Screening for Autism Spectrum Disorder (ASD) and intellectual disability in the criminal justice system: a systematic review
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Screening for Autism Spectrum Disorder (ASD) and intellectual disability in the criminal justice system: a systematic review

Background

In the general population, it is estimated that Autism Spectrum Disorder (ASD) affects around 1% to 1.5% (Centre for Disease Control and Prevention, 2014) and Intellectual Disability (ID) 2–3% (2001). Studies across the criminal justice system (CJS) have estimated the prevalence of prisoners with ASD and ID at 4.4% (Fazio et al, 2012) and 7% (Mottram, 2007) respectively, suggesting that they are over represented in the CJS (Hellenbach et al, 2017). Moreover, the presence of ASD and ID within the CJS is associated with poorer outcomes (Vanny et al, 2009), increasing the likelihood of future recidivism, or custodial or more restrictive or punitive sentencing (McCarthy et al; 2016).

There is little research into the prevalence of ID and ASD in courts and varying estimates have been reported from 3-23%, whilst in police stations estimates have ranged between 2% and 9% (Murphy and Mason, 2014). Identification has highlighted individuals with ID are more likely to present with mental health problems and that those with borderline ID have similar characteristics to those with mild ID (Hayes, 1997). The characteristics of ID offenders it is argued are different to defendants without ID (Vinkers, 2013).

While there should be parity of access to identification and screening programmes between individuals with ASD and ID and mental illness, little research has been published on the prevalence of ASD and ID in police, court, probation and prison, and how identification of these conditions may influence an individuals’ journey in the CJS from arrest to sentencing. Traditionally screening tools used within the CJS have concentrated on identifying mental disorder focussed on serious mental illness and risk. To complement the use of self-report and routine clinical interview and assessment in identifying ID and ASD, there have been several screening tools aimed at people with ID and ASD piloted in the CJS in a number of countries over the last decade such as the Rapid Assessment of Potential Intellectual Disability (RAPID) (Ali et al, 2016), Hayes Ability Screening Index (HASI) (Hayes, 2000) Learning Disability Screening Questionnaire, and the Kaufman Brief Intelligence Test (K-BIT) (Kaufman, 1990) for ID and the AQ-10 for ASD (see Booth et al, 2013).

Given the recent growth of screening, this proposal seeks to review the effect and impact of screening of adults for ASD and ID across the CJS.
Objectives

The objective(s) focus is:

1. Are current screening programmes within the CJS effective in identifying persons with ASD and ID?
2. Does identification of persons with ASD and ID following screening increase diversion to health services and reduce future contact with the CJS?

Existing reviews

There are no existing or current reviews that examine the impact or effect of screening. This proposal is driven by the need for effective screening and assessment of ASD and ID within the CJS, given they are disproportionately represented. This review therefore seeks to examine current screening of ASD and ID within the police, court probation and prison systems and their effectiveness in identification, disposal and future contact with the CJS.

Intervention

We define screening as: 1) assessment interventions delivered by at least one trained clinician, court worker or another professional; 2) delivered in the CJS i.e. police, court, probation or prison setting.

Modalities: Screening will be considered as gaining information from 3) interrogating current records (case notes) or via interview. Currently there is no standardised screen across courts internationally to identify ID and ASD although in some countries such as the UK measures such as the Autism Quotient – short form (AQ-10) (Booth et al, 2013) and Learning Disability Screening Questionnaire (LDSQ) (McKenzie and Paxton, 2006) have gained popularity to screen for ASD and ID respectively.

Comparison: A comparison will be made on outcomes for those identified as having ASD and ID in across the CJS. Comparator interventions will include methods of screening and identification i.e. the use of specialist ASD and/or ID screens vs clinical interview and generic screening.

This review seeks to evaluate the effect of screening on the identification, diversion and disposal of individuals with ASD and ID as well as future contact with the CJS.

Population

The population to be studied will be those accused at police stations, defendants at court, subject to remand or probation or a sentenced prisoner. This includes male and female adults with a primary diagnosis of ASD and/or ID. Diagnoses will be defined as those meeting
screening or clinical criteria using either validated screening measures or according to the WHO ICD or DSM diagnostic criteria to undertake a clinical diagnostic assessment.

### Outcomes

The primary and secondary outcomes identified for individuals with ASD and ID are:

**Primary outcomes**
1. Identification of ASD and ID through screening
2. Rates of diversion to prison, hospital and community

**Secondary outcomes**
1. Use and range of validated screening and diagnostic tools for ASD and ID
2. Rates of detection of ASD and ID
3. Rates and variation of sentencing options for ASD and ID
4. Evidence relating to economic outcomes associated with screening and sentencing

### Study designs

The review will consider quantitative evidence and consider the following experimental designs.

- Systematic reviews (with or without meta-analysis)
- Randomised controlled trials
- Quasi experimental designs =such as non-equivalent group design in which participants have not been randomly assigned to conditions or single arm intervention studies
- Cross sectional studies where ASD and ID population are identified through screening across the court population
- Cohort studies
- Case controlled studies

These designs have been chosen so that comparison can be made between groups across a range of methodologies in the absence of RCTs.
References


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Roles and responsibilities

Collectively, the team has significant clinical experience of working with individuals with ASD and ID, across criminal justice, health and social care settings. Several of the co-authors (EC, JM, AF) have also worked in and managed forensic and criminal justice services. In terms of research experience, majority of the co-authors (EC, JMc, KM-T, DS, and BT) have undertaken qualitative and or quantitative studies with adults with ASD / ID, contributing to project design, data collection, analysis and dissemination of findings. As a team, we have co-authored a number of systematic reviews, some of which have comprised narrative analysis and others meta-analysis. We are accustomed to following standardised guidelines for the conduct and reporting of systematic reviews. We have contributed to two Cochrane reviews. Several of the co-authors have attended systematic review training, either at University of London, Joanna Briggs Centre or the Cochrane Collaboration.

- Content: Professor Eddie Chaplin and Dr Jane McCarthy Review Leads
- Systematic review methods: Debbie Spain who has Cochrane review experience
- Statistical analysis: Professor Barry Tolchard
- Information retrieval: Dr Andrew Forrester, Professor Sally Hardy and Karina Marshall-Tate

Funding

This will be a non-funded study with no plans to apply for funding.

Potential conflicts of interest

There are no conflicts of interest.

Preliminary timeframe

The plan is to submit a draft protocol within six months and the draft review within 18 months.

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