

# Au-delà du DSM-5

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# Disclosures

Speaker bureau:	Astra Zeneca	Biovail
Bristol Myers Squibb (BMS)	Eli Lilly	GlaxoSmithKline (GSK)
Janssen-Ortho	Lundbeck	Organon
Oryx	Otsuka	Wyeth Pfizer
Consultant/Advisory Board:	Astra Zeneca	Bristol Myers Squibb
Eli Lilly	GlaxoSmithKline (GSK)	(BMS)
Lundbeck	Merck	Janssen-Ortho
Otsuka		Pfizer
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Lundbeck	Merck-Frosst	Novartis
Pfizer	Servier	Otsuka
Stock holding/patents: N/A		

# FISHING POX

VERY CONTAGIOUS TO ADULT MALES

SYMPTOMS — Continual complaint as to need for fresh air, sunshine and relaxation. Patient has blank expression, sometimes deaf to wife and kids. Has no taste for work of any kind. Frequent checking of tackle catalogues. Hangs out in Sporting Goods Stores longer than usual. Secret night phone calls to fishing pals. Mumbles to self. Lies to everyone.

Expert diagnosis and treatment at any Canadian Tire Corporation Tackle Bar.

#### NO KNOWN CURE

Quarantine unnecessary

TREATMENT --- Medication is useless. Disease is not fatal.

Victim should go fishing as often as possible.

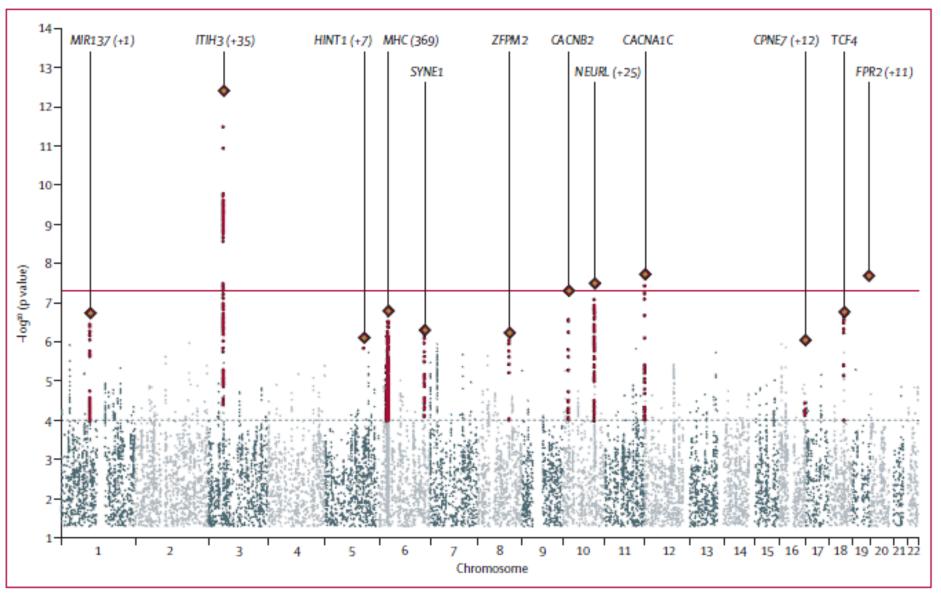
Visit your local CANADIAN TIRE CORP. ASSOCIATE STORE for the "BEST" in fine Fishing Tackle.

# THE LANCET

Identification of risk loci with shared effects on five major psychiatric disorders: a genome-wide analysis Cross-Disorder Group of the Psychiatric Genomics Consortium The Lancet - 28 February 2013







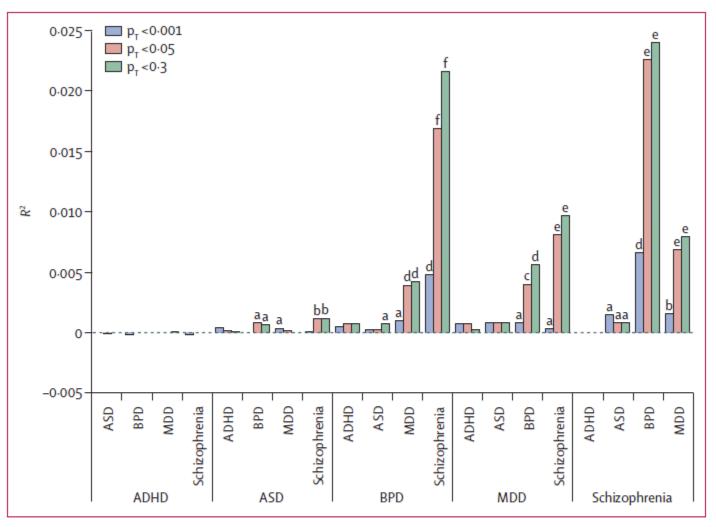
#### Figure 1: Manhattan plot of primary fixed-effects meta-analysis

Horizontal line shows threshold for genome-wide significance (p<5×10").

Association results and forest plots showing effect size for genome-wide significant loci by disorder Data in parentheses are numbers of cases or controls. Het p=p value for the heterogeneity test. Het\_I=heterogeneity test statistic. IQS=imputation quality score (INFO). In(OR)=log of the odds ratio (OR). F=frequency. SE=standard error of the log OR. ADHD=attention deficit-hyperactivity disorder. ASD=autism spectrum disorders. BPD=bipolar disorder. MDD=major depressive disorder. \*Number of studies in which the variant was directly genotyped.

Α												
rs25356	29	G/A		3:52808259								
				het_p:	0-27	het_l:	-157					
	Studies*	IQS	p value	F (cases)	F (controls)	In(OR)	SE					
ADHD	0	0.94	0.201	0-339 (2787)	0.350 (2635)	0-0535	0-0418			-		
ASD	0	0.95	0.196	0-334 (4949)	0.347 (5314)	0-0495	0-0306	-				
BPD	3	0-90	6-61×10 <sup>-6</sup>	0-325 (6990)	0.348 (4820)	0.139	0-0308				-	
MDD	1	0.97	0.000216	0-336 (9227)	0.351 (7383)	0-0913	0-0247		-	-		
Schizophrenia	6	0.94	6-71×10-5	0-332 (9379)	0.350 (7736)	0-0993	0.0249					
All	10	0.94	2-54×10-12	0-333 (33 332)	0-349 (27888)	0-0908	0.013			-	•	
									i		1	1
B rs11191	454	A/G		10:104649994								
		14.4				hat l	77.4					
	Ch. (5 5	105		het_p:	0.32	het_l:	-27-1					
	Studies*	IQS	p value	F (cases)	F (controls)	In(OR)	SE					
ADHD	1	0.99	0-355	0-918 (2787)	0.914 (2635)	0-0649	0-0698	-		-		
ASD	1	1.01	0.143	0-915 (4949)	0.910 (5314)	0-0733	0-05	_				
BPD	7	1.01	0.0107	0-920 (6990)	0.912 (4820)	0.127	0-0495		-			
MDD	1	1.00	0.0156	0-916 (9227)	0.909 (7383)	0-098	0-0406					-
Schizophrenia	12	1.03	3-48×10-6	0-921 (9379)	0.908 (7736)	0.19	0-0409				-	
All	22	1.01	1-39×10 <sup>-8</sup>	0.918 (33332)	0-910 (27 888)	0.12	0.0212					
								ſ	i	<del>г г</del>	1	1
с												
rs10245	82	A/G		12:2272507								
				het_p:	0-01	het_l:	58-8					
	Studies*	IQS	p value	F (cases)	F (controls)	In(OR)	SE					
			P Targe									
								_		-		
ADHD	0	0-96	0.127	0-342 (2787)	0.328 (2635)	0-0639	0-0418					
ASD	2	0-99	0.892	0-331 (4949)	0.333 (5314)	0-00399	0.0301	•	-	_	-	
ASD BPD	2 0	0-99 0-98	0-892 1-12×10 <sup>-6</sup>	0-331 (4949) 0-362 (6990)	0·333 (5314) 0·335 (4820)	0-00399 0-144	0-0301 0-0296	•	-			
ASD BPD MDD	2 0 0	0-99 0-98 0-98	0-892 1-12×10 <sup>-6</sup> 0-12	0-331 (4949) 0-362 (6990) 0-344 (9227)	0-333 (5314) 0-335 (4820) 0-341 (7383)	0-00399 0-144 0-0383	0-0301 0-0296 0-0244	<b>-</b>		- 	•	
ASD BPD MDD Schizophrenia	2 0 0 0	0-99 0-98 0-98 0-98	0-892 1-12×10 <sup>-6</sup> 0-12 2-84×10 <sup>-5</sup>	0-331 (4949) 0-362 (6990) 0-344 (9227) 0-357 (9379)	0-333 (5314) 0-335 (4820) 0-341 (7383) 0-340 (7736)	0-00399 0-144 0-0383 0-103	0-0301 0-0296 0-0244 0-0244	<b>-</b>			-	
ASD BPD MDD	2 0 0	0-99 0-98 0-98	0-892 1-12×10 <sup>-6</sup> 0-12	0-331 (4949) 0-362 (6990) 0-344 (9227)	0-333 (5314) 0-335 (4820) 0-341 (7383) 0-340 (7736)	0-00399 0-144 0-0383	0-0301 0-0296 0-0244	-		- 	-	
ASD BPD MDD Schizophrenia	2 0 0 0	0-99 0-98 0-98 0-98	0-892 1-12×10 <sup>-6</sup> 0-12 2-84×10 <sup>-5</sup>	0-331 (4949) 0-362 (6990) 0-344 (9227) 0-357 (9379)	0-333 (5314) 0-335 (4820) 0-341 (7383) 0-340 (7736)	0-00399 0-144 0-0383 0-103	0-0301 0-0296 0-0244 0-0244	<u>-</u> -		- 		
ASD BPD MDD Schizophrenia All	2 0 0 0	0-99 0-98 0-98 0-98	0-892 1-12×10 <sup>-6</sup> 0-12 2-84×10 <sup>-5</sup>	0-331 (4949) 0-362 (6990) 0-344 (9227) 0-357 (9379)	0-333 (5314) 0-335 (4820) 0-341 (7383) 0-340 (7736)	0-00399 0-144 0-0383 0-103	0-0301 0-0296 0-0244 0-0244			- 		
ASD BPD MDD Schizophrenia	2 0 0 2	0-99 0-98 0-98 0-98	0-892 1-12×10 <sup>-6</sup> 0-12 2-84×10 <sup>-5</sup>	0-331 (4949) 0-362 (6990) 0-344 (9227) 0-357 (9379)	0-333 (5314) 0-335 (4820) 0-341 (7383) 0-340 (7736)	0-00399 0-144 0-0383 0-103	0-0301 0-0296 0-0244 0-0244				<b>8</b>	
ASD BPD MDD Schizophrenia All	2 0 0 2	0-99 0-98 0-98 0-98 <b>0-98</b>	0-892 1-12×10 <sup>-6</sup> 0-12 2-84×10 <sup>-5</sup>	0-331 (4949) 0-362 (6990) 0-344 (9227) 0-357 (9379) 0-349 (33332)	0-333 (5314) 0-335 (4820) 0-341 (7383) 0-340 (7736)	0-00399 0-144 0-0383 0-103	0-0301 0-0296 0-0244 0-0244			- 	<b>-</b>	
ASD BPD MDD Schizophrenia All	2 0 0 2	0-99 0-98 0-98 0-98 0-98 0-98	0-892 1-12×10 <sup>-6</sup> 0-12 2-84×10 <sup>-5</sup>	0-331 (4949) 0-362 (6990) 0-344 (9227) 0-357 (9379) 0-349 (33 332) 10:18641934	0-333 (5314) 0-335 (4820) 0-341 (7383) 0-340 (7736) <b>0-337 (27 888)</b>	0-00399 0-144 0-0383 0-103 0-0714	0-0301 0-0296 0-0244 0-0244 <b>0-0127</b>	- -			<b></b>	
ASD BPD Schizophrenia AII D rs27995	2 0 0 2 73 Studies*	0-99 0-98 0-98 0-98 <b>0-98</b> <b>T/C</b>	0-892 1-12×10 <sup>-6</sup> 0-12 2-84×10 <sup>-5</sup> <b>1-87×10<sup>-8</sup></b>	0-331 (4949) 0-362 (6990) 0-344 (9227) 0-357 (9379) 0-349 (33332) 10:18641934 het_p: F (cases)	0-333 (5314) 0-335 (4820) 0-341 (7383) 0-340 (7736) <b>0-337 (27 888)</b> 0-56 F (controls)	0-00399 0-144 0-0383 0-103 0-0714 het_l: In(OR)	0-0301 0-0296 0-0244 0-0244 0-0127 0-0127			- 		
ASD BPD MDD Schizophrenia AII D rs27995 ADHD	2 0 0 2 73 <u>Studies*</u> 2	0-99 0-98 0-98 0-98 0-98 0-98 T/C IQS	0-892 1-12×10 <sup>-6</sup> 0-12 2-84×10 <sup>-5</sup> <b>1-87×10<sup>-8</sup></b> p value 0-00691	0-331 (4949) 0-362 (6990) 0-344 (9227) 0-357 (9379) 0-349 (33332) 10:18641934 het_p: F (cases) 0-745 (2787)	0-333 (5314) 0-335 (4820) 0-341 (7383) 0-340 (7736) <b>0-337 (27 888)</b> 0-56 F (controls) 0-726 (2635)	0-00399 0-144 0-0383 0-103 0-0714 het_l: ln(OR) 0-132	0-0301 0-0296 0-0244 0-0244 0-0127 0-0127 0-0 SE	·		- 		
ASD BPD MDD Schizophrenia AII D rs27995 ADHD ASD	2 0 0 2 773 Studies*	0-99 0-98 0-98 0-98 0-98 0-98 T/C IQS 0-82 0-91	0-892 1-12×10 <sup>-6</sup> 0-12 2-84×10 <sup>-5</sup> <b>1-87×10<sup>-8</sup></b> p value 0-00691 0-238	0-331 (4949) 0-362 (6990) 0-344 (9227) 0-357 (9379) 0-349 (33332) 10:18641934 het_p: F (cases) 0-745 (2787) 0-739 (4949)	0-333 (5314) 0-335 (4820) 0-341 (7383) 0-340 (7736) <b>0-337 (27 888)</b> 0-56 F (controls) 0-726 (2635) 0-734 (5314)	0-00399 0-144 0-0383 0-103 0-0714 0-0714 het_l: ln(0R) 0-132 0-0402	0-0301 0-0296 0-0244 0-0244 0-0127 0-0127 5E 0-0489 0-0337			- 		
ASD BPD MDD Schizophrenia AII D rs27995 ADHD ASD BPD	2 0 0 2 773 Studies* 2 6 3	0-99 0-98 0-98 0-98 0-98 0-98 0-98 0.98 0.98 0.82 0.91 0.74	0-892 1-12×10 <sup>-6</sup> 0-12 2-84×10 <sup>-5</sup> <b>1-87×10<sup>-8</sup></b> p value 0-00691 0-238 0-0617	0-331 (4949) 0-362 (6990) 0-344 (9227) 0-357 (9379) 0-349 (33332) 10:18641934 het_p: F (cases) 0-745 (2787) 0-739 (4949) 0-723 (6990)	0-333 (5314) 0-335 (4820) 0-341 (7383) 0-340 (7736) 0-337 (27 888) 0-56 F (controls) 0-726 (2635) 0-726 (2635) 0-734 (5314) 0-709 (4820)	0-00399 0-144 0-0383 0-103 0-0714 0-0714 het_l: ln(0R) 0-132 0-0402 0-0667	0-0301 0-0296 0-0244 0-0244 0-0127 0-0127 0-0 5E 0-0489 0-0337 0-0356	<				
ASD BPD Schizophrenia All D rs27995 ADHD ASD BPD MDD	2 0 0 2 773 Studies* 2 6 3 6	0-99 0-98 0-98 0-98 0-98 0-98 0-98 U 0-98 0-91 0-74 0-92	0.892 1.12×10 <sup>-6</sup> 0.12 2.84×10 <sup>-5</sup> <b>1.87×10<sup>-8</sup></b> p value 0.00691 0.238 0.0617 0.00108	0-331 (4949) 0-362 (6990) 0-344 (9227) 0-357 (9379) 0-349 (33332) 10:18641934 het_p: F (cases) 0-745 (2787) 0-739 (4949) 0-723 (6990) 0-725 (9227)	0-333 (5314) 0-335 (4820) 0-341 (7383) 0-340 (7736) 0-337 (27 888) 0-56 F (controls) 0-726 (2635) 0-734 (5314) 0-709 (4820) 0-707 (7383)	0-00399 0-144 0-0383 0-103 0-0714 0-0714 het_l: ln(0R) 0-132 0-0402 0-0667 0-088	0-0301 0-0296 0-0244 0-0244 0-0127 0-0127 0-0127 0-0489 0-0337 0-0356 0-0268	<				
ASD BPD MDD Schizophrenia AII D rs27995 ADHD ASD BPD MDD Schizophrenia	2 0 0 2 773 Studies* 2 6 3 6 4	0-99 0-98 0-98 0-98 <b>0-98</b> <b>T/C</b> IQS 0-82 0-91 0-74 0-92 0-73	0-892 1-12×10 <sup>-6</sup> 0-12 2-84×10 <sup>-5</sup> <b>1-87×10<sup>-8</sup></b> p value 0-00691 0-238 0-0617 0-00108 0-00161	0-331 (4949) 0-362 (6990) 0-344 (9227) 0-357 (9379) 0-349 (33332) 0-349 (33332) 0-349 (33332) 0-349 (33332) 0-349 (33332) 0-745 (2787) 0-739 (4949) 0-723 (6990) 0-725 (9227) 0-724 (9379)	0-333 (5314) 0-335 (4820) 0-341 (7383) 0-340 (7736) 0-337 (27 888) 0-56 F (controls) 0-726 (2635) 0-734 (5314) 0-709 (4820) 0-707 (7383) 0-711 (7736)	0-00399 0-144 0-0383 0-103 0-0714 0-0714 het_l: ln(0R) 0-132 0-0402 0-0667 0-088 0-0935	0-0301 0-0296 0-0244 0-0244 0-0127 0-0127 0-0127 0-0489 0-0337 0-0356 0-0268 0-0296	<				
ASD BPD Schizophrenia All D rs27995 ADHD ASD BPD MDD	2 0 0 2 773 Studies* 2 6 3 6	0-99 0-98 0-98 0-98 0-98 0-98 0-98 U 0-98 0-91 0-74 0-92	0.892 1.12×10 <sup>-6</sup> 0.12 2.84×10 <sup>-5</sup> <b>1.87×10<sup>-8</sup></b> p value 0.00691 0.238 0.0617 0.00108	0-331 (4949) 0-362 (6990) 0-344 (9227) 0-357 (9379) 0-349 (33332) 10:18641934 het_p: F (cases) 0-745 (2787) 0-739 (4949) 0-723 (6990) 0-725 (9227)	0-333 (5314) 0-335 (4820) 0-341 (7383) 0-340 (7736) 0-337 (27 888) 0-56 F (controls) 0-726 (2635) 0-734 (5314) 0-709 (4820) 0-707 (7383) 0-711 (7736)	0-00399 0-144 0-0383 0-103 0-0714 0-0714 het_l: ln(0R) 0-132 0-0402 0-0667 0-088	0-0301 0-0296 0-0244 0-0244 0-0127 0-0127 0-0127 0-0489 0-0337 0-0356 0-0268	<				
ASD BPD MDD Schizophrenia AII D rs27995 ADHD ASD BPD MDD Schizophrenia	2 0 0 2 773 Studies* 2 6 3 6 4	0-99 0-98 0-98 0-98 <b>0-98</b> <b>T/C</b> IQS 0-82 0-91 0-74 0-92 0-73	0-892 1-12×10 <sup>-6</sup> 0-12 2-84×10 <sup>-5</sup> <b>1-87×10<sup>-8</sup></b> p value 0-00691 0-238 0-0617 0-00108 0-00161	0-331 (4949) 0-362 (6990) 0-344 (9227) 0-357 (9379) 0-349 (33332) 0-349 (33332) 0-349 (33332) 0-349 (33332) 0-349 (33332) 0-745 (2787) 0-739 (4949) 0-723 (6990) 0-725 (9227) 0-724 (9379)	0-333 (5314) 0-335 (4820) 0-341 (7383) 0-340 (7736) 0-337 (27 888) 0-56 F (controls) 0-726 (2635) 0-734 (5314) 0-709 (4820) 0-707 (7383) 0-711 (7736)	0-00399 0-144 0-0383 0-103 0-0714 0-0714 het_l: ln(0R) 0-132 0-0402 0-0667 0-088 0-0935	0-0301 0-0296 0-0244 0-0244 0-0127 0-0127 0-0127 0-0489 0-0337 0-0356 0-0268 0-0296	-0.05				

In(OR), 95% CI



#### Figure 3: Pair-wise cross-disorder polygene analysis

We derived polygene risk scores for each disorder (discovery sets) and applied them sequentially to the remaining disorders (target sets). Results are grouped by each discovery set. Each pair is shown on the x-axis and the proportion of variance explained for the target disorder (estimated via Nagelkerke's pseudo  $R^2$ ) on the y-axis. For purposes of illustration, three  $p_T$  cutoffs are shown, but appendix p 62 shows the proportion of variance results for a broader range of cutoffs.  $p_T$ =training-set p value (used to select training set SNPs). Significance of results: a=p<0.05;  $b=p<10^{-4}$ ;  $c=p<10^{-16}$ ;  $d=p<10^{-16}$ ;  $f=p<10^{-50}$ . ADHD=attention deficit-hyperactivity disorder. ASD=autism spectrum disorders. BPD=bipolar disorder. MDD=major depressive disorder.



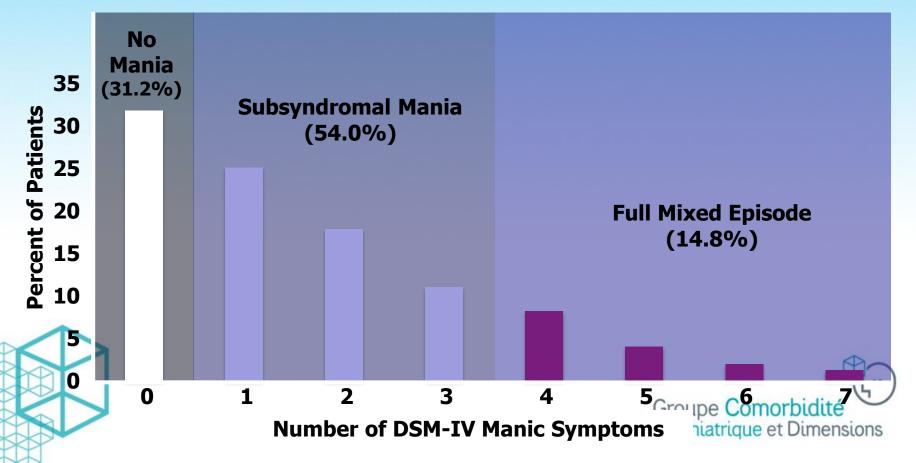
# Young at heart.Slightly older in other places.





#### "Mixed Depression" or "Depressive Mixed States"

STEP-BD: Presence of sub-syndromal mania (1-3 mania symptoms) is frequent during index bipolar MDE



Goldberg et al. Am J Psychiatry 2009; 166: 173-81.

#### **Longitudinal Course of Bipolar Disorder**

- Prospective follow-up of 219 BDI patients
  122 (56%) followed for ≥20 years
- 1208 episodes observed
  - Only 2 pure mixed episodes (<1%)
    - Defined as concurrent depression and mood elevation throughout the entire episode
  - 94 episodes (8%) of "mixed major cycling"
    - Episode of major cycling that at some point included a mixed state of concurrent depression and mood elevation





Solomon DA, et al. Arch Gen Psychiatry 2010: 67: 339-47.

#### Mixed States: Diagnostic Complexities

- There is concordance among many researchers that mixed states are not simply a simultaneous or sequential occurrence of affective symptoms of opposite polarity, i.e., depression and mania, but rather complex, fluctuating and unstable clinical pictures<sup>1</sup>
  - This may not be captured by DSM-IV criteria alone which operationalizes mixed states as a stable construct.
- Mixed states may be better defined along a continuum/spectrum (consistent with clinical practice) as opposed to being a static/modal phenomenon

The "degree of mixity" becomes the operational term Groupe Comorbidité psychiatrique et Dimensions

1. Kruger S, et al. Bipolar Disorders 2005: 7: 205-215.

# DSM 5 Bipolar Disorders Classification

October 2012

- C 00 Bipolar I Disorder
- C 01 Bipolar II Disorder
- C 02 Cyclothymic Disorder
- C 03 Substance-Induced Bipolar Disorder
- C 04 Bipolar Disorder Associated with Another Medical Condition
- C 05 Bipolar Disorder Not Elsewhere Classified

#### **Specifiers:**

Current or Most Recent Episode Hypomanic/Manic	With Melancholic Features (for depression)
Current or Most Recent Episode Depressed	With Rapid Cycling
With Mixed Features	With Anxiety, mild to severe
With Psychotic Features (for depression)	With Suicide Risk Severity
With Catatonic Features (for depression)	With Seasonal Pattern
With Atypical Features (for depression)	With Postpartum Onset



DSM 5

#### Proposed revision on Bipolar Disorder diagnostic category (2/3) October 2012

#### Bipolar Disorder not Elsewhere Classified (NEC)

- Subclassification will be used for this diverse group of conditions.
- The recorded name of the condition should NOT be "Bipolar Disorder NEC" but rater, one of the following diagnostic terms:
  - MDEs & Short (2-3) Hypomanic Episodes
  - MDEs & Hypomanic Episodes characterized by insufficient symptoms
  - Hypomanic Episode witout MDE
  - Short Duration (less than 2 years) Cyclothymia
    - \* Uncertain Bipolar Condtions

Groupe Comorbidité psychiatrique et Dimensions



# Proposed ICD – 11 Mood Disorders Classification

F30 First manic episode F31 Bipolar affective disorder F32 First depressive episode F33 Recurrent depressive disorder F34 First mixed affective episode F35 Persistent mood disorders F38 Other mood disorders



F39 Unspecified mood disorders



# Three-Fold Higher Rate of Bipolar Disorder Amongst Individuals with MDD When Using Bipolar Specifier

#### Table 1. Demographic Features of the Study Sample

					No. (%)		
Country	Patients, No.	Hospitalized, %	Age, Mean (SD), y	Male Sex, %	l Bipolar <i>DSM-IV-TR</i>	Bipolar Specifier	
Bosnia	200	46.5	46.3 (10.9)	32.5	45 (22.5)	111 (55.5)	
Bulgaria	300	46.0	49.8 (12.5)	36.5	56 (18.7)	171 (57.0)	
China	727	45.9	39.7 (14.4)	39.1	105 (14.4)	290 (39.9)	
Egypt	306	24.2	37.7 (12.8)	49.0	42 (13.7)	144 (47.1)	
Georgia	254	18.5	46.5 (15.0)	32.9	39 (15.4)	103 (40.6)	
Germany	251	59.4	48.0 (12.3)	36.8	29 (11.6)	102 (40.6)	
Iran	313	37.4	38.4 (12.3)	33.9	57 (18.2)	169 (54.0)	
Korea	212	25.5	45.0 (14.5)	27.8	15 (7.1)	55 (25.9)	
Macedonia	224	26.8	47.5 (13.3)	28.6	29 (12.9)	107 (47.8)	
Morocco	317	20.8	39.7 (11.5)	38.3	55 (17.4)	148 (46.7)	
The Netherlands	220	12.7	46.1 (13.7)	40.0	28 (12.7)	81 (36.8)	
Pakistan	265	37.0	38.2 (12.0)	50.4	60 (22.6)	158 (59.6)	
Portugal	311	11.9	45.9 (13.0)	25.7	45 (14.5)	172 (55.3)	
Slovakia	297	57.6	48.4 (13.2)	38.0	50 (16.8)	166 (55.9)	
Spain	655	25.5	47.2 (13.9)	33.1	100 (15.3)	324 (49.5)	
Taiwan	420	14.8	45.3 (12.7)	27.2	64 (15.2)	149 (35.5)	
Ukraine	297	73.7	46.9 (13.1)	29.6	65 (21.9)	156 (52.5)	
Vietnam	66	37.9	40.7 (11.1)	51.5	19 (28.8)	41 (62.1)	
Total	5635	34.4	44.1 (13.7)	35.5	903 (16.0)	2647 (47.0)	

psychiatrique et Dimensions

Angst J. et al. Arch Gen Psychiatry. 2011;68(8):791-799.

### Patients With Mixed Episodes Have Poor Treatment Outcomes

- More severe course of illness<sup>1,2</sup>
- Less frequent remission/higher risk of reoccurrence<sup>1,2</sup>
- More substance abuse<sup>1,2</sup>
- Poorer response to some medications<sup>2</sup>
- Increased risk of suicide<sup>3,4</sup>



1. Shah NN, et al. *Psychiatr Q.* 2004;75(2):183-196. 3. Hirschfeld RMA, et al. *J Clin Psychiatry.* 2003;64(1):53-59. 2. Prien RF, et al. *J Affect Disord.* 1988;15(1):9-15. 4. Goldberg JF, et al. *J Affect Disord.* 1999;56(1):75-81.





#### EDITORIAL

#### Why are there no treatment guidelines for mood disorders and comorbidities?

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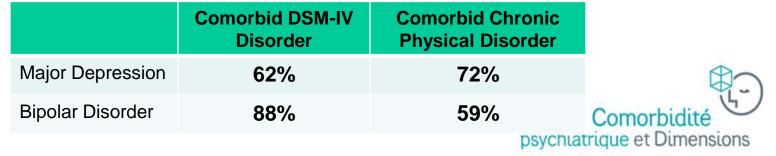
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Lakshmi N. Yatham, MBBS, FRCPC, MRCPsych (UK) Bipolar Chair, CANMAT Department of Psychiatry University of British Columbia Vencouve, British Columbia, Canada ood disorders, including major depressive disorder (MDD) and bipolar disorder (BD), are among the most prevalent and burdensome medical conditions. In a World Mental Health Survey sponsored by the World Health Organization, the lifetime and 12-month prevalence rates for these 2 disorders in 17 developed and developing countries<sup>1</sup> were 12.5% and 5.6% for major depressive episodes, respectively, and 1% and 0.7% for BD, respectively.<sup>2</sup> A recent commentary on challenges in global mental health identified depression as the third leading contributor to the global disease burden; unipolar depressive disorders and BD, respectively, were ranked first and fourth in an evaluation of the global burden across all mental, neurological, and substance use disorders.<sup>3</sup> Previous studies have highlighted the enormous unmet need for treatment among persons with mood disorders.<sup>4</sup>

Comorbidity has been defined as "any distinct additional clinical entity that has coexisted or may occur during the clinical course of a patient who has the index disease under study."<sup>1</sup> This may apply equally to  $\geq 2$  physical diseases,  $\geq 2$  mental disorders, or the co-occurrence of mental and physical disorders. Comorbidity is prevalent among persons with mood disorders. In developed countries, 62% of persons identified

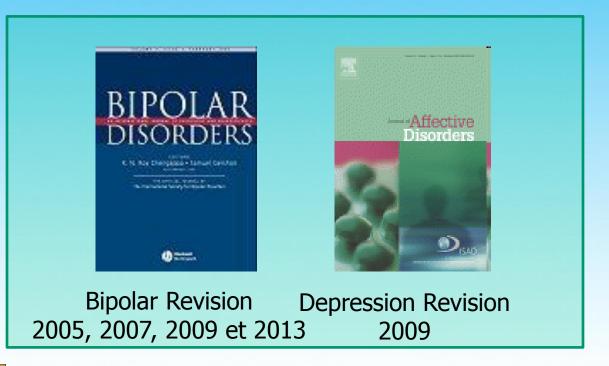
- Comorbidity is the rule, not the exception
- Many possible combinations of comorbidities
- Few high quality studies to guide treatment decisions
- Clinicians still request guidance for treatment options





#### Merikangas et al, 2011; Kessler et al, 2010; Magalhaes et al, 2011.

#### **CANMAT Clinical Guidelines**





#### **CANMAT Task Force Recommendations for Mood Disorders and Comorbid Conditions**

- Roger McIntyre, Ayal Schaffer, Serge Beaulieu
- Published February, 2012
- Anxiety, medical, personality, substance use, ADHD, metabolic syndrome
- Available at www.canmat.org

Groupe Comorbidité psychiatrique et Dimensions





#### Arguments en faveur d'une classification dimensionnelle

"Nearly all genetic factors identified thus far... seem to confer somewhat comparable risk for schizophrenia and bipolar disorder and, perhaps, for other disorders such as unipolar depression, substance abuse, and even epilepsy."

"... the biology of psychotic illnesses may fail to align neatly with the classic Kraepelinian distinction between schizophrenia and manic-depressive illness... However, they do resonate with clinical observations that many patients present with a mix of bipolar and schizophrenia symptoms, both at a single admission and also across time."



B.N. Cuthbert and T.R Insel. Schizophrenia Bulletin. 2010. 36 (6): 1061-1062.

#### Arguments en faveur d'une classification dimensionnelle

"These clinical observations support the accelerating body of literature over the last decade arguing that Kraepelin's classic dichotomy for psychotic disorders may need to be superseded by a new system based on biology as well as observed clinical phenomenology."





B.N. Cuthbert and T.R Insel. Schizophrenia Bulletin. 2010. 36 (6): 1061-1062.

#### **Research Domain Criteria**

	Units of analysis							
Domains/constructs	Genes	Molecules	Cells	Circuits	Physiology	Behavior	Self-reports	Paradigms
Negative valence systems								
Active threat ("fear")								
Potential threat ("anxiety")								
Sustained threat								
Loss								
Frustrative nonreward								
Positive valence systems								
Approach motivation								
Initial responsiveness to reward								
Sustained responsiveness to reward								
Reward learning								
Habit								
Cognitive systems								
Attention								
Perception								
Working memory								
Declarative memory								
Language behavior								
Cognitive (effortful) control								
Systems for social processes								
Imitation, theory of mind								
Social dominance								
Facial expression identification								
Attachment/separation fear								
Self-representation areas								
Arousal/regulatory systems								
Arousal and regulation (multiple)								
Resting state activity								



# La Théorie,

c'est quand on comprend tout et que rien ne marche.

# La Pratique,

c'est quand tout marche, mais On ne sait pas pourquoi.

# Ici

nous avons réussi les deux : rien ne marche

et personne ne sait pourquoi.

In many of the results of randomized clinical trials or of risk studies that use categorical measures, **a** report of statistical non-significance may be partially or wholly due to the lack of power to detect effects due to use of categorical measures, particularly when the cutoff defining the categorical measures is set by intuition rather than optimally based on empirical evidence.





Kraemer, HC. Int J. Methods in Psych. Res. 2007. 16 (S1): S8-S15.

Approche empirique

 Permet des analyses statistiques plus ciblées sur les modérateurs et médiateurs donc plus en harmonie avec les stratifications cliniques

• Rapprochement avec les symptômes cliniques observés par les cliniciens et vécus par les patients

 Pourrait donc éventuellement créer une classification plus écologiquement valide





Kraemer, HC. Int J. Methods in Psych. Res. 2007. 16 (S1): S8-S15.

- Meilleure modélisation de la psychopathologie dans des modèles animaux
- Approche qui favorise l'étude de l'aspect dévelopmental des maladies





- Faibles validités inter-juges (Kappa ratings) obtenues lors des essais en milieux cliniques (même académiques)
- Dépression: 0.34 !!!!





 Risquons de devoir redéfinir l'ensemble des traitements en fonction des nouveaux critères





# I can only please one person per day . today is not your day. tomorrow doesn't look good either



