

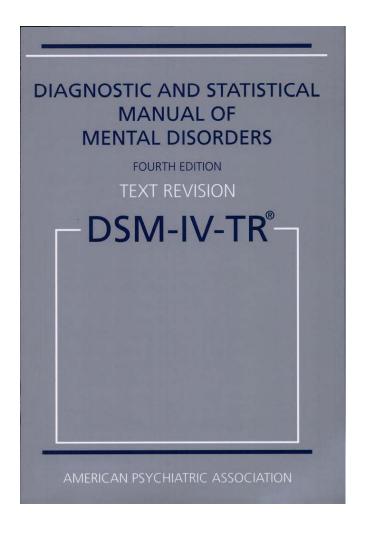
Clinical and public health significance of the proposed changes to the diagnosis of alcohol abuse and dependence in DSM-5

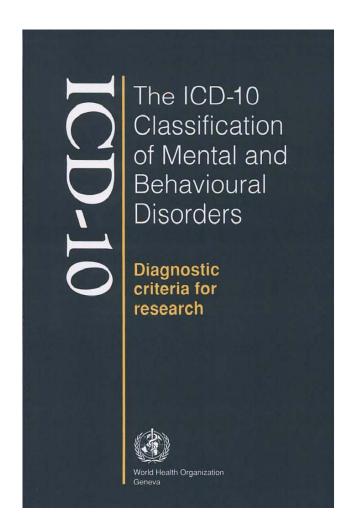
Dr Tim Slade, Senior Research Fellow, National Drug and Alcohol Research Centre, University of New South Wales

Medicine

National Drug and Alcohol Research Centre

Classification of mental disorders







DSM Alcohol Use Disorders

<u>Criterion</u> <u>Description</u>

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

Continued use despite knowing it is causing a significant problem

Craving or a strong desire for a substance



Alcohol Use Disorders in DSM-IV

<u>Criterion</u> <u>Clinical description</u>

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Threshold for Alcohol Abuse: > 1 criterion

Alcohol Use Disorders in DSM-IV

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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

Threshold for Alcohol Dependence: > 3 criteria

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 or a strong desire for a substance



Alcohol Use Disorders in DSM-5*

<u>Criterion</u> <u>Clinical description</u>

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 Withdrawal Threshold for Alcohol Use Disorder:

2-3 criteria – moderate > 4 criteria – severe

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

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UNSW THE UNIVERSITY OF NEW SOUTH WALES

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



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Prevalence of DSM-IV vs DSM-5 AUD

	Prevalence % (SE)	Карра*
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



Prevalence of DSM-IV vs DSM-5 AUD

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DSM-IV abuse or dependence	6.0 (0.2)	-
DSM-5 (≥2 criteria)	9.7 (0.4)	0.65
DSM-5 (≥3 criteria)	5.2 (0.2)	0.84
DSM-5 (≥4 criteria)	3.0 (0.2)	0.65

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...and in more detail

							DSM-I	V					
	No cri	No criteria Diagnostic Abuse Dependence Orphans*											
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



[#] Percentages represent weighted prevalence of each DSM-5 diagnostic sub-group amongst those individuals in each DSM-IV diagnostic sub-group

					DSM-I	V			
	No cr	iteria	Diag: Orph	nostic nans*	Abı	nse	Deper	ndence	Total
DSM-5									
No criteria									
One criterion									
Moderate AUD (2-3 criteria)									
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Total									

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	No cri	teria	0	nostic nans*	Abı	use	Deper	ndence	Total
DSM-5									
No criteria									
One criterion									
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					DSM-I	V			
	No cri	iteria	_	nostic nans*	Ab	nse	Deper	ndence	Total
DSM-5	П	%#	П	%#	Π	%#	n	%#	Π
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
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	No cri	iteria		nostic nans*	Ab	use	Deper	ndence	Total
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	No cri	iteria	Diagi Orph	nse	Deper	ndence	Total		
DSM-5	Π	% [#]	n	%#	Π	%#	Π	%#	Π
No criteria	8581	99.8	0	0	13	6.3	0	0	8594
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		DSM-IV										
	No cri	teria			nostic nans*		Abı	use		Deper	ndence	Total
DSM-5	Π	%#		n	%#		Π	%#		Π	%#	Π
No criteria	8581	99.8		0	0		13	6.3		0	0	8594
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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



		DSM-IV										
	No cri	iteria		_	nostic nans*		Ab	use		Deper	ndence	Total
DSM-5	n	%#		n	%#		n	%#		n	%#	n
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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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Tolerance	54.0%	46.6%	0.8 (0.5-1.1)
Withdrawal	13.6%	7.0%	0.5* (0.2-1.0)
Larger	78.6%	67.0%	0.6* (0.4-0.9)
Cut down	52.4%	55.5%	1.1 (0.8-1.7)
Time spent	9.5%	3.8%	0.4* (0.2-0.9)
Give up	0.7%	0.9%	1.3 (0.9-17.1)
Continue	18.8%	12.1%	0.6* (0.4-0.9)

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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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- This was funded in part by NHMRC project grant (no. 630414)
- Tim Slade, p: 9385 0267, e: tims@unsw.edu.au

