outcome.

Results

C&YP service

- 163 referrals (April 2017 to August 2018)
- 108 ASC assessments and 55 ASC/ADHD assessments
- 35 declined the service and were discharged (21%)
- 4 were ongoing
- 106 ASC and 18 ADHD assessments were completed with 71 diagnoses of ASC (67%).

Adult service

- 144 referrals (January to August 2018)
- 7 early discharges (5%)
- 75 were ongoing
- 69 resulted in a diagnosis of ASC (48%)

Conclusions

Anecdotal evidence suggests diagnostic rates are comparable to those achieved by traditional F2F diagnostic services.

Qualitative feedback from families and clients has been positive: Families are satisfied with an online digital service and the outcomes, particularly the flexibility and ability to be assessed in their home environment, thus reducing anxiety. Clients have also appreciated the high visual content of the assessment.

Future research

The digital mode of autism diagnostic assessment appears to be a promising service delivery model and there is a need for further research regarding the capabilities and limitations of telepractice as a service delivery model. As technology improves, online assessments for ASC diagnosis will likely become increasingly more efficient, effective and versatile and an even more viable means to address the need for improved access to diagnostic services for individuals with ASC.

