ORIGINAL INVESTIGATION

ADHD and offenders

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Abstract
Objectives. To present the needs and psychological treatment options for offenders with ADHD. Methods. Key papers are discussed in relation to this topic. Results. Research suggests there is a disproportionately high number of individuals with ADHD involved with the Criminal Justice System. UK studies among offenders have indicated around 45% of youths and 24% of male adults screen positive for a childhood history of ADHD, 14% of whom have persisting symptoms in adulthood. Those with persisting symptoms have a significantly younger onset of offending and higher rate of recidivism. ADHD was the most powerful predictor of violent offending, even above substance misuse. They accounted for 8-fold more institutional aggressive behavioural disturbances (critical incidents) than other non-ADHD prisoners. Critical incidents have also been associated with personality disordered patients screening positive for ADHD and detained under the Mental Health Act. It is the impulsive symptoms and mood instability associated with ADHD that most likely increase the risk of critical incidents within institutional settings. Conclusions. There are international guidelines available for the treatment of ADHD; however, serious offenders with ADHD will require more complex and comprehensive interventions than their non-offending peers. In particular psychological interventions need to be provided that contain a prosocial competence component. One such programme, the R&R2 for ADHD Youths and Adults, has demonstrated improvement in ADHD symptoms, anxiety, depression, antisocial behaviour and social functioning at three month follow-up with medium to large effect sizes.

Key words: ADHD, offenders, crime, recidivism, personality disorder, mood instability, intervention, CBT, R&R

ADHD and offenders

Over the past few years there has been growing interest in the association between ADHD and offending. This initially stemmed from empirical studies published in the 1980s and 1990s reporting that ADHD youths were more likely to be arrested and receive convictions (Hechtman and Weiss 1986; Lambert 1989; Mannuzza et al. 1989; Satterfield et al. 1982; Satterfield et al. 1994). There followed international studies from North America, Finland, Sweden, Canada, Norway, Germany, Iceland and Scotland reporting high prevalence rates of ADHD in male prisoners with rates of up to 71% for childhood ADHD and up to 45% with persistent symptoms (for review see Young et al. 2011a). As one would expect, rates are higher for samples using younger age groups, e.g., those detained in youth offending institutions. Adult prison samples also distinguish between those with persistent symptoms and those who are sub-threshold but who may still be symptomatic, i.e. in partial remission. Differences in underlying rates may reflect geographical and cultural differences, and in large part differing methodologies as most of the studies identify ADHD symptoms by using self-rated symptom checklists to screen for childhood and/or adulthood symptoms. A further complication is that varying cut-off criteria has been applied. Thus it is likely that reported rates provide an overestimation of the real picture with a high number of false positives being obtained from screens. Nevertheless the rates are undoubtedly considerably higher than community prevalence rates in children of 5% (Polanczyk et al. 2007) and adults 2.5% (Simon et al. 2009). It seems that when comprehensive clinical assessments using DSM-IV criteria are conducted in prison settings rates of inmates experiencing persistent ADHD symptoms are around 30% for male adults (Young et al. 2011a), 10% for female adults (Rösl er et al. 2009) and 45% for youth offenders (Retz et al. 2004; Rösl er et al. 2004; Young et al. 2010).

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The interface between ADHD and the criminal justice system

People with ADHD are vulnerable to engage in antisocial behaviour and criminal outcomes for several reasons. Firstly, around 40–60% of children and adolescents with ADHD will develop comorbid disruptive disorders; conduct disorder and oppositional defiant disorder (Wolraich et al. 1996). These common comorbid conditions may represent a “double dose” of risk as there is evidence that co-occurring ADHD and Conduct Disorder are clinically and genetically more severe variants of their independent disorders (Thapar et al. 2001).

Secondly, by nature of their cognitive impairments, people with ADHD are probably more easily apprehended for their antisocial activities. One can speculate that they get caught out because they are not sophisticated offenders. Their offences are likely to be reactive and opportunistic rather than well planned and organized activities. Once involved with the criminal justice system they are vulnerable to being able to effectively cope with the custodial process, the police interview and court process. This often requires the ability to sustain attention over lengthy periods of time while they are questioned and put under interrogative pressure, and to focus on questions while involved in other tasks such as looking at exhibits or drawing maps of locations and/ or room layouts. Juveniles are particularly susceptible to interrogative pressure and compliance which means that they are more likely to accept or comply with the suggestions of authority figures (Gudjonsson and Singh 1984; Richardson et al. 1995). Gudjonsson and colleagues have studied these traits in adults who were clinically referred for ADHD and found that when put under interrogative pressure those with ADHD engaged in a strategy of responding “I don’t know” to questions including questions that were based on a recognition paradigm to which people commonly give correct responses (Gudjonsson et al. 2007). Furthermore they reported to be more eager to comply with requests from others, most likely to avoid conflict and confrontation (Gudjonsson et al. 2008; Gudjonsson and Sigurdsson 2010). These characteristics may be important contributory factors to the reported elevated rates of false confession by people with ADHD (Gudjonsson et al. 2008; Gudjonsson et al. Under review(b)).

Once incarcerated, undiagnosed and untreated individuals seem to have great difficulty tolerating the stress of prison life indicated by high rates of aggressive incidents recorded in secure settings (Young et al. 2003; Young et al. 2009; Young et al. 2011b). This may be explained by several factors associated with ADHD including impulsive responding (Young et al. 2007), mood instability and low frustration tolerance (Gudjonsson et al. Under review(a); Skirrow et al. 2009) and a chaotic/disorganised personality style (Gudjonsson et al. online). Many of the prisoners in these samples were in partial remission of their symptoms indicating that risk is not limited to those with severe impairments.

The Scottish prison project

Young, Gudjonsson and colleagues have conducted a series of studies investigating characteristics of male offenders at a Scottish prison (Young et al. 2009, online; Gudjonsson et al. 2011, online). They screened for ADHD, Axis-I and -II psychopathology, substance misuse and motivation for offending. Offending was obtained from official criminal records and aggressive behavioral disturbance (critical incidents) over the last 3 months were obtained from prison wing records. ADHD prisoners were involved in eight times more aggressive incidents than other prisoners, and six times more incidents when controlling for antisocial personality disorder. An evaluation of the highest frequency (10%) of critical incidents in a Scottish prison showed a clear relationship between participation in critical incidents and persistence of ADHD symptoms. This strongly suggests that ADHD contributes to disruptive behaviour much above and beyond antisocial personality disorder. This means that ADHD inmates are likely to be perceived as challenging individuals who are difficult and costly to manage. Behavioural disturbance within prisons, especially those resulting in staff assaults and prisoner-on-prisoner assaults, are a major source of concern and many of these aggressive incidents will lead to formal adjudications (sanctions) which, in turn, means that they are less likely to be considered for early release.

The ADHD symptomatic group were significantly younger than the non-ADHD group at the time of first conviction and had a larger number of total previous convictions, property and violent offences. Among this sample, those with ADHD symptoms had greater severity of psychopathology and personality pathology, although the key predictor of ADHD was a disorganised personality style rather than personality disorder. Drug and alcohol misuse featured strongly in the sample. The authors investigated the relationship between psychopathology and motivation for past offending. Personality disorders did not predict motivation for offending beyond that of Axis-I Clinical Syndromes and ADHD symptoms. Drug dependence and ADHD symptoms were the most powerful predictors of financial motivation, alcohol dependence of provocation and anxiety of
compliance motivation. The results highlight the importance of clinical syndromes, particularly drug and alcohol dependence, ADHD symptoms and anxiety, in predicting the motivation of offending among imprisoned offenders.

Offending was categorized into total offences, violent offences, drug offences, property offences and “other” offences (e.g., breach of bail, criminal damage, arson and sexual offending) and the authors examined predictors of offending for each category. Hierarchical multiple regressions were conducted by entering only significant predictor variables of age at first conviction, childhood history of ADHD symptoms, antisocial personality disorder symptoms, alcohol and substance use dependence scale, regular use of heroin and crack cocaine. Multiple regressions showed that illicit drug use was influential in predicting offending – the most powerful predictor of the total offending was heroin, followed by childhood ADHD; drug offences were predicted by crack cocaine use, and “other” offences by heroin use. There were no significant individual predictors of property offending. By contrast the most powerful predictor of violent offending was childhood ADHD symptoms, followed by alcohol dependence. A similar pattern of results were found when “current” persisting ADHD symptoms were substituted for childhood ADHD symptoms in the model, thus the findings hold for prisoners with a childhood history of ADHD and those who experience persistent symptoms.

Interventions for ADHD offenders

For the most part, ADHD is a treatable condition and intervention can be introduced at any age (Young and Amarasinghe 2010). There are international guidelines available for the treatment of ADHD. In the UK, the National Institute for Clinical Excellence guidelines (NICE 2009) recommend treatment with medication as the first-line treatment for children and adults with severe ADHD, and psychological treatment as first-line for those with less severe symptoms. The guidelines state that drug treatment for ADHD should always include a comprehensive treatment programme addressing psychological, behavioural, educational or occupational needs. One needs to bear in mind however, when treating serious offenders with ADHD, that this may require more complex and comprehensive interventions than those provided to their non-offending peers. This is because the aims of “treatment” in such cases are multifaceted; one must (1) confer health gain to the individual by reducing ADHD symptoms and associated impairment, improve function and quality of life; (2) rehabilitate the individual by identifying criminogenic needs and providing treatments to target them, e.g., to address antisocial attitudes and thinking styles, to develop insight into offending and victim empathy; (3) observe public protection issues and reduce risk to society; and (4) deliver justice in a fair and reasonable way. Medication alone will not achieve all of these aims.

There is growing evidence from studies in children that multimodal treatments (i.e. a combination of psychological and drug treatments) lead to greater effects on comorbidity and greater sustained effects. Most of these psychosocial treatments have evolved from interventions designed for children with disruptive behavioural problems (Young and Amarasinghe 2010). By contrast, psychosocial treatments developed for ADHD adults specifically target the reduction of ADHD symptoms and the improvement of executive function skills, e.g., time-management, planning and organization skills (Safren et al. 2010; Solanto et al. 2010). However, given the high comorbidity between ADHD and conduct disorder/antisocial behaviour, the longer term outcome of providing additive treatments to improve executive function skills may be greater – and indeed more antisocial – than anticipated. Thus adults with antisocial comorbidity need to be either screened out from participation in such psychosocial programmes or alternatively the programmes need to include a prosocial competence component. One programme that does this is the R&R2 for ADHD Youths and Adults programme (Young and Ross 2007). This is a manualised 15 session CBT group programme suitable for adolescents and adults. The R&R2 is a revision of its predecessor (R&R) which has strong evidence for a 14% reduction in re-offending when delivered in institutional settings and a 21% reduction when delivered in community settings (Tong and Farrington 2006). More recently the R&R2 has been evaluated in a randomized controlled trial delivered in the community in a non-offending sample of clinically referred ADHD patients (males and females) (Emilsson et al. submitted). The study compared a “treatment as usual” medication-only arm with a CBT + medication arm. The findings suggested medium to large treatment effects for ADHD symptoms (both self-rated and rated by an independent evaluator), which increased further at 3-month follow-up. Additionally, comorbid problems (anxiety, depression, antisocial behaviour, social functioning) also improved at follow-up with large effect sizes. Thus antisocial behaviour significantly improved even through the participants were not specifically referred for this reason.
Conclusions

Compared with community rates there are disproportionately high rates of prisoners with ADHD. However these studies are evaluating the “top slice” of offenders, i.e. those who have been sentenced for indictable offences. The inclusion of non-indictable offences, such as drunk and disorderly behaviour and less severe acts of public order and criminal damage, may bloat the statistics manifold. These individuals enter the criminal justice system at a younger age, many will become revolving door recidivists and their aggressive behaviour within institutions means that they may be unable to access lower tariffs and early release. In turn this means that they will be more costly to manage than their peers. A major problem is that ADHD is being missed or misdiagnosed in these individuals. This is unacceptable as an appropriate treatment combination is likely to reduce symptoms, improve behavioural and emotional control and improve prosocial skills. It may promote better therapeutic engagement and reduce violent behaviour. In the longer term recidivism may decrease. Moreover with early intervention there is the potential divert youths away from a criminal trajectory.

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Statement of Interest

None

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