

Case need domain: “Substance abuse assessment review”

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About two thirds of offenders experience substance abuse problems to some degree. This high prevalence, along with data from large surveys and police reports of substance involvement at the time of arrest, indicate a strong association between substance abuse and crime. Accurate assessment that leads to appropriate treatment is therefore paramount if offenders are to be safely reintegrated into the community. This article highlights key findings from an extensive review² that examined the prevalence of substance abuse among offender populations as well as the various measures that have evolved for substance abuse assessment in offender and non-offender populations. We also offer recommendations for enhancing the substance abuse domain of the Case Needs Identification and Analysis (CNIA) instrument currently used by the Correctional Service of Canada.

Research has consistently concluded that Alcohol problems, drug problems and a mixture of the two are associated with crime.³ Further, incarcerated substance abusers are a heterogeneous group and differ in many ways. Assessment makes it possible to identify an offender’s particular needs, match them with appropriate treatment and manage risk when the offender is released. In addition, thorough assessment allows the creation of a database of substance-related information that is useful for research and planning purposes. This article therefore briefly considers the prevalence of substance abuse among federally sentenced offenders in the Correctional Service of Canada. It then highlights key findings from an extensive report⁴ that reviewed various substance abuse assessment measures developed for use in offender and non-offender populations, and recommends ways to improve the substance abuse domain of the CNIA.

Prevalence of substance abuse

It is now much easier to establish the prevalence of substance abuse problems among Canadian federal offenders, thanks to the database created by the routine screening of new admissions using the Computerized Lifestyle Assessment Instrument (CLAI).⁵

The CLAI is a self-report, multidimensional assessment tool that includes the Alcohol Dependence Scale (ADS),⁶ the Drug Abuse Screening Test (DAST)⁷ and a series of additional substance abuse indicators. According to information obtained from the CLAI, approximately two thirds of federally incarcerated male offenders report some degree of alcohol or drug abuse problem.⁸ Although samples are much smaller, indications are that female offenders are less likely to report alcohol problems (28%) but more likely than male offenders to report drug problems (65% versus 48%).⁹ Similarly, Aboriginal offenders are twice as likely to report severe alcohol abuse problems than are their non-Aboriginal counterparts. Finally, Aboriginal and non-Aboriginal offenders report similar rates of severe drug abuse problems.¹⁰

Review of assessment measures

It has been noted that “there are literally hundreds of published instruments for use in assessing alcohol problems.”¹¹ The list grows even longer when other substances are included. Not surprisingly, our review reflected this breadth and quantity. We located various assessment measures ranging from one-minute, self-report screening instruments requiring minimal expertise to highly involved, structured interviews and comprehensive assessment batteries requiring considerable time and expertise to complete, administer and interpret. Among these instruments, more than 60 individual measurement of substance abuse contained adequate information for evaluative purposes. Highlights from this review are presented below.

Assessment review highlights

- There are several substance abuse assessment approaches. Among them are self-report questionnaires, observer reports based on behaviour ratings, combined self

and observer reports, face-to-face structured, semi-structured or open-ended interviews administered by clinical or non-clinical staff, computer-administered protocols, and laboratory tests that tap biological markers of current and chronic use of certain substances.

- The greatest source of debate about optimal information-gathering techniques seems to concern the validity of self-report data. Frequently, the questioning of the integrity and validity of self-report data is pitted against the limited information accessible through an observer report and the limited or questionable sensitivity and time-frame constraints of biological markers. We agree with the conclusion¹² that, in most circumstances, self-reports tend to be fairly accurate and are therefore a useful and valid source of information. However, in circumstances where under- or over-reporting is suspected, the use of collateral sources is recommended to support self-report data.
- Substance abuse measures can be classified according to one of five functional dimensions. First are those that simply screen for the presence or absence of a problem. Second are measures that elaborate on the nature and severity of the problem. Third are specific instruments that not only help establish treatment and relapse prevention targets but also assess changes associated with treatment. Fourth are comprehensive batteries of tests that serve multiple functions including screening, problem severity assessment, multiple need identification, treatment planning and research database construction. Last are laboratory assessments, which are mainly used to screen for biological signs of current and chronic use of certain substances.
- There are several brief and reasonably sensitive screening instruments. However, since all admissions to federal prisons are assessed by the more comprehensive CLAI, the use of such a screening instrument would be redundant.
- There are several measures for assessing the severity of substance abuse problems that show strong reliability and validity. However, our review showed that the reliability, validity and other qualities of

the ADS and DAST, currently used by the Service as part of the CLAI, are as good as or better than any comparable instrument available.

- Although there are several excellent comprehensive assessment batteries currently available, the CLAI is possibly the most comprehensive. Further, we can find no compelling reason to suggest the use of any other comprehensive battery in its place. Nevertheless, one shortcoming is that the CLAI does not screen for neurological deficits. This is particularly problematic given that substance abusers, especially those with severe alcohol problems, commonly have neurological deficits that can interfere with treatment response.
- Several instruments assess specific treatment and relapse prevention targets. These instruments tap a range of content areas, including the identification of high-risk situations, cravings for drugs or alcohol, the offender's expectations of negative consequences associated with immediate alcohol or drug consumption, the offender's confidence associated with maintaining abstinence in high-risk situations, and treatment readiness and motivation. Although prominent substance abuse programs of the Correctional Service of Canada have adopted some of these measures, additional measures boasting excellent psychometric properties should also be considered for inclusion.
- Some laboratory assessments measure biological indicators of recent use (e.g., breath alcohol tests, saliva testing or urinalysis) and long-term substance abuse (e.g., liver functioning). Currently, laboratory tests are of fairly limited utility in determining the severity of a problem or in assessing treatment targets, particularly among incarcerated populations, although some assessments, particularly those designed to measure recent use, are helpful in monitoring abstinence compliance.

The CNIA substance abuse domain

The substance abuse domain of the CNIA comprises three principal components: alcohol abuse, drug abuse and interventions. The alcohol and drug abuse components are further

divided into three subcomponents: pattern, situations and interference. The interventions component comprises only one subcomponent: history. Finally, 29 individual yes-and-no indicators are associated with the various subcomponents.

Our review revealed that the substance abuse domain of the CNIA covers all the essential areas required to ensure that an existing problem is spotted and offers some indication of problem severity. Nevertheless, how those content areas are measured and defined could be enhanced. One strategy for improvement might be to reduce the level of subjectivity associated with the scoring of certain indicators. Highly specific indicators could be used to build concrete definitions for more global indicators. For example, the global indicator "abuses alcohol" could be scored on the basis of information derived from the remaining highly specific alcohol abuse indicators such as "drinks on a regular basis," "history of drinking binges" and "combines the use of alcohol and drugs." Moreover, indicators that are typically considered specific treatment and relapse prevention targets (e.g., situational factors) could be deleted from this assessment, given that they are usually assessed much more thoroughly with participation in substance abuse programs. Finally, the

development of a strategy that routinely incorporates CLAI findings into the CNIA assessment of substance abuse indicators would likely improve detection of problems and better estimate their severity. This would undoubtedly enhance the practical utility of the substance abuse domain.

Conclusion

Substance abuse is a significant problem among federally incarcerated offenders. Moreover, several highly reliable and well-validated instruments for measuring substance abuse are currently available. The use of the CLAI by the Correctional Service of Canada is commendable given that this battery of tests is one of the most comprehensive, reliable and valid assessment tools currently available. Although the CNIA requires some modification in terms of scoring and item restructuring, it addresses the major content areas deemed necessary to screen accurately for substance abuse and to assess the severity of the problem. Ultimately, the development of a strategy that integrates CLAI and CNIA information will yield an assessment approach that accurately and expediently identifies the existence of a substance abuse problem as well as the extent of that problem. ■

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- ² F. Boland, K. Henderson and J. Baker, *Case Need Review: Substance Abuse Domain* (Ottawa, ON: Correctional Service of Canada, 1998).
- ³ M. D. Anglin, "Alcohol and criminality," *Encyclopedic Handbook of Alcoholism*, E. M. Pattison and E. Kaufman, Eds. (New York, NY: Gardner Press, 1992): 383-394. See also L. Harrison and J. Gfroerer, "The intersection of drug use and criminal behavior: Results from the National Household Survey on Drug Abuse" *Crime and Delinquency* (Special issue: Drugs and Crime), 38 (1992): 422-443. And see B. Miller and J. Welte, "Comparisons of incarcerated offenders according to use of alcohol and/or drugs prior to offence," *Criminal Justice and Behaviour*, 13 (1986): 366-392.
- ⁴ Boland, Henderson and Baker, *Case Need Review: Substance Abuse Domain*.
- ⁵ D. Robinson, E. Fabiano, F. P. Porporino, W. A. Millson and G. Graves, *A Guide to the Use of the Computerized Lifestyle Assessment Instrument (CLAI) for Substance Abuse*, 2nd ed. (Ottawa, ON: Correctional Service of Canada, 1993).
- ⁶ H. A. Skinner and J. L. Horn, *Alcohol Dependence Scale (ADS): User's Guide* (Toronto, ON: Addiction Research Foundation, 1984).

- ⁷ H. A. Skinner, "The Drug Abuse Screening Test," *Addictive Behaviours*, 7 (1982): 363-371.
- ⁸ J. R. Weekes, A. E. Moser and C. M. Langevin, "Assessing substance abuse offenders for treatment," workshop presented at the meeting of the International Community Corrections Associations (Cleveland, OH: 1997).
- ⁹ L. O. Lightfoot and L. Lambert, *Substance Abuse Treatment Need of Federally Sentenced Women*, Technical reports 1 and 2 (Kingston, ON: Correctional Service of Canada, 1991).
- ¹⁰ S. A. Vanderburg, J. R. Weekes and W. A. Millson, *Assessment of Substance Abuse Problems in Native Offenders: The Computerized Lifestyle Assessment Instrument*, Report R-37 (Ottawa, ON: Correctional Service of Canada, 1994).
- ¹¹ W. R. Miller, V. S. Westerberg and H. B. Waldron, "Evaluating alcohol problems in adults and adolescents," *Handbook of Alcoholism Treatment Approaches: Effective Alternatives*, 2nd ed., R. K. Hester and W. R. Miller, Eds. (Boston, MA: Allyn and Bacon, 1995): 61-88.
- ¹² Weekes, Moser and Langevin, "Assessing substance abuse offenders for treatment."