

Classification of mood disorders

Congress of Neuropsychiatry and Neuropsychology 2014
Poznań
27 November 2014

Jules Angst

Department of Psychiatry, Psychotherapy and Psychosomatics
Psychiatric Hospital, University of Zurich
Lenggstrasse 31, P.O. Box 1931, 8032 Zurich, Switzerland

jules.angst@uzh.ch

Contents

- Three-dimensional spectrum of mood disorders
- DSM-IV vs DSM-5 diagnostic changes
- Hypomania
- Depression
- Bipolar disorder
- Mania
- Conclusions

		Diagnostic Mood Spectrum					
		Depression	Bipolar Disorders		Mania		
Severity Spectrum	Major ↑	Major psychotic mood disorders (mc-mic)	MDD D	BP-II Dm	BP-I MD	Md Md	Mania M
		Major (non-psychotic) mood disorders	MDD D	BP-II Dm	BP-I MD	Md	Mania M
		Minor mood disorders (sub-threshold)	Minor depr. disorders d	Minor bipolar disorders md			Hypomania m
		Chronic	Dysthymia	Cyclothymic disorder			-
		Episodic	Minor depression	Recurrent minor bipolar disorder			
	Minor ↓		Recurrent brief depression	Recurrent brief bipolar disorder			Recurrent brief hypomania
	Symptoms (normal)	dsx	mdsx			msx	

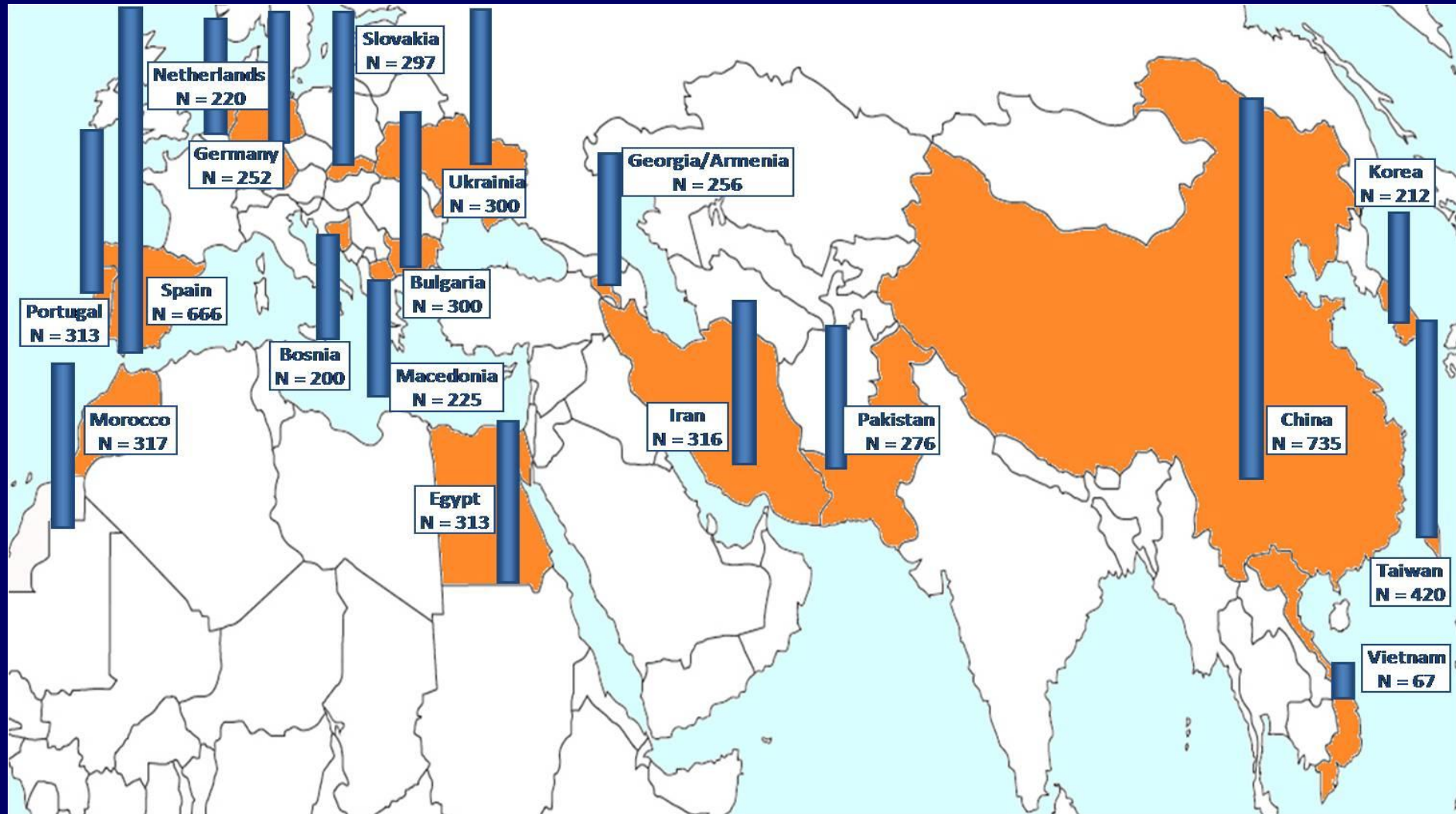
Personality

Temperament (normal)	Depressive temperament	Cyclothymic temperament	Hyperthymic temperament
Affective personality disorders	Depressive personality disorder	Cycloid/ Borderline personality disorder	Hyperthymic personality disorder

Definitions of mania and hypomania

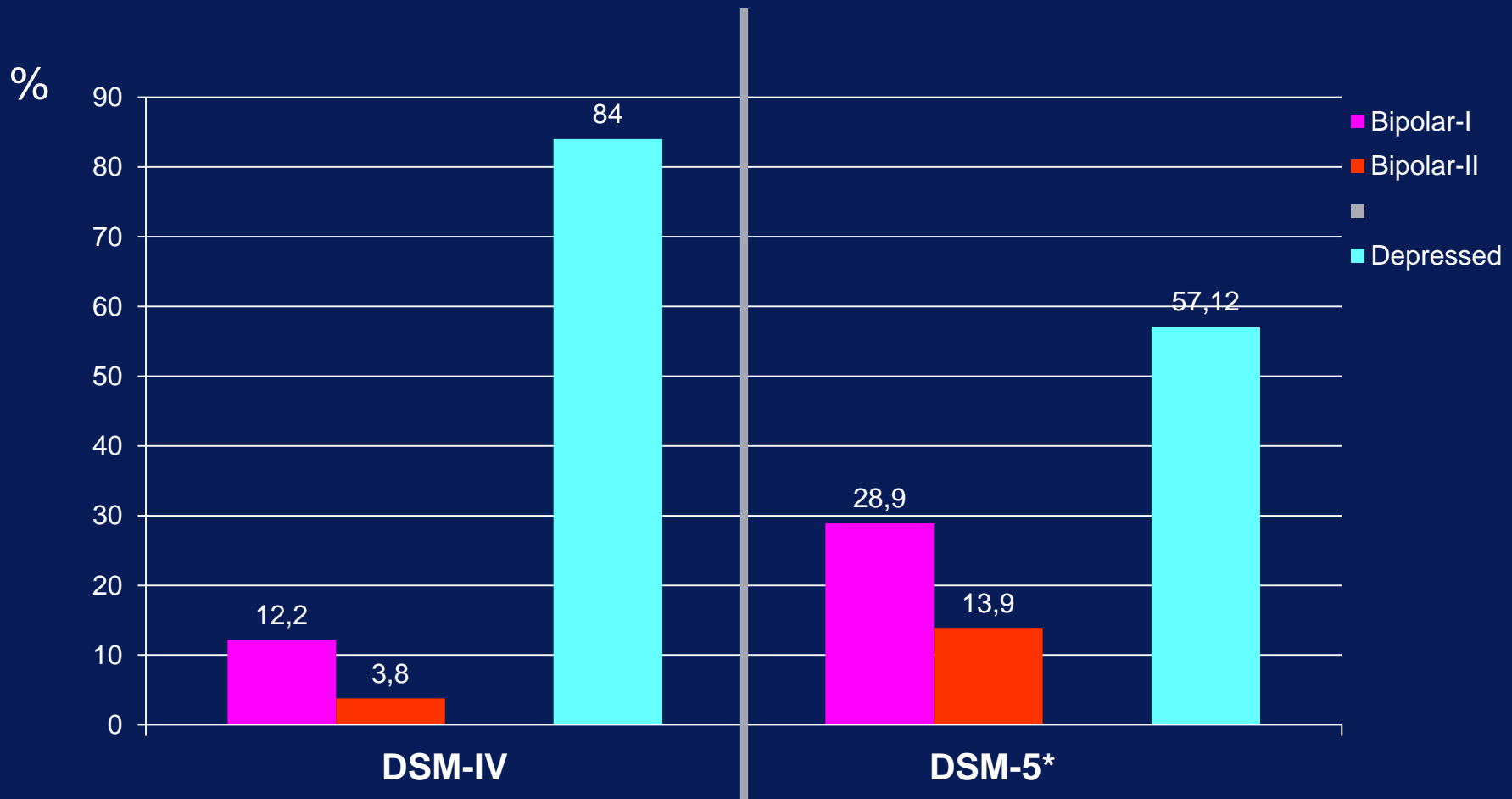
	Mania		Hypomania	
	DSM-IV	DSM-5	DSM-IV	DSM-5
Distinct period	7+ days	7+ days	4+ days	4+ days
A1. elated/irritable	+	+	+	+
A2. Increased activity/energy	-	& +	-	& +
B. Seven symptoms	3+/4+	3+/4+	3+/4+	3+/4+
D. Marked impairment or hosp. or psychotic	+	+	-	-
E. not due to AD	+	-	+	-
not due to somatic treatment/illness	+	+	+	+
C. No mixed episode	+	+	+	+

Bridge Study N=5635 MDE



Bridge Study 5635 MDE patients

BP-I, BP-II, MDD -- DSM-IV vs. DSM-5



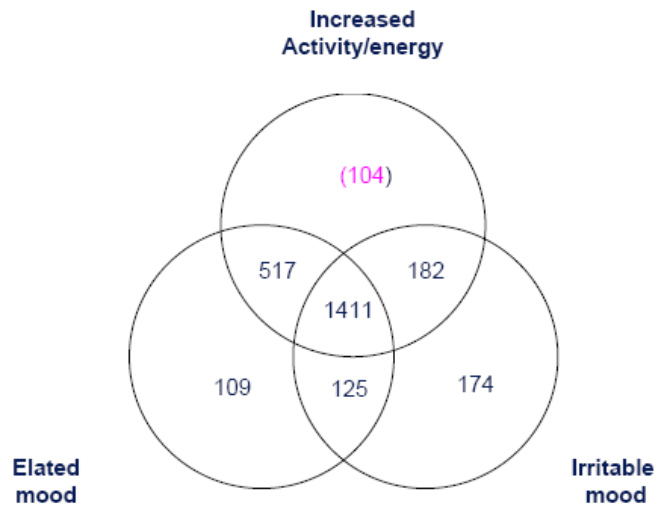
***191 MDD (4%)
were treated for hypomania**

Bipolarity: comparison of gate questions

DSM-IV gate questions

MDE with 3/7 manic symptoms and consequences

N=2611: 104=4% excluded

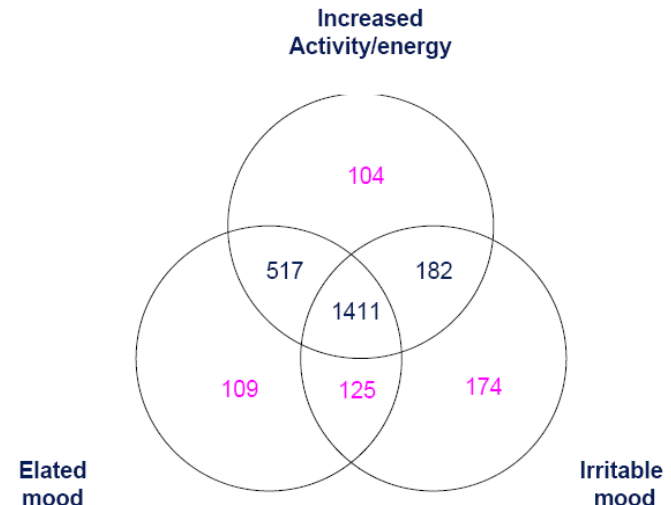


Data Bridge Study unpublished

DSM-5 gate questions

MDE with 3/7 manic symptoms and consequences

N=2611: 512=19.6% excluded



Data Bridge Study unpublished

Problematic decision in red

Bridge Study: DSM-IV vs. DSM-5

	BP-I DSM-5	BP-II DSM-5	BP MDE switch	MDD DSM-5	MDD DSM-5	Total
BP-I DSM-IV	650	0	2	0	33	685
BP-II DSM-IV	159	54	2	0	3	218
MDD DSM-IV	821	100	628	3183	0	4732
Total	1630	154	632	3183 -23%	36	5635

Switch from depression to hypomania Bridge Study

• MDD DSM-IV	4732	%
• Switch total	1595	33.7
- Antidepressants	1392	29.4
- Other substances	144	3.0
- Other causes	59	1.3

Previous history: about 30% of these patients with MDD had switched from depression to hypomania under antidepressants

Bridge Study: DSM exclusion criteria for hypomania

DSM-IV diagnosis	MDD	MDD+switch other substances	MDD+switch other medical conditions	BPD
N	3137	144	59	903
	%	%	%	%
Family history of mania	7.7	22.0	27.1	30.9
Early onset <30yrs	38.4	65.2	50.0	60.6
≥ 2 mood episodes	55.8	79.0	62.1	88.1
Free intervals	57.2	70.4	65.5	84.5
Illness progression	68.4	83.3	67.2	94.7
Seasonality of mood episodes	18.2	34.0	37.9	37.8
Resistance to treatment	17.3	25.0	12.3	21.7
Mixed state/Mood lability	23.7	44.6	42.9	46.0
Atypical depression	18.3	36.8	28.8	27.5

Minimum duration of a hypomanic episode

Consequences or treatment as
diagnostic criteria for hypomania

Zurich Study

Three subgroups of hypomanic syndromes

1. 2 weeks+ hypomanic syndromes (N=59)
2. 4 days+ hypomanic syndromes (N=41)
3. 1-3 days hypomanic syndromes (N=74)
4. earlier manic symptoms or treatment (N=64)
5. controls (N=261)

Validators: FH+ mania

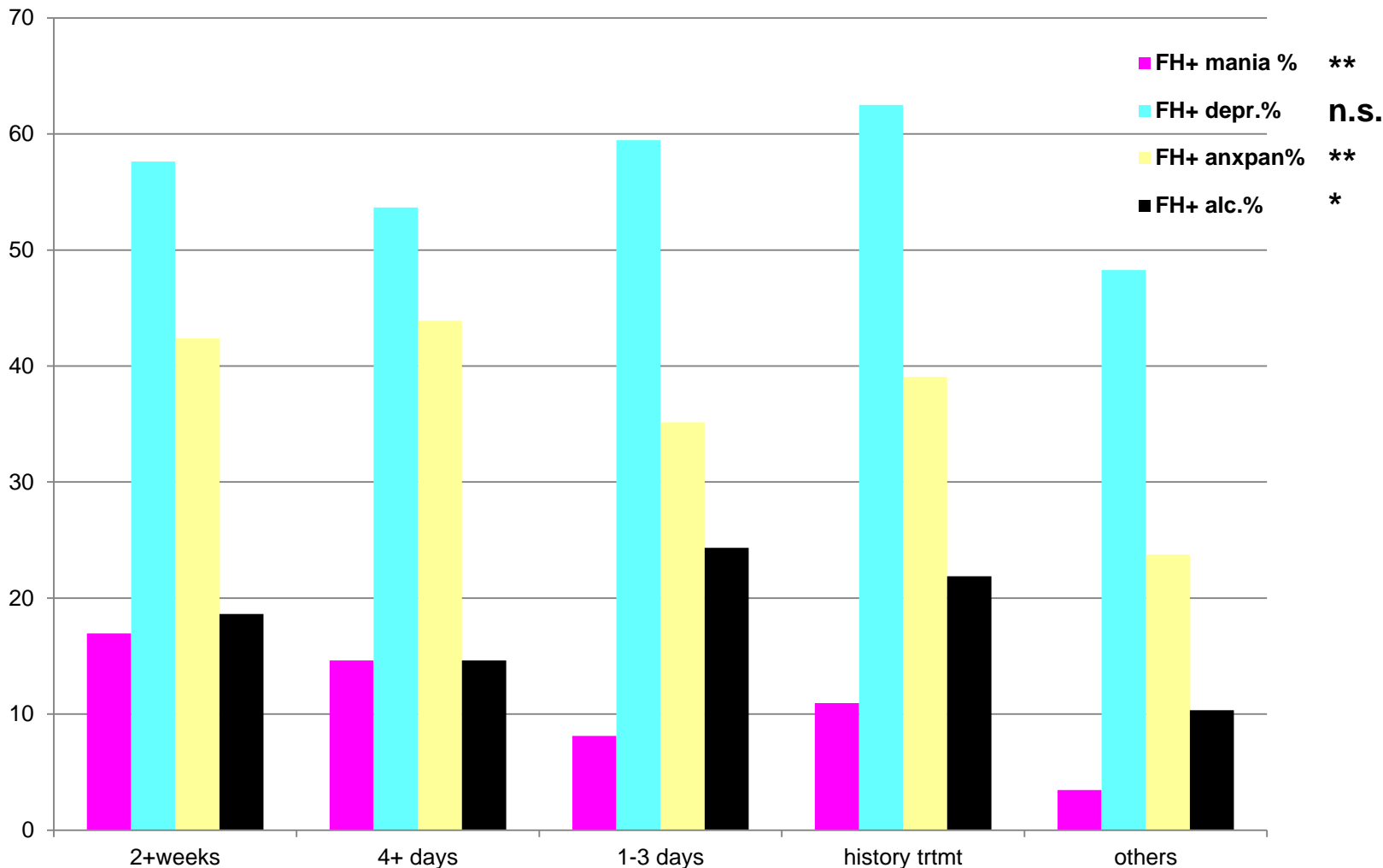
FH+ depression

FH+ anxiety/panic

%years with symptoms

Zurich Study

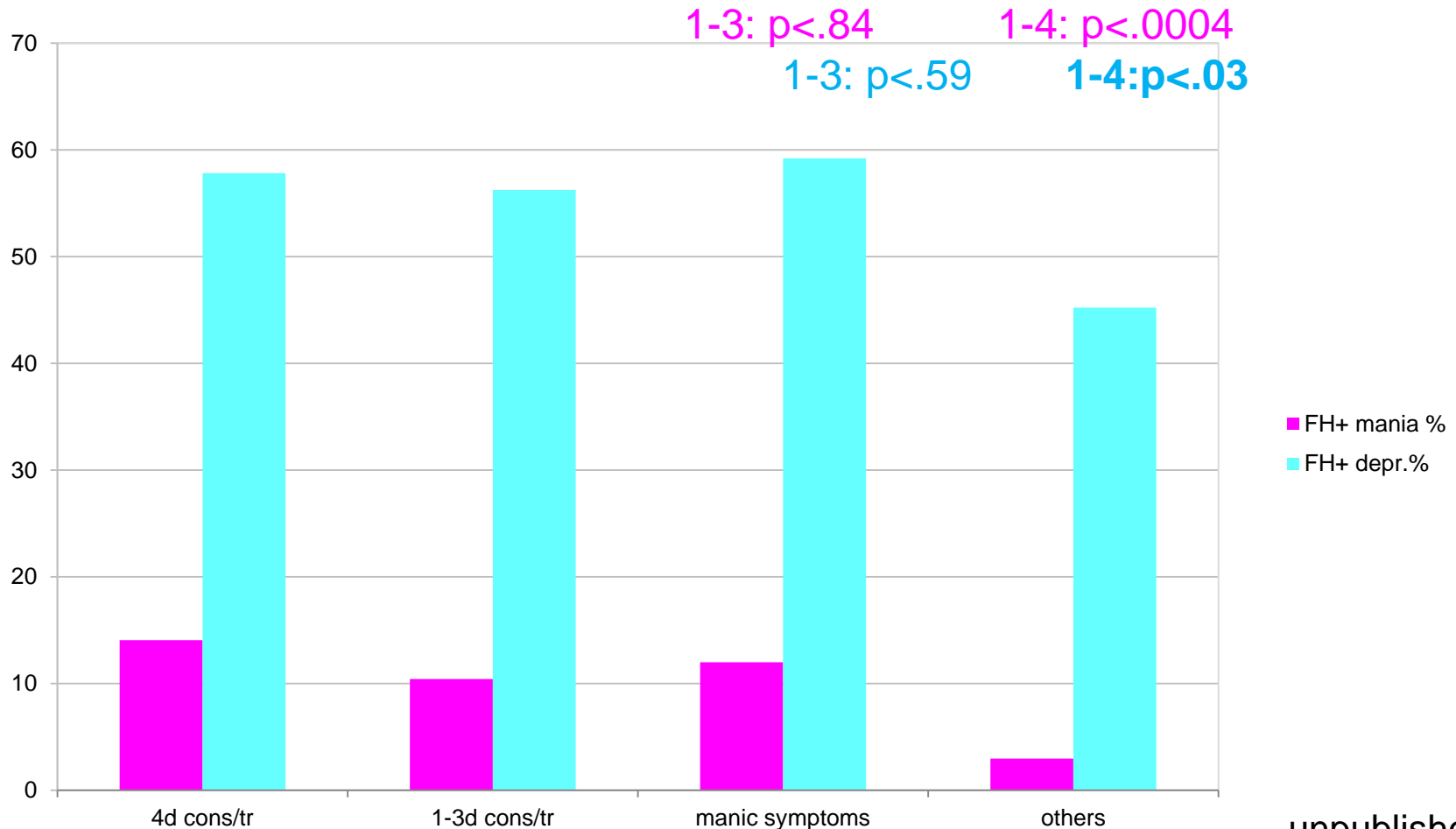
Family history and duration of hypomania



unpublished

Zurich Study

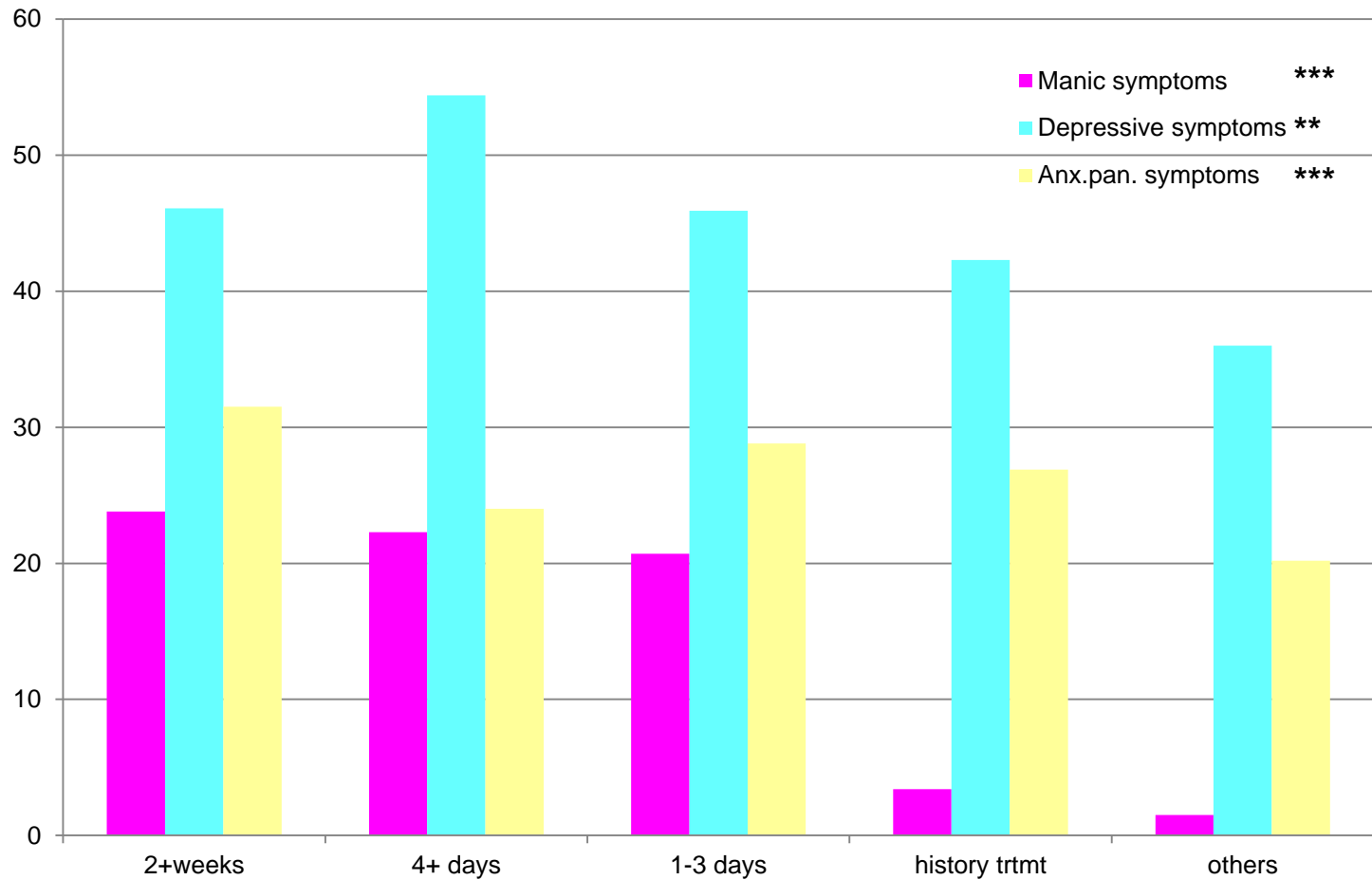
Family history and duration of hypomania by presence or absence of consequences/treatment



unpublished

Zurich Study

% years with symptoms 1978-2008



unpublished

Problems in DSM-5 (and possibly ICD-11)

Hypomania

- Requirement of energy/activity plus mood items (elated, irritable): unwise, because over-exclusive
- Hypomanic episodes under other medical conditions and other substances: should not be excluded
- Minimum episode duration: 4+ days, could be 1 or 2+ days
- Consequences probably not required for diagnosis
- Treatment not taken into account

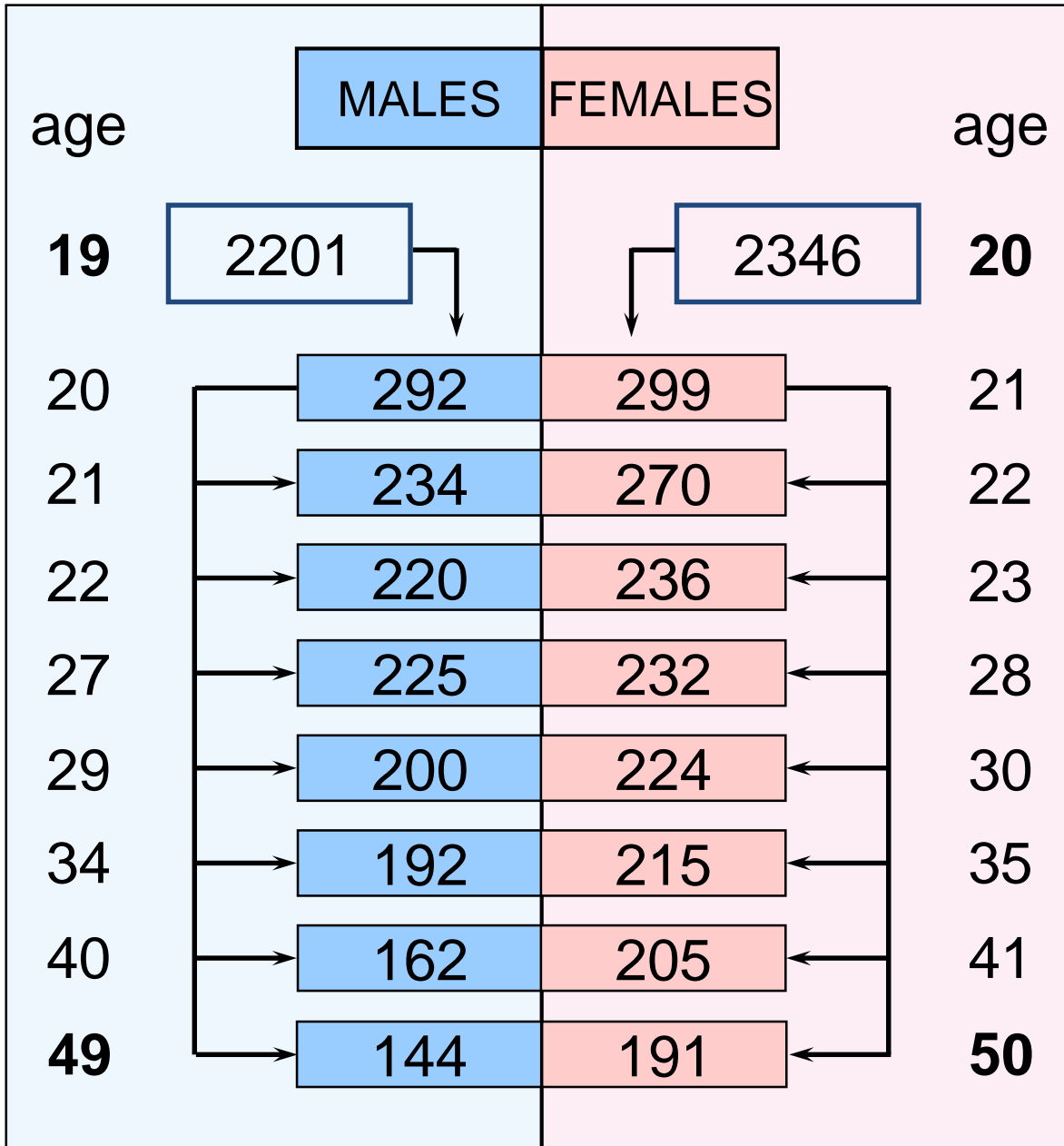
Unipolar mania/hypomania : subsumed under BP disorders

Depression

- Major depression: duration criterion 2 weeks or 4+ days?
- RBD and Brief depressive episodes: duration of 30+ days cumulative/year?

Major depression
minimum duration of episode
2 weeks or 4 days?

Zurich Study 1978-2008: age 20 to 50



1979 Interview
weighted N=2599

1981 Interview

1986 Interview

1988 Interview

1993 Interview

1999 Interview

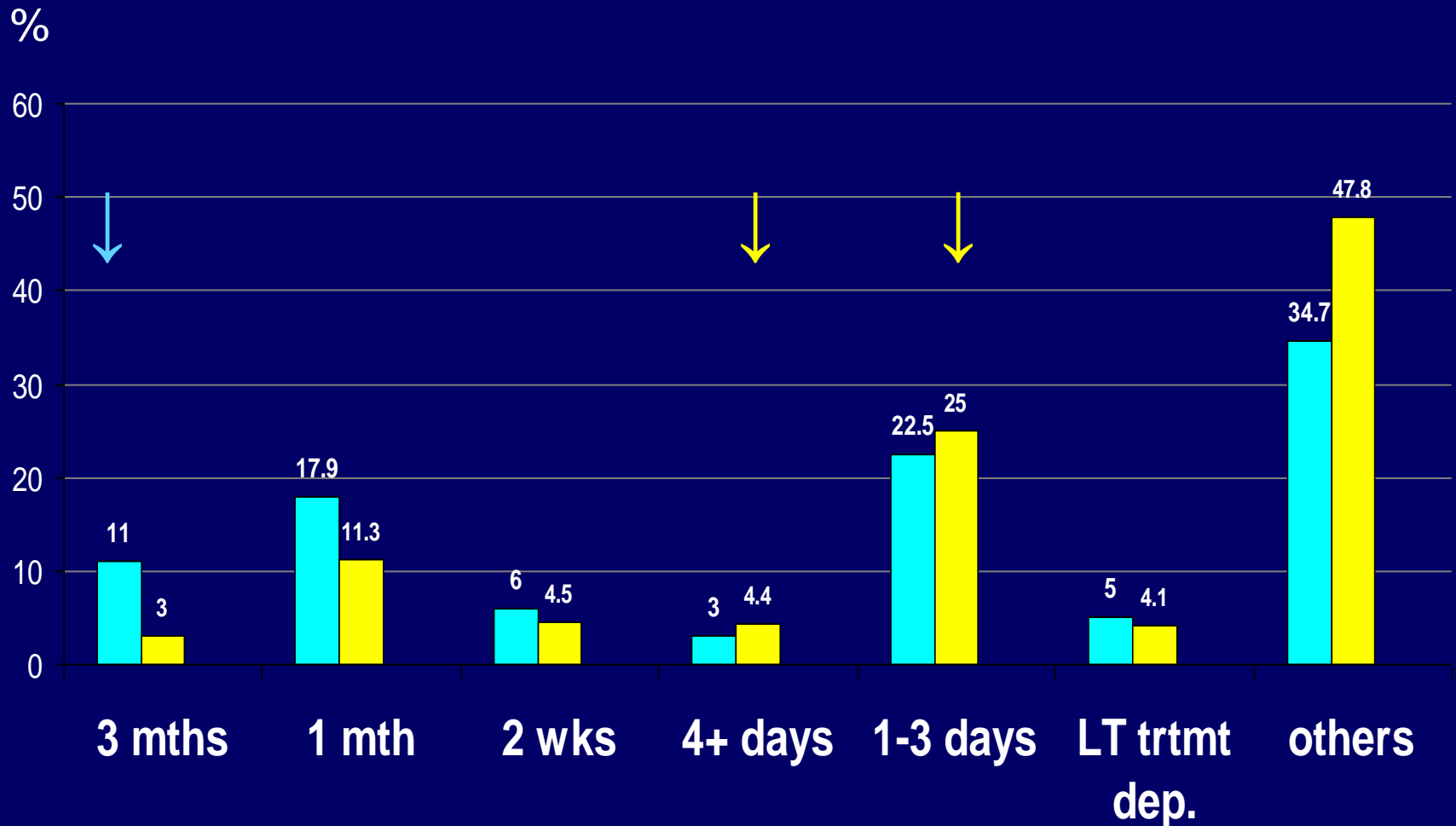
2008 Interview

56.7%: weighted N=1499

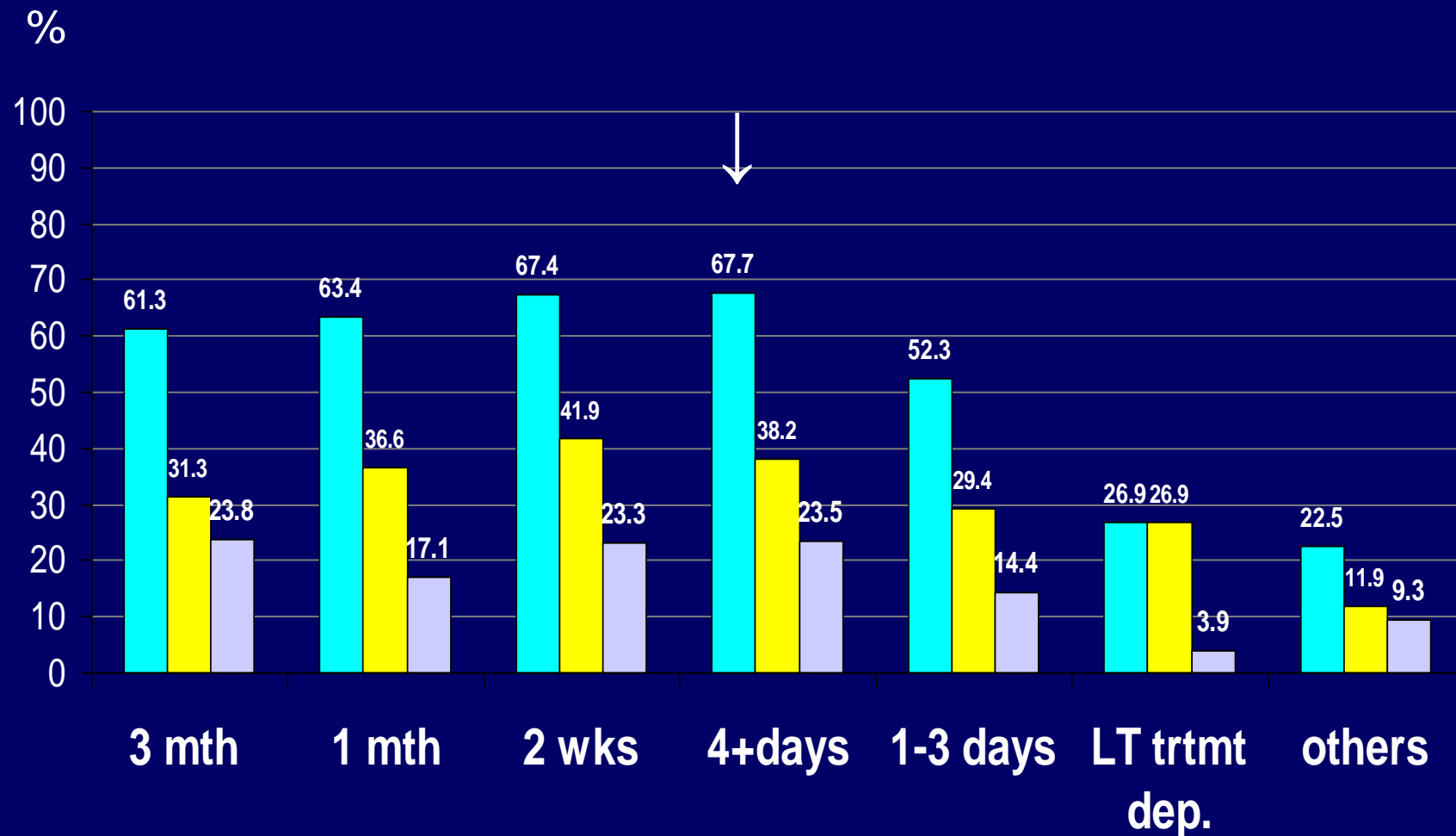
Depressive syndromes by duration of episodes

- Maximum duration of depressive episodes across 7 interviews from ages 20 to 50
- **Depressive syndrome** defined by **5 of 9 symptoms of DSM-IV depression**
- Distress and impairment
 - not considered for definition of syndromes
 - but analysed as independent variables and measured on analogue scales (0-100) in most interviews

Depressive syndromes: weighted prevalence rates by gender (women, men)

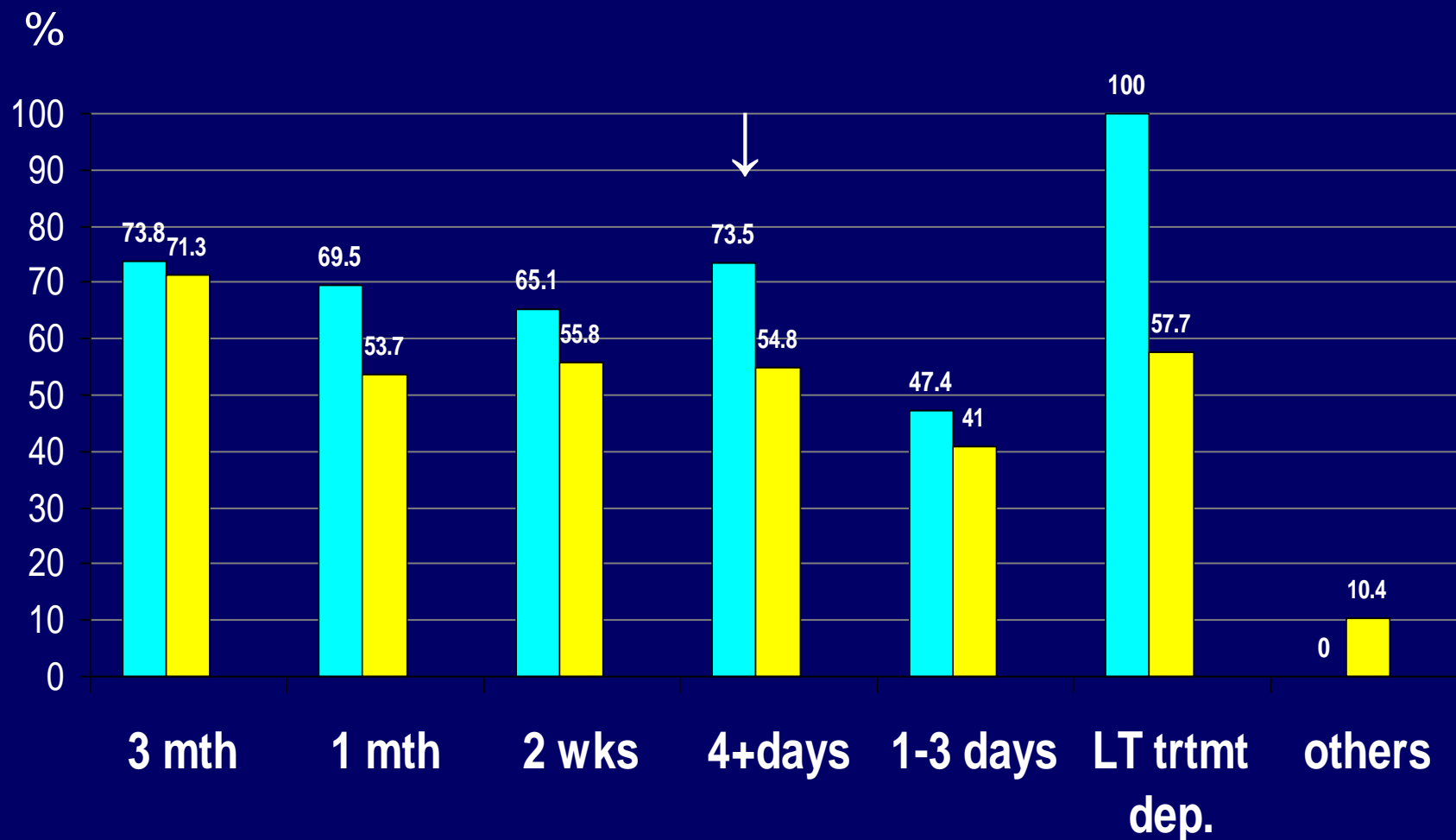


Depressive syndromes: family history for depression, anxiety/panic and suicidality



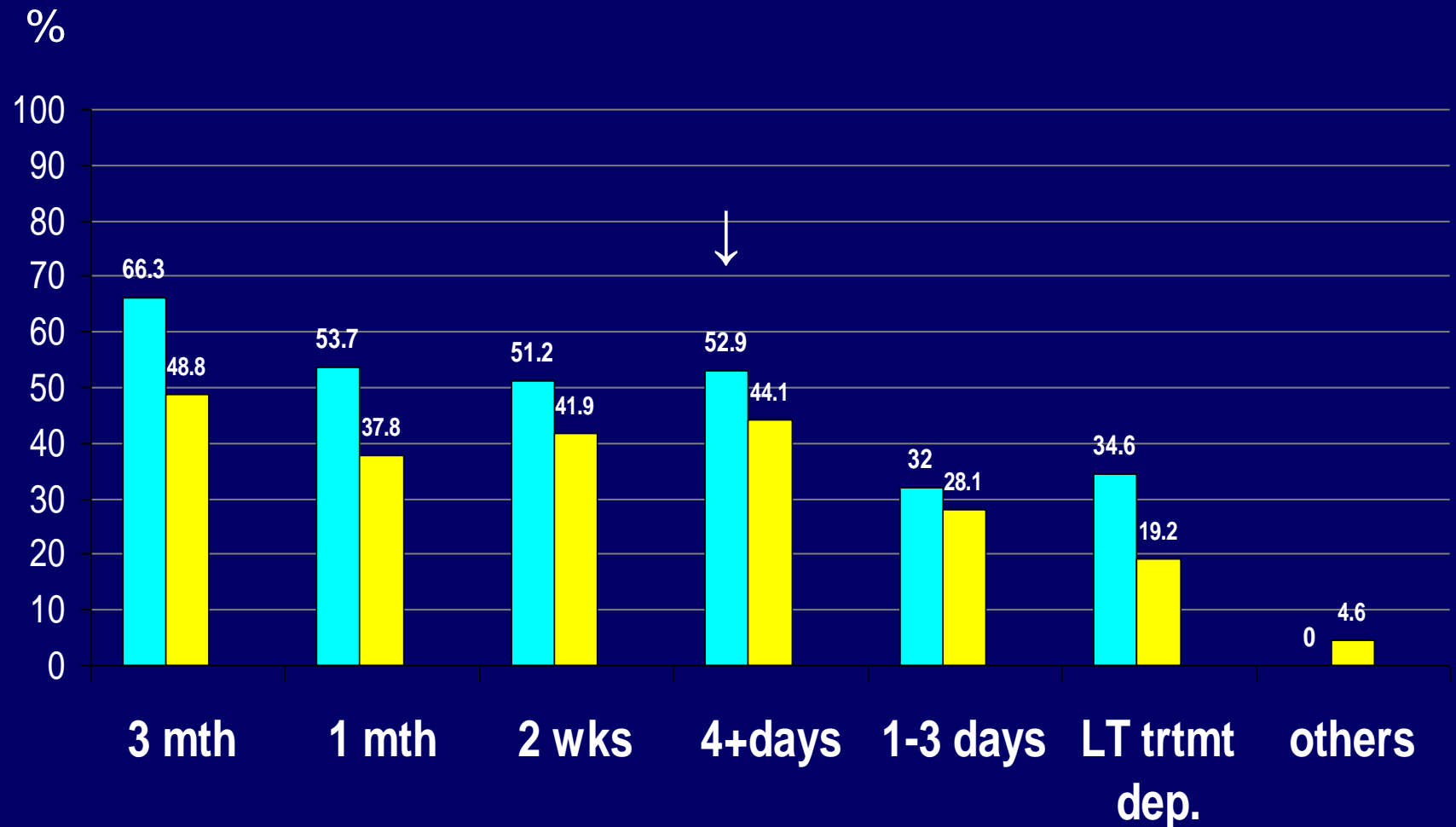
Groups 1-4: all p=n.s.

Depressive syndromes: lifetime treatment rates for depression and anxiety/panic



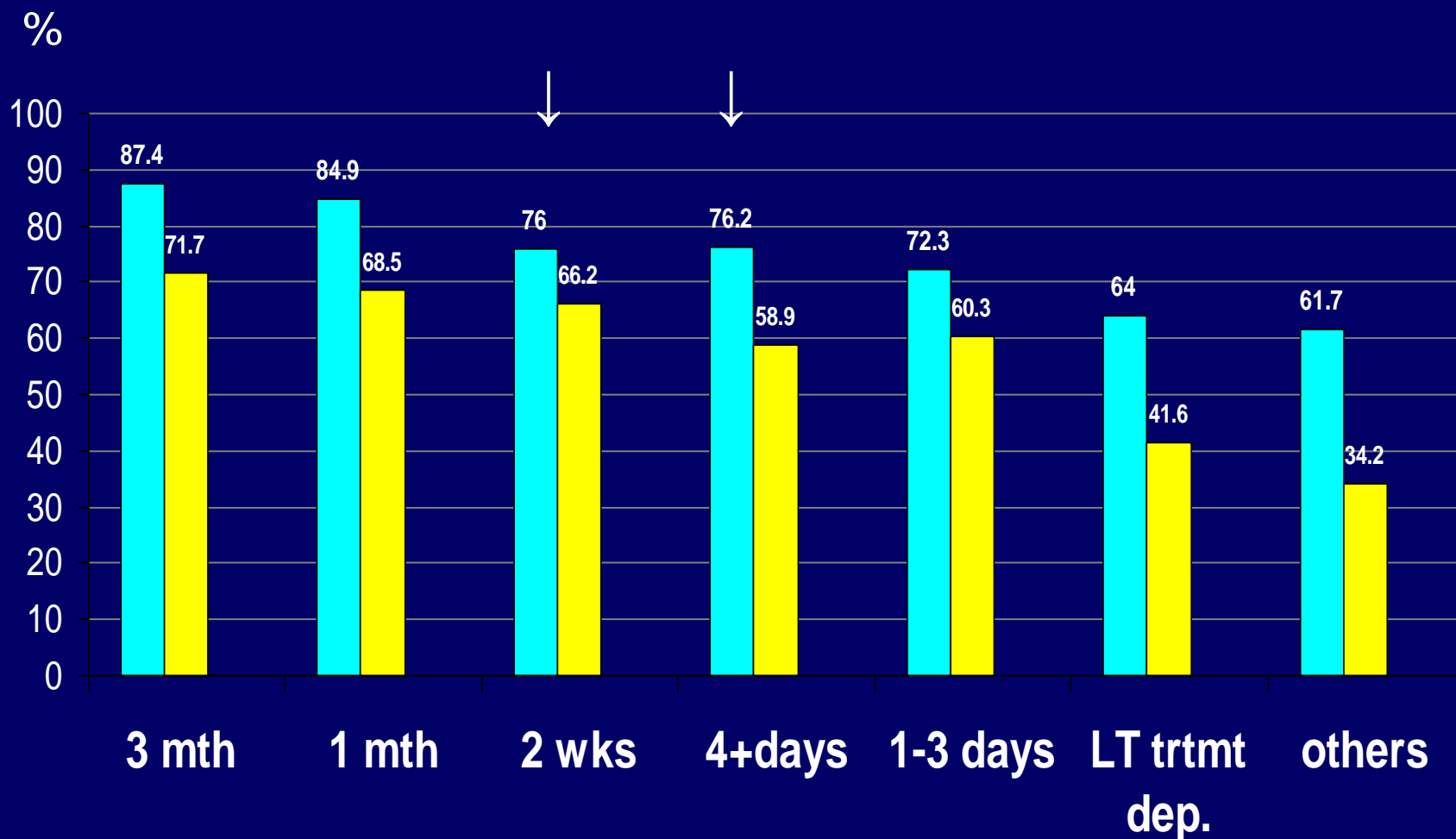
Groups 1-4: all p=n.s.

Depressive syndromes: treatment during interview years for depression and anxiety/panic



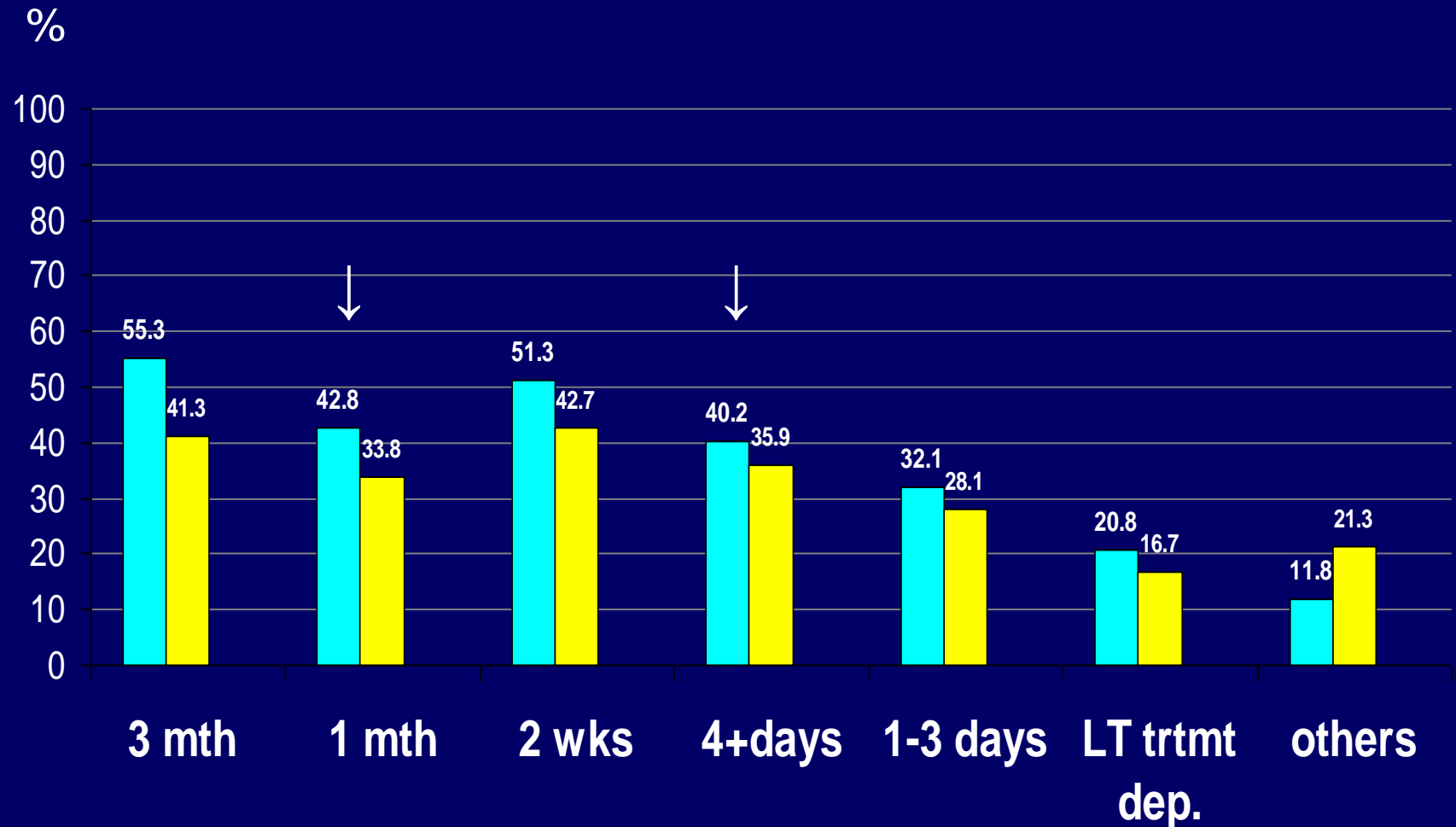
Groups 1-4: all p=n.s.

Depressive syndromes: distress (0-100) during interview years for depression and anxiety/panic



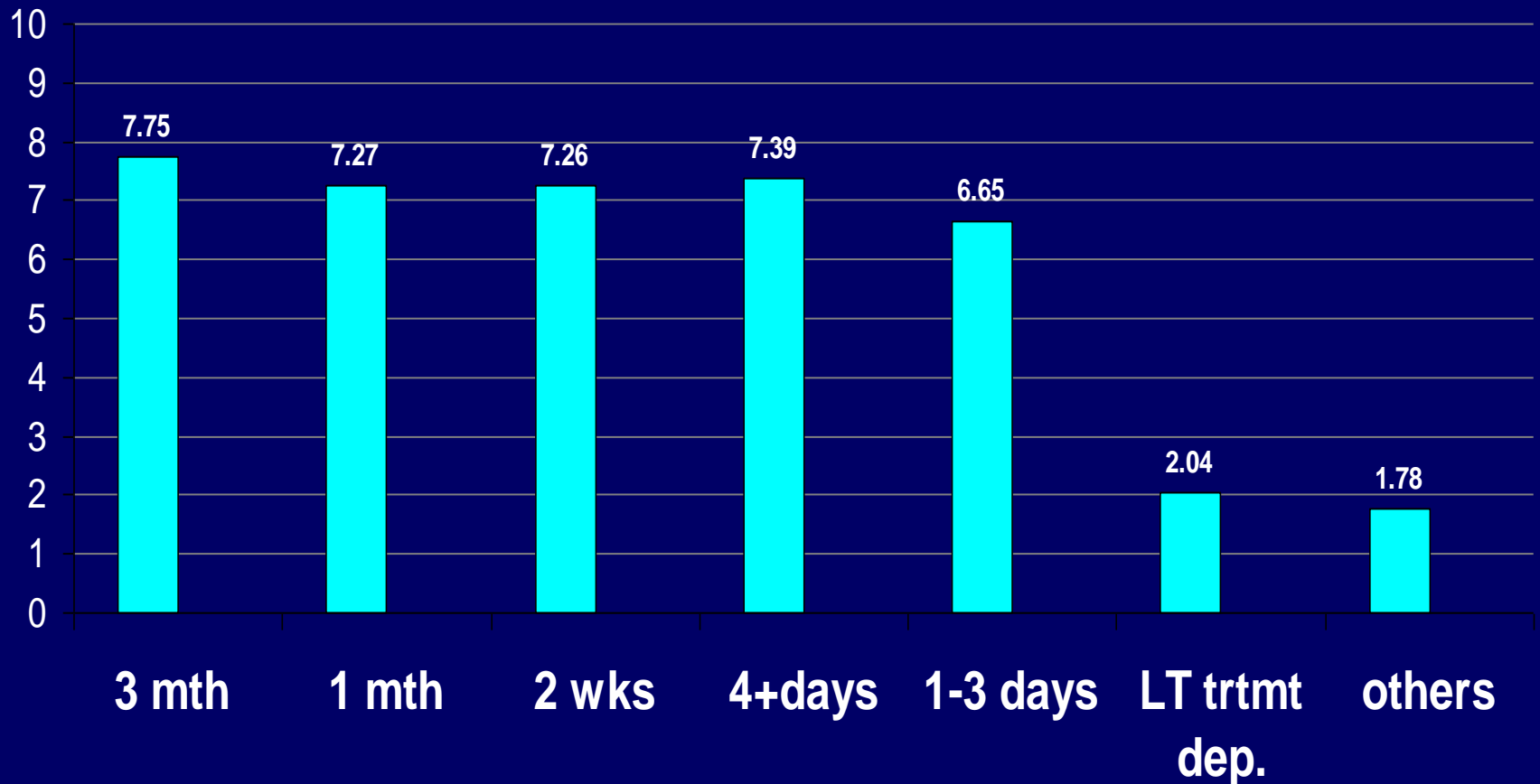
Groups 1-4: depression $p < .02$, anxiety/panic $p < .19$

Depressive syndromes: work impairment (0-100) over five interview years for depression and anxiety/panic



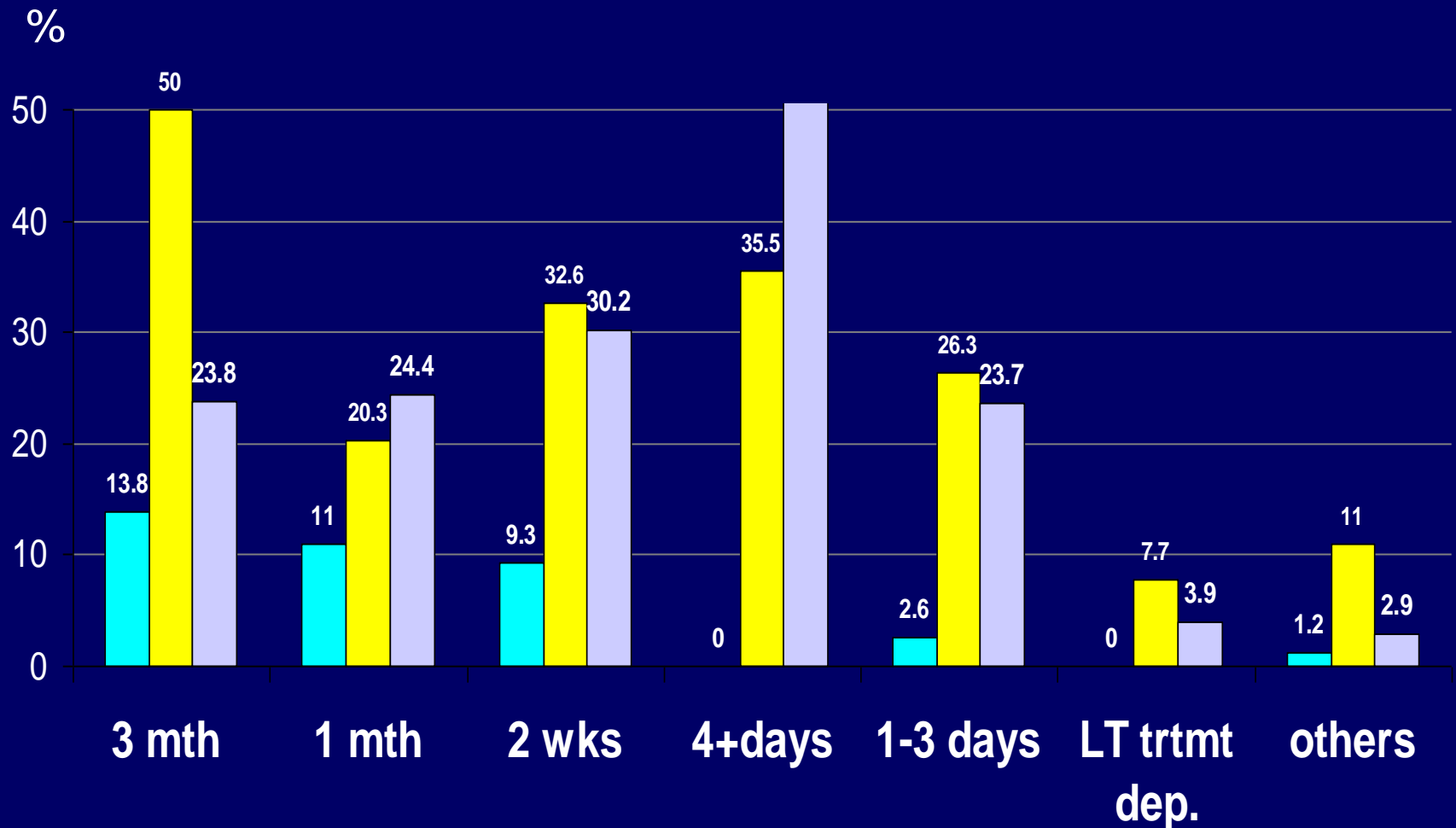
Groups 1-4: depression $p < .03$, anxiety/panic $p < .43$

Depressive syndromes: number of 9 diagnostic symptoms (means of maxima across 7 interviews)



groups 1-7: $p < .0000$ groups 1-4: $p < .06$

Duration of depressive episodes and suicidality: attempts, plans, ideation



Groups 1-7: $p < .0001$, 1-4: $p < .0004$

Result : duration criterion for
diagnosis of depression

Durations of 4+ days and 2 weeks
have identical validity

Duration as criterion for depression brief episodes

Major depressive syndromes (MDS)

- DSM-5: 5+/9 criterial depressive symptoms
- Duration
 - 2+ weeks past year = **MDS** (DSM-IV, DSM-5)
 - Few days but monthly over past year = **RBDS** (DSM-IV, DSM-5)
 - <2 weeks but **cumulative '30 days/4 weeks' over past year = Brief MDS**
- Consequences not included (required for diagnosis)

Major depressive syndromes (MDS) Age 40-50

Groups	1	2	
Diagnosis over past year	MDS 2 weeks 1988-2008	Brief MDS 4 weeks 1988-2008	p (1-2)
N	145	60	
Family history			
- Depression	65.5	71.7	1.35
- Mania	8.5	7.0	.86
- Anxiety/panic	35.2	43.3	.24
Impairment 1979-2008			
- Work impairment	92.4	91.7	.86
- Social imparment	97.9	96.7	.60
- Any impairment	99.3	98.3	.52

Unipolar mania (UM) vs. BP-I

Suggested diagnostic criteria for UM (M,Md)

- DSM-5 manic episodes without MDE: **M**
- Minor depression or RBD permitted: **Md**
- Minimum number of episodes=3

- The condition is relatively rare and less well studied than bipolar disorder

Epidemiological studies on mania

EDSP Study (Early Developmental Stages of Psychopathology) Munich

- 3021 adolescents and young adults, aged 14-24 at baseline, were followed up 10 years
- The **final prevalence rate for unipolar mania was 1.5%** and for **unipolar hypomania 3.6%** of the general population

NCS-A Study (National Comorbidity Survey Adolescent Supplement)

- 10321 adolescents, aged 13-18 were investigated cross-sectionally
- Life time prevalence rates of **M/Md of 1.7%** were found vs. BP-I/BP-II disorders 2.5%.

Clinical studies on unipolar mania among BP-I disorders

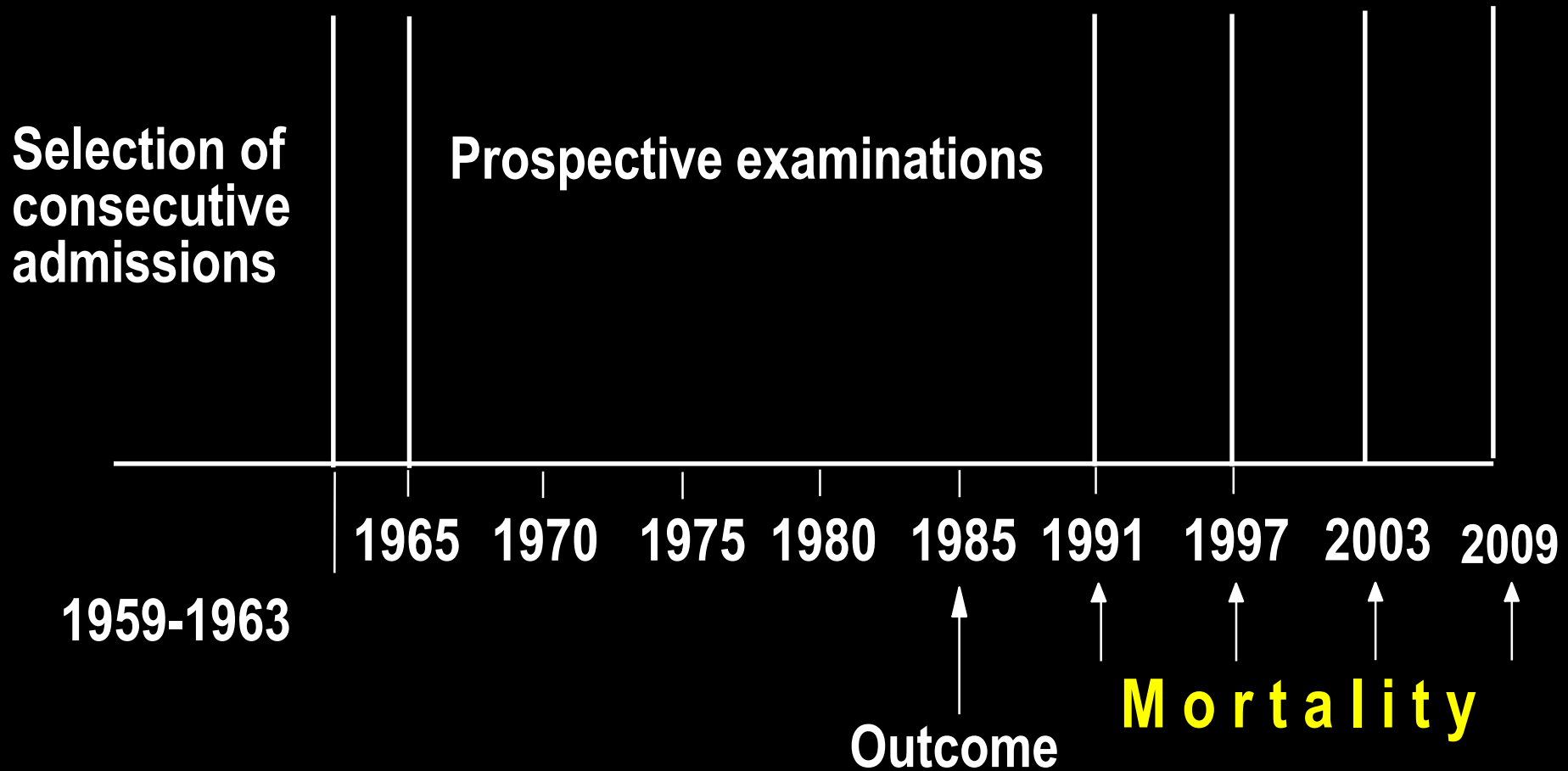
Western countries

- 9 retrospective studies: 23.1% UM (251/1086)
- 3 prospective studies: 11% UM (43/439)

Non-western countries

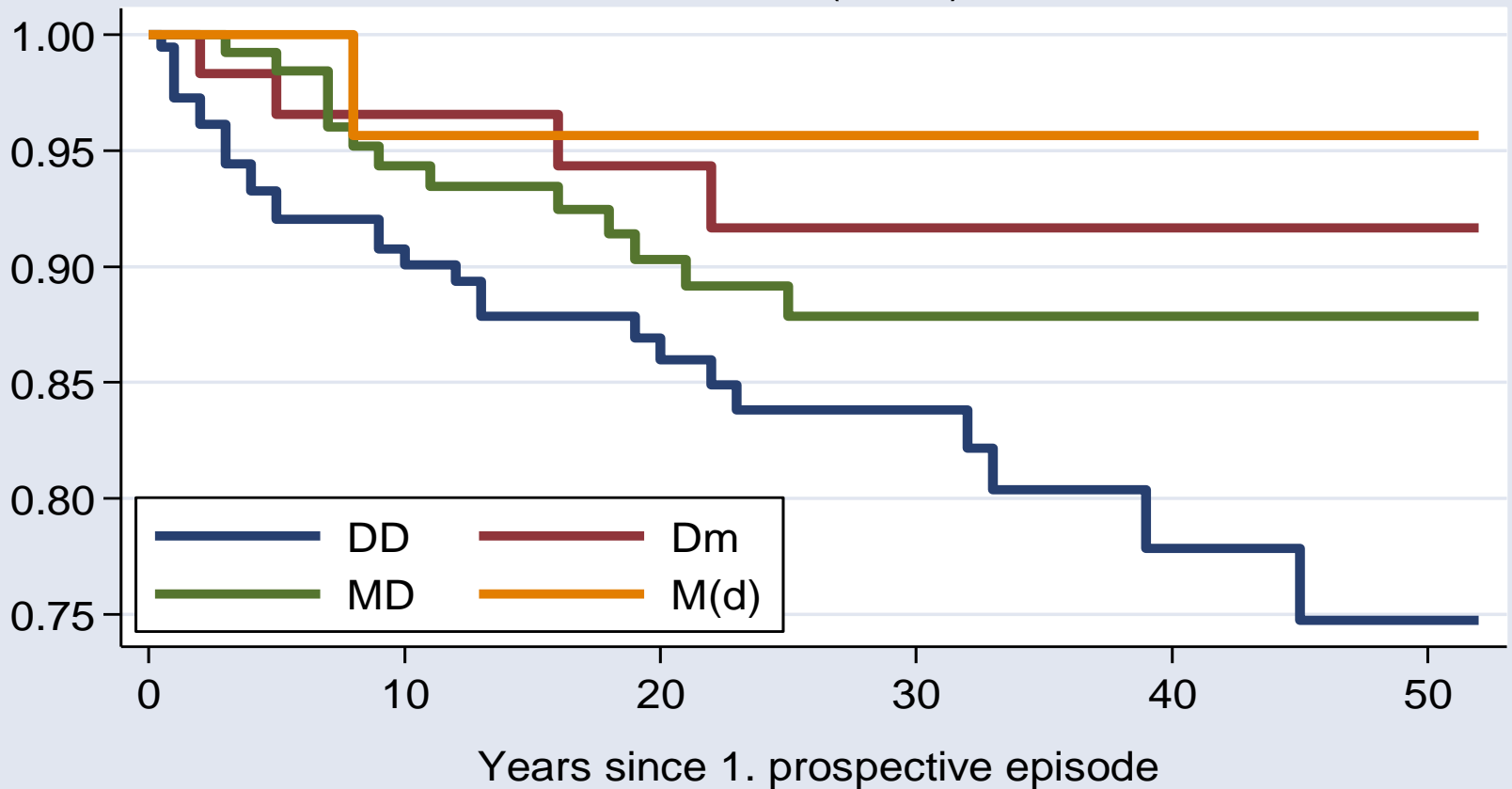
- 12 retrospective studies: 35.9% (698/1964)
- 1 prospective study: 52.6% (55/104)

Affective disorder in-patient study: Zurich 1959-2009 (N=403)



Survival analysis of suicides in mood disorder patients

N=403 (2009)

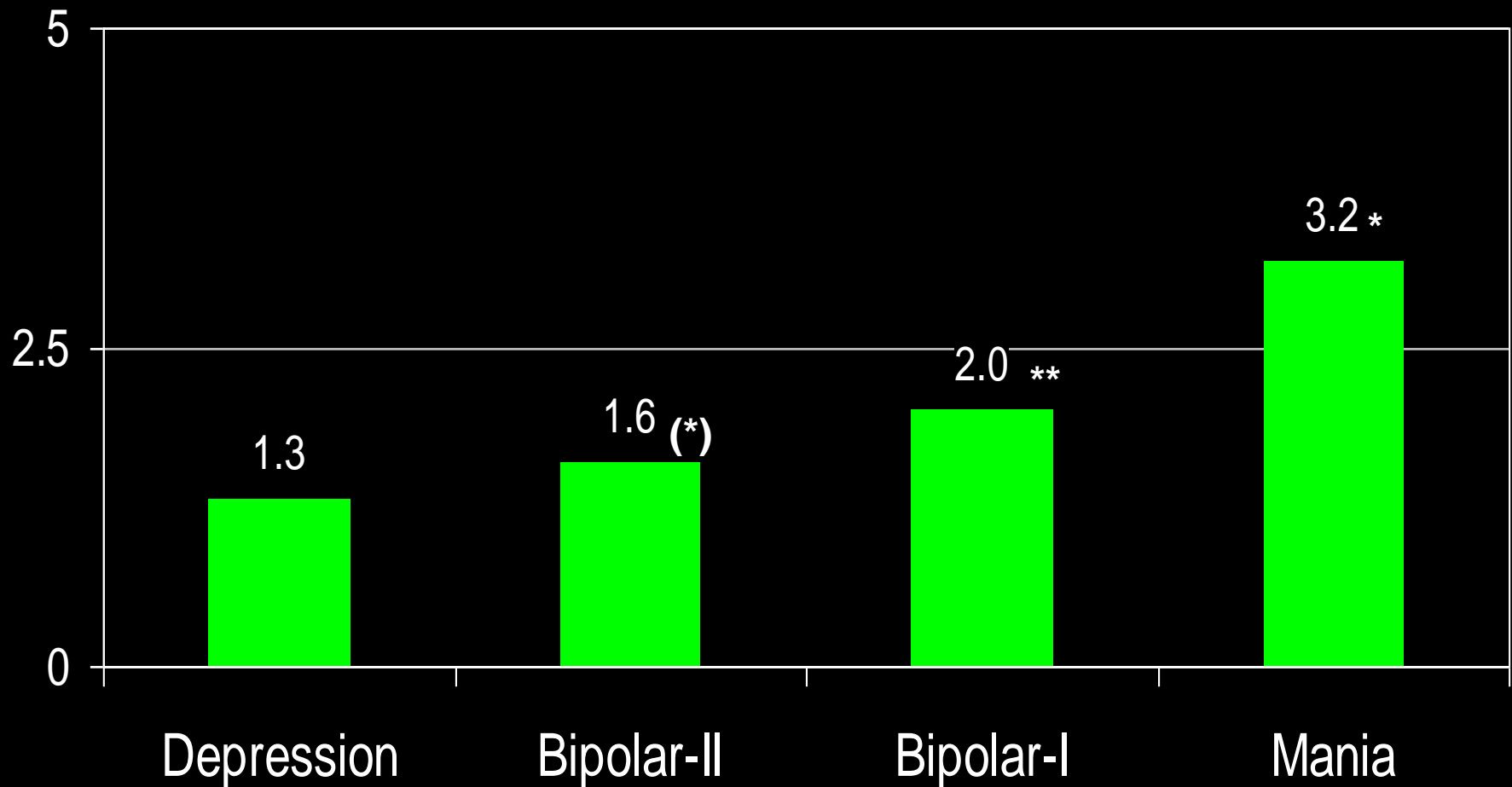


Number at risk

	0	10	20	30	40	50
synd_typ = 0	183	135	91	57	30	10
synd_typ = 1	60	49	38	24	15	5
synd_typ = 2	130	109	81	53	27	11
synd_typ = 3	30	22	16	13	11	6

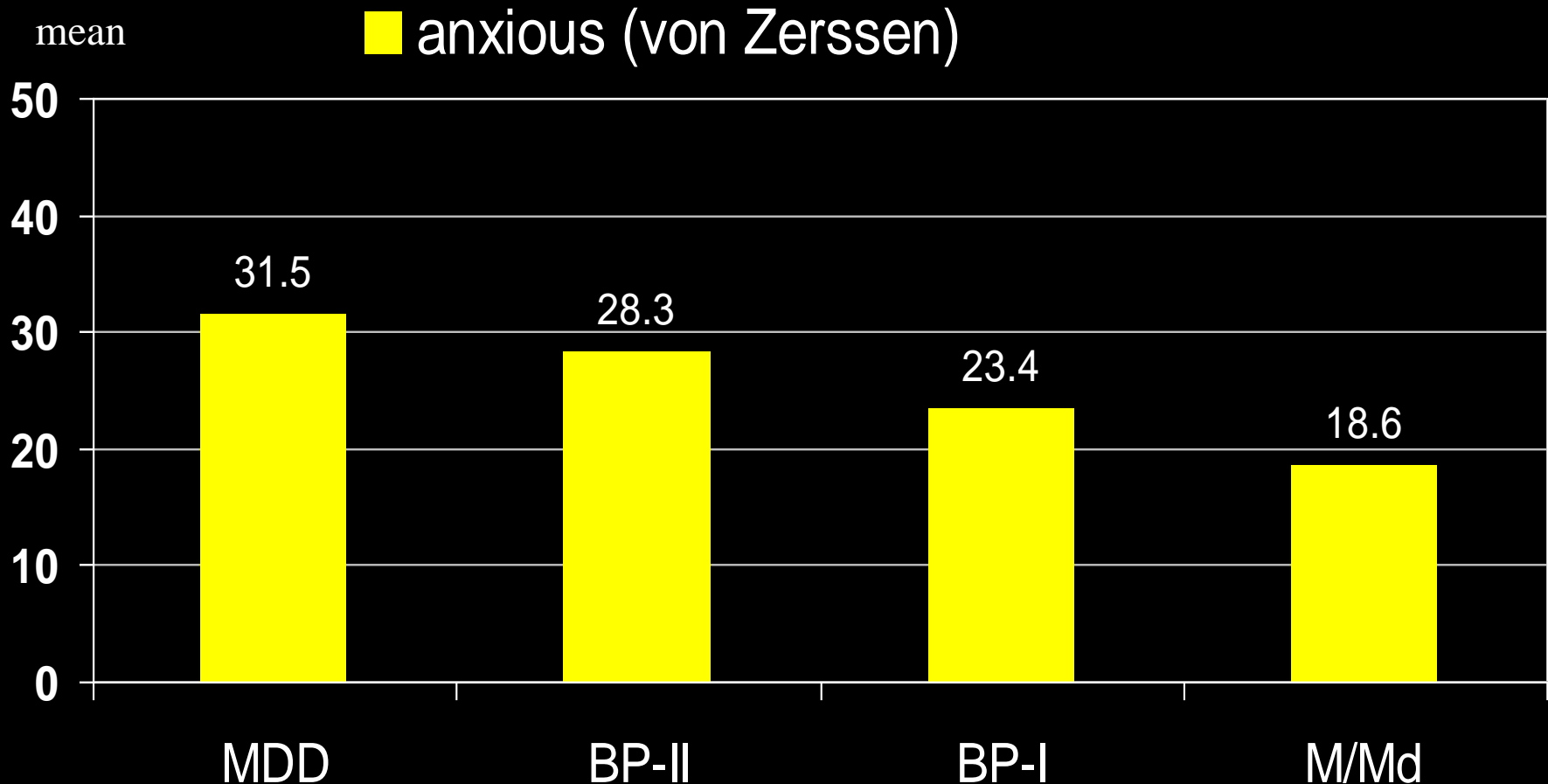
Cardiovascular mortality (N=353 deaths)

■ SMR



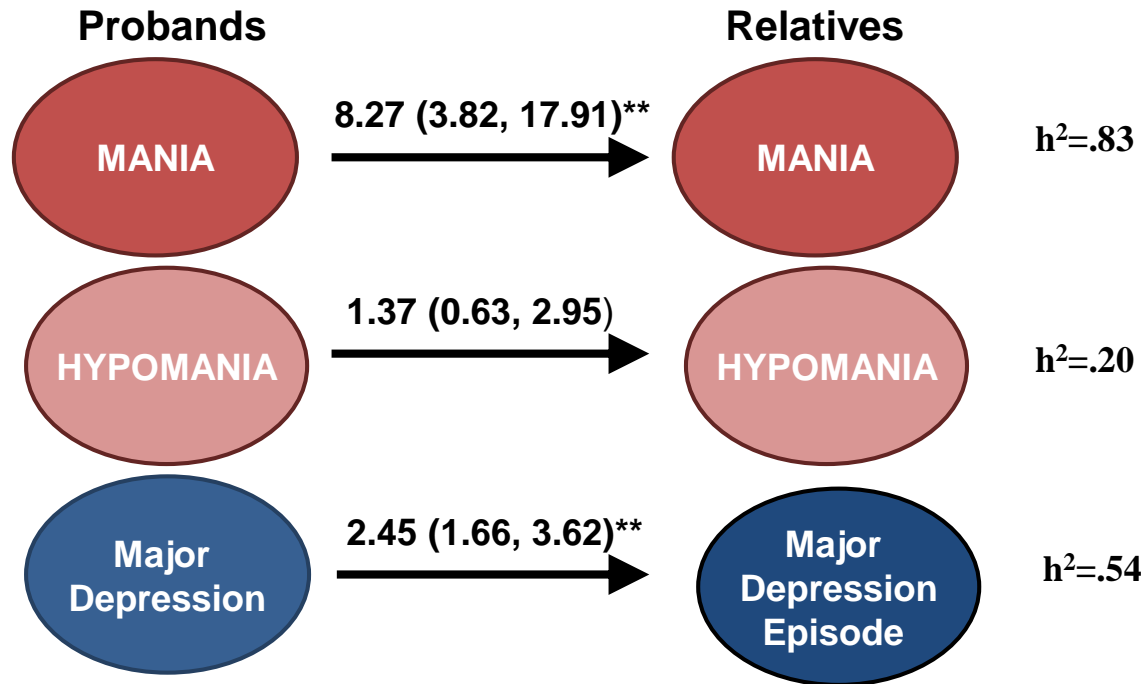
Diagnoses and anxious personality

(gender difference $p < .09$)



Transmission of mood disorders

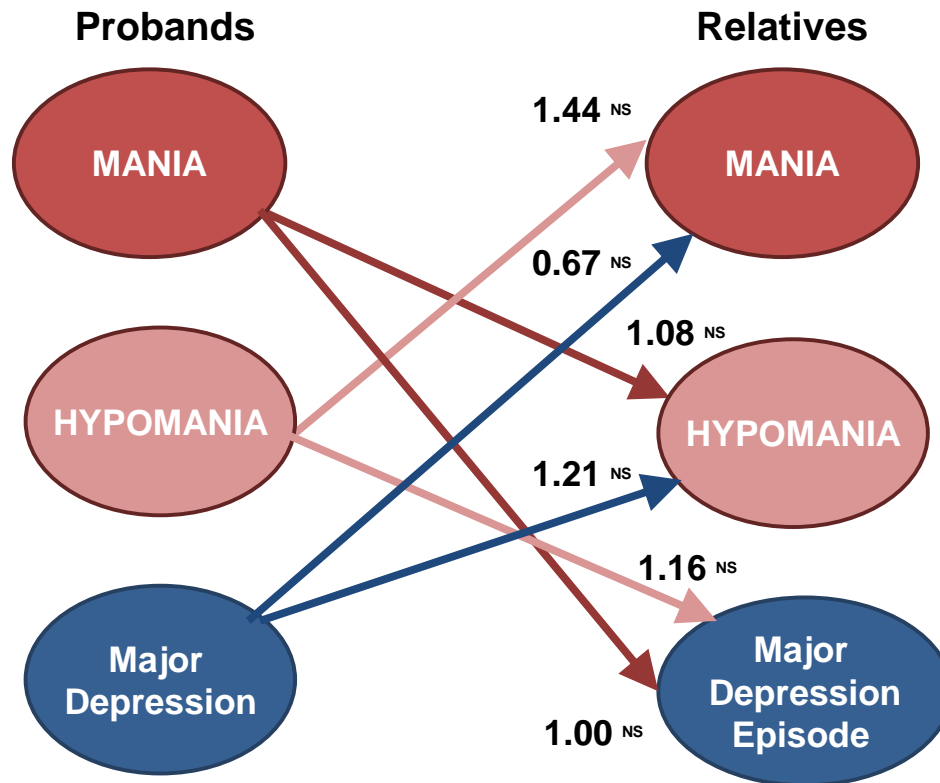
Figure 1a. Transmission of Mania, Hypomania and Major Depression in Probands and Relatives (n=2082)



** p < .01; Models controlled for proband sex, source, anxiety, substance, and relative age, sex, anxiety, substance, and interview status.

Cross-transmission

Figure 1b. Cross-transmission of Mania and Major Depression in Probands and Relatives (n=2082)



Models controlled for proband sex, source, anxiety, substance, and relative age, sex, anxiety, substance, and interview status.

Odds ratios of associations between patients and relatives by episode types

Family study in Lausanne and Geneva

Diagnoses	Patients				
	Psychosis	Mania	Hypomania	MDE	Controls
Relatives	Psychosis	Mania	Hypomania	MDE	Controls
(N) 1734	505	628	113	1182	493
Psychosis	2.9*	0.9	0.4	1.0	Ref.
Mania	1.0	6.4***	1.6	1.7	Ref.
Hypomania	1.2	2.1	1.3	0.8	Ref.
MDE	1.0	0.7	1.0	2.0***	Ref.

Conclusions

- DSM-5: improved definitions of mood disorders
- **Bipolar disorder** is still underestimated
- Restrictive gate questions for hypomania/mania are not valid
- Minimum duration of 4 days for hypomania not optimal
- Impairment/distress not valid requirements for a diagnosis of hypomania

- **Major Depression**
- Minimum episode duration could be 4 days
- **Brief depression**: a complex problem. Cumulative duration of 30 days/year needs further research.

- **Mania** should be diagnosable and kept separate (incl. Md)

Thank you for your attention

