Comorbidity of mental disorders and substance use: A brief guide for the primary care clinician

Monograph Series No. 71
Comorbidity of mental disorders and substance use: A brief guide for the primary care clinician

Drug and Alcohol Services South Australia 2008
Comorbidity of mental disorders and substance use: 
A brief guide for the primary care clinician

Author: Dr Andrea Gordon
Drug and Alcohol Services South Australia (DASSA)
Clinical Services and Research
Adelaide, South Australia

© Commonwealth of Australia 2008
Additional copies can be obtained from:
National Mail and Marketing
11 Tralee Street Hume ACT
Tel: 02 6269 1000
Fax 02 6260 2770

Internet sites
(c) Commonwealth of Australia 2009
This work is copyright. You may download, display, print and reproduce this
material in unaltered form only (retaining this notice) for your personal,
non-commercial use or use within your organisation. Apart from any use as
permitted under the Copyright Act 1968, all other rights are reserved.
Requests and inquiries concerning reproduction and rights should be
addressed to Commonwealth Copyright Administration, Attorney-General's
Department, Robert Garran Offices, National Circuit, Barton ACT 2600 or

The opinions expressed in this document are those of the authors and are not necessarily those of the
Australian Government.
Acknowledgments

The original version of “Comorbidity of mental disorders and substance use: A brief guide for the primary care clinician” (the Guidelines) was funded by the Commonwealth Department of Health and Ageing in 2002, under a joint initiative of the National Drug Strategy and The National Mental Health Strategy. It was written by Dr Chris Holmwood in conjunction with the Primary Mental Health Care Australian Resource Centre (PARC) based in the Department of General Practice at Flinders University. PARC must be acknowledged for their contribution of resources to the original document.

Dr Chris Wurm (National Centre for Education and Training on Addiction), Associate Professor Chris Alderman (Drug and Therapeutics Information Service, Repatriation General Hospital) and Ms Jody Braddon (Pharmacist, Drug and Therapeutics Information Service) must also be acknowledged for their contributions to the original document.

Thanks must go to Damian McCabe who was the Project Officer for the original 2001 Comorbidity Scoping Study. The need for the original version of this clinical resource arose as a result of this initial work.

In order for the Guidelines to remain a useful and current resource for general practitioners, it was decided by the Department of Health and Ageing to review and update them.

The revised Guidelines are funded by the Department of Health and Ageing under the National Comorbidity Initiative.

The revision of the original Guidelines was undertaken by Drug and Alcohol Services South Australia (DASSA) with Dr Andrea Gordon as the Author and coordinating Research Officer and Dr Chris Holmwood as the Project Manager.

The revision and update of this management resource would not have been possible without the assistance and contribution of those members of the reference group and other major contributors:

Ms Maxie Ashton (Seaton Mental Health Site, Central Northern Adelaide Health Service)
Associate Professor Michael Baigent (Department of Psychiatry, Flinders University)
Dr Peter Donohoe (Australian General Practice Network)
Dr Linda Gowing (DASSA Evidence-Based Practice Unit/Discipline of Pharmacology, University of Adelaide)
Dr Les Koopowitz (Department of Psychiatry, University of Adelaide), and
Professor Jason White (Discipline of Pharmacology, University of Adelaide).
# Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGPN</td>
<td>Australian General Practice Network</td>
</tr>
<tr>
<td>AOD</td>
<td>Alcohol and other drugs</td>
</tr>
<tr>
<td>ARBI</td>
<td>Alcohol related brain injury</td>
</tr>
<tr>
<td>CBT</td>
<td>Cognitive behavioural therapy</td>
</tr>
<tr>
<td>CYP 450</td>
<td>Cytochrome P450</td>
</tr>
<tr>
<td>DASSA</td>
<td>Drug and Alcohol Services South Australia</td>
</tr>
<tr>
<td>DSM-IV</td>
<td>Diagnostic and statistical manual</td>
</tr>
<tr>
<td>HIV</td>
<td>Human immunodeficiency virus</td>
</tr>
<tr>
<td>GAD</td>
<td>Generalised anxiety disorder</td>
</tr>
<tr>
<td>LSD</td>
<td>Lysergic acid diethylamide</td>
</tr>
<tr>
<td>MAO-I</td>
<td>Monoamine oxidase inhibitor</td>
</tr>
<tr>
<td>MDMA</td>
<td>3,4 - methylendioxymethamphetamine</td>
</tr>
<tr>
<td>NRT</td>
<td>Nicotine Replacement Therapy</td>
</tr>
<tr>
<td>OCD</td>
<td>Obsessive compulsive disorder</td>
</tr>
<tr>
<td>PARC</td>
<td>Primary Mental Health Care Australian Resource Centre</td>
</tr>
<tr>
<td>PBS</td>
<td>Pharmaceutical Benefits Scheme</td>
</tr>
<tr>
<td>PTSD</td>
<td>Post traumatic stress disorder</td>
</tr>
<tr>
<td>RCT</td>
<td>Randomised controlled trial</td>
</tr>
<tr>
<td>SNRI</td>
<td>Selective noradrenaline re-uptake inhibitors</td>
</tr>
<tr>
<td>SSRI</td>
<td>Selective serotonin reuptake inhibitor</td>
</tr>
<tr>
<td>TBI</td>
<td>Traumatic brain injury</td>
</tr>
<tr>
<td>THC</td>
<td>Tetrahydrocannabinol</td>
</tr>
</tbody>
</table>
Contents

Acknowledgments ................................................................. iii
Abbreviations ..................................................................... iv
Preface .................................................................................. viii
Introduction ........................................................................... ix

1 Levels of evidence ............................................................... 1
   1.1 Management approaches .............................................. 1
   1.2 Drug interactions ......................................................... 1

2 Management of people with comorbidity of mental disorders and substance use ............................................. 3
   2.1 Detection ........................................................................ 3
   2.2 Assessment ..................................................................... 3
   2.3 General management ................................................... 4
   2.4 Specific management .................................................. 4
   2.5 Pharmacological approaches ....................................... 4
   2.6 Referral ......................................................................... 4

3 The common drug groups .................................................... 5
   3.1 Cannabis/hallucinogen .................................................. 5
   3.2 Alcohol .......................................................................... 6
   3.3 Opioids ......................................................................... 7
   3.4 Stimulants (including methamphetamine) .................... 7
   3.5 Benzodiazepine ............................................................. 8
   3.6 Inhalants/solvents ........................................................ 9
   3.7 Tobacco ........................................................................ 10

4 Tobacco .............................................................................. 12
   4.1 Comorbidity with tobacco ............................................ 12

5 Depression and substance use ............................................... 19
   5.1 Depression ...................................................................... 19
   5.2 Comorbidity with depression ....................................... 19
   5.3 Major clinical issues with depression and cannabis/hallucinogen use .......................................................... 20
   5.4 Major clinical issues with depression and alcohol use .................................................................................. 21
   5.5 Major clinical issues with depression and opioid use ................................................................................ 22
   5.6 Major clinical issues with depression and stimulant (including methamphetamine) use .................................. 24
   5.7 Major clinical issues with depression and benzodiazepine use ................................................................... 25
   5.8 Major clinical issues with depression and inhalant/solvent use ................................................................. 27

6 Anxiety disorders and substance use .................................... 29
   6.1 Anxiety ........................................................................... 29
   6.2 Comorbidity with anxiety disorders ................................ 31
   6.3 Major clinical issues with anxiety disorders and cannabis/hallucinogen use .................................................. 31
   6.4 Major clinical issues with anxiety disorders and alcohol use ....................................................................... 33
6.5 Major clinical issues with anxiety disorders and opioid use ................................................................. 35
6.6 Major clinical issues with anxiety disorders and stimulant
(including methamphetamine) use ........................................................................................................ 37
6.7 Major clinical issues with anxiety disorders and benzodiazepine use .................................................. 38
6.8 Major clinical issues with anxiety disorders and inhalant/solvent use .................................................. 40

7 Psychosis (schizophrenia and bipolar disorder) and substance use ....................................................... 42
7.1 Psychosis ........................................................................................................................................... 42
7.2 Comorbidity with psychosis ............................................................................................................. 43
7.3 Major clinical issues with psychosis and cannabis/hallucinogen use .................................................. 46
7.4 Major clinical issues with psychosis and alcohol use ......................................................................... 48
7.5 Major clinical issues with psychosis and opioid use ......................................................................... 50
7.6 Major clinical issues with psychosis and stimulant
(including methamphetamine) use ...................................................................................................... 52
7.7 Major clinical issues with psychosis and benzodiazepine use ............................................................. 55
7.8 Major clinical issues with psychosis and inhalant/solvent use ............................................................. 56

8 Personality disorders and substance use ................................................................................................ 58
8.1 Personality disorders.......................................................................................................................... 58
8.2 Comorbidity with personality disorders ............................................................................................ 60
8.3 Major clinical issues with personality disorders and cannabis/hallucinogen use .................................. 61
8.4 Major clinical issues with personality disorders and alcohol use ...................................................... 62
8.5 Major clinical issues with personality disorders and opioid use ...................................................... 64
8.6 Major clinical issues with personality disorders and stimulant
(including methamphetamine) use ......................................................................................................... 65
8.7 Major clinical issues with personality disorders and benzodiazepine use .............................................. 66
8.8 Major clinical issues with personality disorders and inhalant/solvent use .......................................... 67

9 Eating disorders and substance use ........................................................................................................ 69
9.1 Eating disorders ............................................................................................................................... 69
9.2 Comorbidity with eating disorders .................................................................................................... 70
9.3 Major clinical issues with eating disorders and cannabis/hallucinogen use ......................................... 71
9.4 Major clinical issues with eating disorders and alcohol use .................................................................. 72
9.5 Major clinical issues with eating disorders and opioid use .............................................................. 74
9.6 Major clinical issues with eating disorders and stimulant
(including methamphetamine) use ......................................................................................................... 75
9.7 Major clinical issues with eating disorders and benzodiazepine use .................................................... 76
9.8 Major clinical issues with eating disorders and inhalant/solvent use .................................................... 77

10 Somatoform disorders and substance use ............................................................................................ 79
10.1 Somatoform disorders ...................................................................................................................... 79
10.2 Comorbidity with somatoform disorders .......................................................................................... 81
10.3 Major clinical issues with somatoform disorders and cannabis/hallucinogen use ................................. 82
10.4 Major clinical issues with somatoform disorders and alcohol use .................................................... 83
10.5 Major clinical issues with somatoform disorders and opioid use ..................................................... 85
10.6 Major clinical issues with somatoform disorders and stimulant
(including methamphetamine) use ......................................................................................................... 87
11 Gambling and substance use .................................................................................. 92
  11.1 Gambling .............................................................................................................. 92
  11.2 Comorbidity with gambling .................................................................................. 94
  11.3 Major clinical issues with gambling and cannabis/hallucinogen use ..................... 96
  11.4 Major clinical issues with gambling and alcohol use ............................................ 97
  11.5 Major clinical issues with gambling and opioid use ............................................. 98
  11.6 Major clinical issues with gambling and stimulant (including methamphetamine) use ......................................................... 100
  11.7 Major clinical issues with gambling and benzodiazepine use ............................... 101
  11.8 Major clinical issues with gambling and inhalant/solvent use .............................. 102

12 Brain injury, mental disorders and substance use .................................................. 103
  12.1 Brain injury ........................................................................................................... 103
  12.2 Do mental disorders predispose individuals to brain injury? ................................. 103
  12.3 Does substance use predispose individuals to brain injury? .................................. 104
  12.4 Does brain injury predispose individuals to mental disorders or to suicide? .......... 104
  12.5 Does brain injury predispose individuals to substance use? ................................ 107
  12.6 Does brain injury impact on treatment approaches to mental disorders and substance use? .................................................. 108

13 Bibliography .......................................................................................................... 111

14 Appendices ............................................................................................................. 141
  14.1 Serotonin toxicity .................................................................................................. 141
  14.2 NRT management ............................................................................................... 142
Preface

The original comorbidity management guidelines were published in 2002 when it became apparent that there was a need for clinically relevant information concerning specific comorbidity patterns to be collated into one accessible resource. Most importantly, this resource provided clinicians with information on how best to manage individuals with comorbid mental disorders and substance use issues.

At the time, the information contained in the resource was based on clinician knowledge in the area and what management approaches were effective based on prior experience.

The updated guidelines provide a greater breadth of information on the same previously discussed topics and have a greater academic foundation.

The current guidelines also include information not previously included relating to brain injury, gambling, tobacco, inhalants and solvents.
Introduction

Comorbidity or the co-occurrence of mental disorders and substance use disorders is common. The prevalence of comorbidity in the community and the complex interactions that occur between the two sets of disorders should raise doubts about the manner in which we continue to deal with each entity separately. Clinicians need to consider these problems as part of a whole complex of phenomena that are closely linked to one another.

There are significant problems with the management of people with comorbidity. There is a dearth of evidence about best practice. Specialist mental health or alcohol and other drugs (AOD) services, where they are available, are usually separated physically, administratively and philosophically. Only recently has training for general practitioners (GPs) become adequate for the problems that are faced on a day to day basis, either in the mental health field or the AOD field.

The original resource was developed as a result of work previously undertaken by PARC in 2001 with the development of a set of principles for the management of people with comorbidity.

The updating of these guidelines was undertaken in 2007–08 by Drug and Alcohol Services South Australia, through funding from the Australian Government under the National Comorbidity Initiative, to include the most current management principles obtained from the literature and clinical practice.

There is still a dearth of information available in the literature for some areas of comorbidity discussed in these guidelines. Therefore, management principles in these areas are based on what is currently thought to be reasonable clinical practice rather than on high levels of evidence. In addition, many people with comorbidity have more than one mental disorder and may have problematic use of several substances. This resource is a simple guide that provides a starting point for clinicians.

Andrea Gordon and Chris Holmwood

Drug and Alcohol Services South Australia

2008