Assessment and Treatment of Adult Inmates with Attention Deficit Hyperactivity Disorder: Clinical Effectiveness and Guidelines
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**Cite As:** Assessment and treatment of adult inmates with attention deficit hyperactivity disorder: clinical effectiveness and guidelines. Ottawa: CADTH; 2017 Jun. (CADTH rapid response report: summary of abstracts).

**Acknowledgments:**

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Research Questions

1. What is the clinical effectiveness regarding the diagnosis of adult inmates who may have attention deficit hyperactivity disorder?
2. What is the clinical effectiveness regarding the treatment of adult inmates who are diagnosed with attention deficit hyperactivity disorder?
3. What are the evidence-based guidelines regarding the diagnosis of adult inmates who may have attention deficit hyperactivity disorder?
4. What are the evidence-based guidelines regarding the treatment of adult inmates who are diagnosed with attention deficit hyperactivity disorder?

Key Findings

One randomized controlled trial, six non-randomized studies, and one evidence-based guideline were identified regarding the diagnosis and treatment of adult inmates with attention deficit hyperactivity disorder.

Methods

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2017, Issue 6), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit the retrieval by study type. The search was also limited to English language documents published between January 1, 2012 and June 5, 2017. Internet links were provided, where available.

Selection Criteria

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

Table 1: Selection Criteria

| Population | Q1: Adult inmates who may have attention deficit hyperactivity disorder (ADHD)  
|Q2: Adult inmates who have ADHD |
| Intervention | Q1, 3: Interventions used to diagnose ADHD  
Q2, 4: Interventions used to treat ADHD (pharmacological and non-pharmacological treatments) |
| Comparator | Q1-2: Any comparator (another intervention or without intervention)  
Q3-4: No comparator required |
| Outcomes | Accurate assessment, effective treatment, guidelines |
| Study Designs | Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, evidence-based guidelines |
Results

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials, non-randomized studies, and evidence-based guidelines.

One randomized controlled trial, six non-randomized studies, and one evidence-based guideline were identified regarding the diagnosis and treatment of adult inmates with attention deficit hyperactivity disorder. No relevant health technology assessments, systematic reviews, or meta-analyses were identified.

Additional references of potential interest are provided in the appendix.

Overall Summary of Findings

One non-randomised study\(^2\) was undertaken to validate the Substance Transitions in Addiction Rating Scale (STARS) in a prison population. The tool was used to screen inmates for a conduct disorder and was administered in combination with a clinical diagnostic interview for ADHD. The authors determined that there was an association between the use of coping as a way to manage symptoms and the presence of ADHD. A non-randomized study\(^3\) compared the Barkley Adult ADHD Rating Scale (BAARS-IV) to a clinical diagnostic interview. In the study population the BAARS-IV had a sensitivity of 37.9 and a specificity of 96.3. One study\(^4\) investigated the use of the ADHD Self-Rating Scale (ASRS) and diagnostic assessment with a structured interview for incarcerated women in Sweden. In this population, the ASRS demonstrated a sensitivity of 100 and a specificity of 66. The authors concluded the ASRS was a useful screening tool in this population. Another non-randomized study\(^5\) assessed the use of the ASRS in a Canadian prison population. Male federal offenders were assessed with the tool at intake over 14 months. The clinical threshold for ADHD diagnosis was reached in 16.5% of the population.

One RCT\(^1\) examined the use of osmotic-release oral system (OROS) methylphenidate in adult male long-term prison inmates with ADHD. Over five weeks of treatment, symptom severity was decreased and global functioning improved. In a 47 week open-label extension of the RCT,\(^7\) the authors determined that verbal and visuospatial working memory and abstract verbal reasoning showed significant improvements of the total study period. Some quality of life domains improved over time. A third study\(^4\) was conducted to assess the three year outcomes of the original RCT. The authors determined that “[m]ethylphenidate-related improvements in ADHD symptoms and psychosocial functioning obtained during the 52-week trial were maintained at 1- and 3-year follow-ups.” At three years, participants who were not receiving methylphenidate reported more substance misuse, functional impairment and ADHD symptoms.

One evidence-based guideline\(^8\) was identified from the National Institute for Health and Care Excellence (NICE). The recommendation was as follows: “Where there may be concern about the potential for drug misuse and diversion (for example, in prison services), atomoxetine may be considered as the first-line drug treatment for ADHD in adults.” (page 24)
References Summarized

Health Technology Assessments

No literature identified.

Systematic Reviews and Meta-analyses

No literature identified.

Randomized Controlled Trials


Non-Randomized Studies


Guidelines and Recommendations
See: 1.7.1.10, page 25
Appendix — Further Information

Review Articles


