Clinical and public health significance of the proposed changes to the diagnosis of alcohol abuse and dependence in DSM-5

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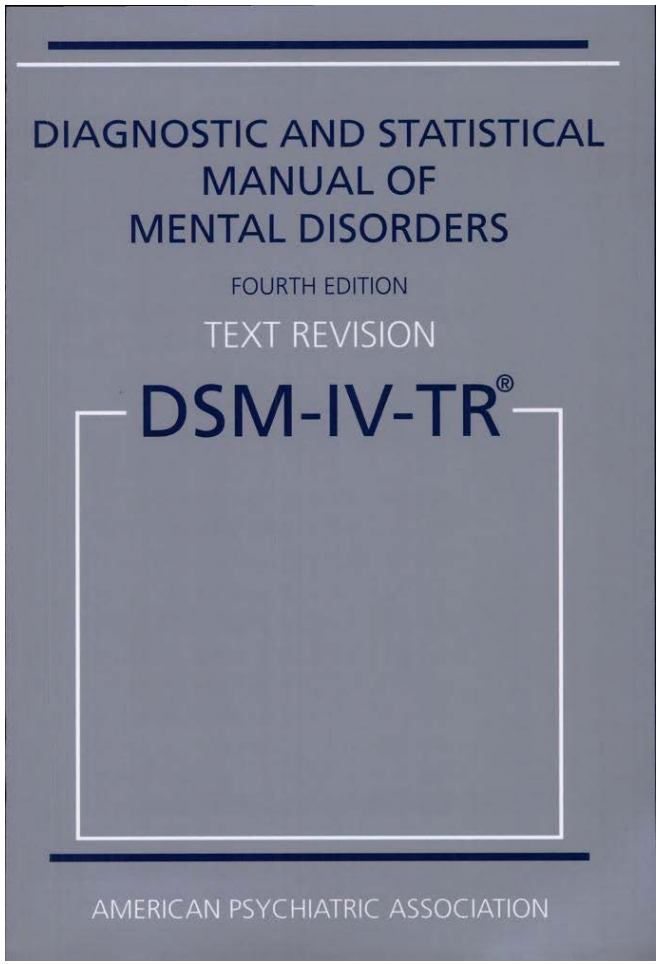
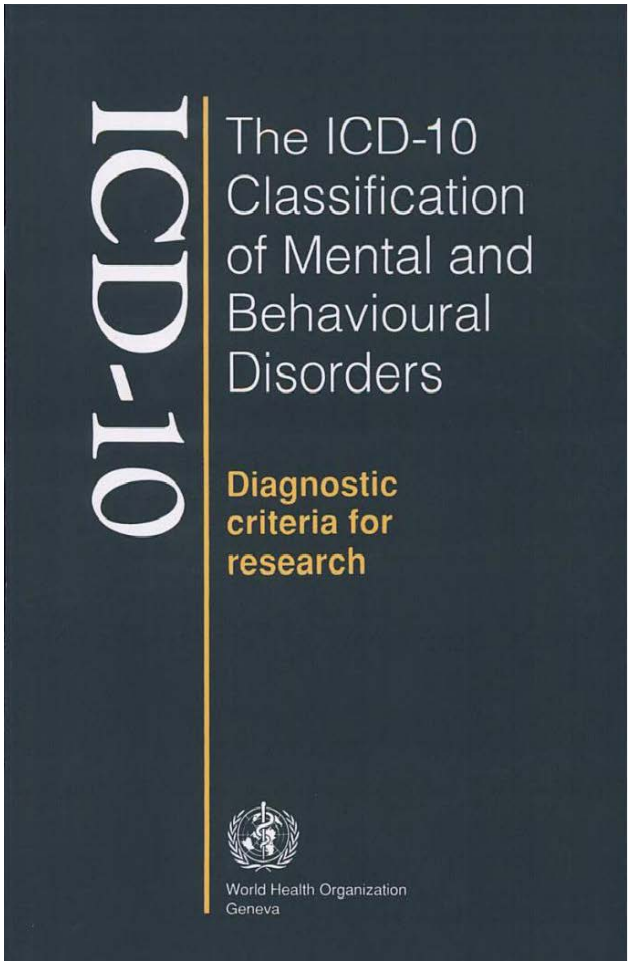
Medicine
National Drug and Alcohol Research Centre

Classification of mental disorders





DSM Alcohol Use Disorders

Criterion	Description
Major role	Recurrent use despite the inability to fulfil major role obligations at work, school or home
Hazard	Recurrent use in physically dangerous situations
Legal	Recurrent use despite substance-related legal problems
Social	Recurrent use despite substance-related social or interpersonal problems
Tolerance	Tolerance
Withdrawal	Withdrawal
Larger	Taking more of the substance or for longer than intended
Cut down	Desire or unsuccessful efforts to cut down
Time spent	A great deal of time obtaining, using or recovering from the effects of the substance
Give up	Reduction in important activities because of substance use
Continue	Continued use despite knowing it is causing a significant problem
Craving	Craving or a strong desire for a substance

Alcohol Use Disorders in DSM-IV

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Threshold for Alcohol Abuse:
≥ 1 criterion

Alcohol Use Disorders in DSM-IV

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Threshold for Alcohol Dependence:
≥ 3 criteria

Alcohol Use Disorders in DSM-5*

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Threshold for Alcohol Use Disorder:
2-3 criteria – moderate
≥ 4 criteria – severe

* According to the proposed diagnostic criteria (http://www.dsm5.org/proposedrevision/Pages/SubstanceUseandAddictiveDisorders.aspx)

Summary of proposed changes*

1. Eliminate distinction between abuse and dependence
2. Remove *substance-related legal problems* criterion
3. Add *craving or strong desire* criterion
4. Change threshold for diagnosis

* According to the proposed diagnostic criteria (http://www.dsm5.org/proposedrevision/Pages/SubstanceUseandAddictiveDisorders.aspx)

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Prevalence of DSM-IV *vs* DSM-5 AUD

	Prevalence % (SE)	Kappa*
DSM-IV abuse or dependence	6.0 (0.2)	-
DSM-5 (≥2 criteria)	9.7 (0.4)	0.65

* Indicates agreement between DSM-IV any alcohol use disorder and DSM-5 alcohol use disorder. Adapted from Mewton *et al.* (2010)

This equates to roughly 592,000 more people in the general population meeting criteria for an alcohol use disorder

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DSM-5 (≥3 criteria)	5.2 (0.2)	0.84
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…and in more detail

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	No criteria			Diagnostic Orphans*			Abuse			Dependence			Total
DSM-5	n	%#		n	%#		n	%#		n	%#		n
No criteria	8581	99.8		0	0		13	6.3		0	0		8594
One criterion	17	0.2		939	67.0		59	29.3		0	0		1015
Moderate AUD (2-3 criteria)	0	0		464	33.0		114	56.2		135	30.8		713
Severe AUD (4+ criteria)	0	0		0	0		17	8.2		302	69.2		319
Total	8598			1403			203			437			10641

* Defined as individuals who endorse at least one but no more than two DSM-IV dependence criteria and no abuse criteria

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What are the clinical implications?

- DSM committees are committed to enhancing clinical utility, i.e. the ability to:
  - Communicate between clinicians, clients, families etc.
  - select effective interventions
  - predict course, prognosis and future management needs
  - differentiate disorder from non-disorder for the purposes of determining who might benefit from treatment

“Non-convertors” versus “Convertors”

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Symptoms	DSM-IV orphans who remain non-cases (n=939)	DSM-IV orphans who convert to DSM-5 cases (n=464)	OR (95%CI)
Tolerance	24.0%	46.6%	2.8** (2.1-3.7)
Withdrawal	3.1%	7.0%	2.3* (1.4-4.2)
Larger	38.9%	67.0%	3.2** (2.3-4.3)
Cut down	29.4%	55.5%	3.0** (2.3-4.0)
Time spent	0.9%	3.8%	4.5* (1.7-12.0)
Give up	0.4%	0.9%	2.1 (0.3-15.1)
Continue	3.3%	12.1%	4.1** (2.4-7.0)

* $p<0.05$
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Clinical characteristics	DSM-IV orphans who remain non-cases (n=939)	DSM-IV orphans who convert to DSM-5 cases (n=464)	OR (95%CI)
Weekly drinking	77.7%	83.6%	1.5* (1.0-2.1)
“Risky” drinking (5+)	32.4%	44.1%	1.6* (1.2-2.2)
Used services	10.5%	17.1%	1.8* (1.2-2.5)
Suicidal ideation (LT)	12.8%	14.9%	1.2 (0.9-1.7)
1+ days out of role	30.2%	33.5%	1.2 (0.8-1.6)
High K10 (22+)	7.7%	12.2%	1.7* (1.1-2.7)
Comorbid mood dis.	6.3%	10.4%	1.7* (1.1-2.7)
Comorbid anxiety dis.	7.9%	11.0%	1.4 (0.8-2.3)
Comorbid drug dis.	4.2%	6.2%	1.5 (0.8-3.0)

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Comorbid drug dis.	**14.0%**	**6.2%**	**0.4* (0.2-0.8)**

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Summary of findings

- The prevalence of alcohol use disorder would increase by 62% with the proposed DSM-5 criteria
- This increase is mostly accounted for by DSM-IV diagnostic orphans “converting” to DSM-5 moderate AUD
- However, the new DSM-5 cases are more like existing cases and less like non-cases

Conclusions

- The proposed threshold for DSM-5 alcohol use disorders may be set too low
- This raises doubts about the sensitivity and specificity of the new diagnosis
- Diagnosis versus need for treatment?

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- Tim Slade, p: 9385 0267, e: tims@unsw.edu.au