### Upcoming PGC Worldwide Lab

- Date: Friday, January 10, 2014
- Presenter:
  - Ronald C. Kessler, Ph.D.
  - McNeil Family Professor of Health Care Policy; Harvard Medical School
- Title: The Global Burden of Mental Illness
- Duration: 1 hour
- Start Time: 10:00am (EST); 7:00am (PST); 3:00pm (GMT); 4:00pm (CET)
- Call Information:
  - Passcode: 275 694 38
  - US Toll Free 1 866 515 2912
  - International: +1 617 399 5126

  - Operators will be on standby to assist with technical issues. \*0 will get you assistance.

#### Lines are Muted NOW

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- Operators announce callers one at a time during question and answer sessions.
- Dial \*1 if you would like to ask a question of the presenter. Presenter will respond to calls as time allows.
- Dial \*0 if you need operator assistance at any time during the duration of the call.

### Upcoming PGC Worldwide Lab

- Date: Friday, February 14, 2014
- Presenter:
  - Kerry Ressler, MD, Ph.D.
  - Emory University
- Title: Genes and Environment in PTSD
- Duration: 1 hour
- Start Time: 10:00am (EST); 7:00am (PST);
   3:00pm (GMT); 4:00pm (CET)

#### The Global Burden of Mental Illness

Ronald C. Kessler, PhD
McNeil Family Professor of Health Care Policy
Department of Health Care Policy
Harvard Medical School
January 10, 2014

## The generations of psychiatric epidemiology

• Pre-1945	Key informant and treatment record studies
• 1945	World War II screening studies
• 1948 – 60	Two-stage clinical surveys (e.g. The Midtown Manhattan Study)
• 1960 – 80	Screening surveys (e.g. Americans View Their Mental Health)
• 1980 – 2000	Structured diagnostic interview surveys (e.g. ECA/NCS surveys)
• 2000 -	Structured-clinical interview surveys (WMH)

#### The core descriptive goals of WMH

#### To estimate...

- Prevalence of mental disorders
- Societal burdens of mental disorders
- Comparative burdens of physical and mental disorders
- Rates of unmet need for treatment
- Rates of treatment adequacy

#### The core analytic goals of WMH

#### To examine...

- Modifiable risk factors for onset and course of mental disorders
- Barriers to seeking treatment
- Predictors of treatment dropout
- Predictors of treatment adequacy

#### Core nosological goals

To support changes in DSM-V and ICD-11 by...

- Searching for evidence of taxonicity
- Examining effects of threshold variation on external validators

### The social policy audiences of WMH

Government policy makers

- Employers
- Citizens

#### The social policy messages of WMH

- Mental disorders are top illness-related cost drivers of impairment
- Safe and effective treatments are available
- Substantial barriers exist to treatment that require structural solutions
- Enhanced outreach and treatment are investment opportunities

#### The WMH study design

- Nationally or regionally representative household surveys
- Adults 18 and older
- Subsamples of spouses of target respondents
- Standardized interviewer training and monitoring
- Standardized face-to-face interviews

#### The WMH study design

- Sample of at least 5000 interviews per country
- Both CAPI and PAPI versions

 Shared training, quality control, and data processing protocols

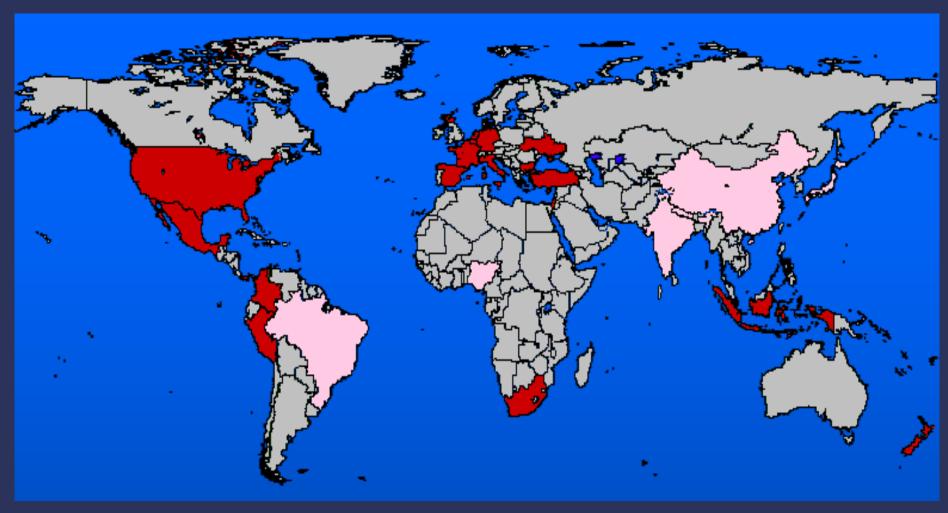
#### Unique aspects of WMH

- Large scale, worldwide
- Same design, translation methods, training, and quality control protocols
- CIDI enhancements
- Clinical follow-up

## WHO World Mental Health (WMH) Survey Consortium

- 28 countries
- All regions of the world
- National household samples of at least 5,000 people
- A total of over 200,000 interviews

#### WMH countries



#### Initial WMH findings

- Mental disorders are highly prevalent.
- They are often seriously impairing.
- They affect not only the people with the disorders, but also their families, friends, and coworkers.

### Lifetime prevalence in selected WMH countries

<u>Country</u>	<u>Anxiety</u>	<u>Mood</u>	<u>Substance</u>	<u>Any</u>
Brazil	17%	15%	16%	36%
Canada	21	10	20	37
Germany	10	17	21	38
Mexico	6	9	10	20
Netherlands	20	19	19	41
Turkey	7	7	0	12
USA	25	19	28	49

#### WMH definitions of severity

Severe

NAP, BPI, physiological substance dependence syndrome, serious suicide attempt, severe role impairment in multiple roles (GAF < 50)

Moderate

Any disorder with serious role impairment (GAF < 60)

Mild

Any other

### Proportion of 12-month cases that are severe

**Americas** Colombia, Mexico, United States 29-30% Europe Belgium, France, Germany, Italy, Netherlands, Spain, Ukraine 11-24% III. Middle East and Africa Lebanon, Nigeria 9-27% IV. Asia Japan, People's Republic of China (Beijing and Shanghai) 10-26%

#### WMH severity and days out of role

Severe

32 - 81

Moderate

9 - 19

Mild

0 - 4

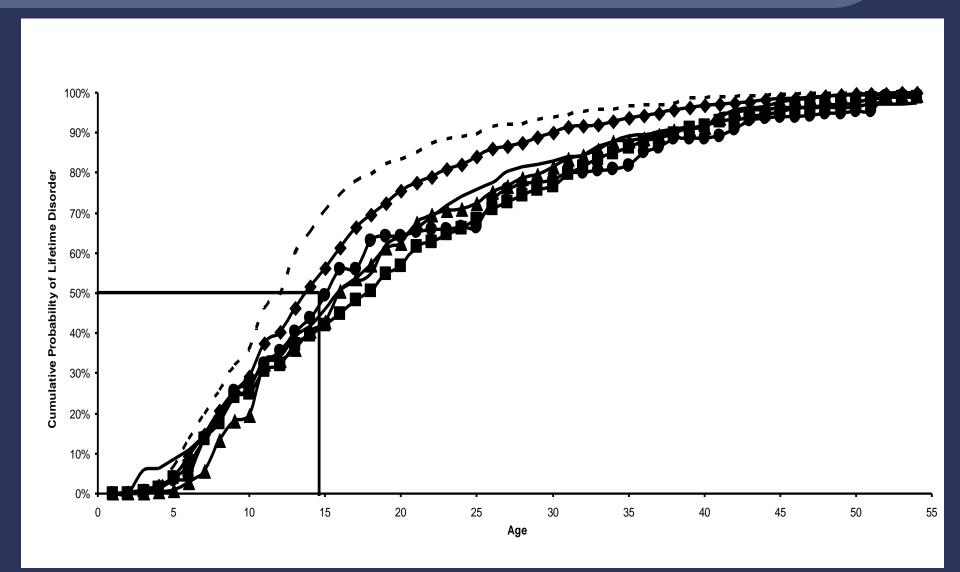
#### Initial WMH findings (cont.)

 The most serious mental disorders usually begin in childhood or adolescence.

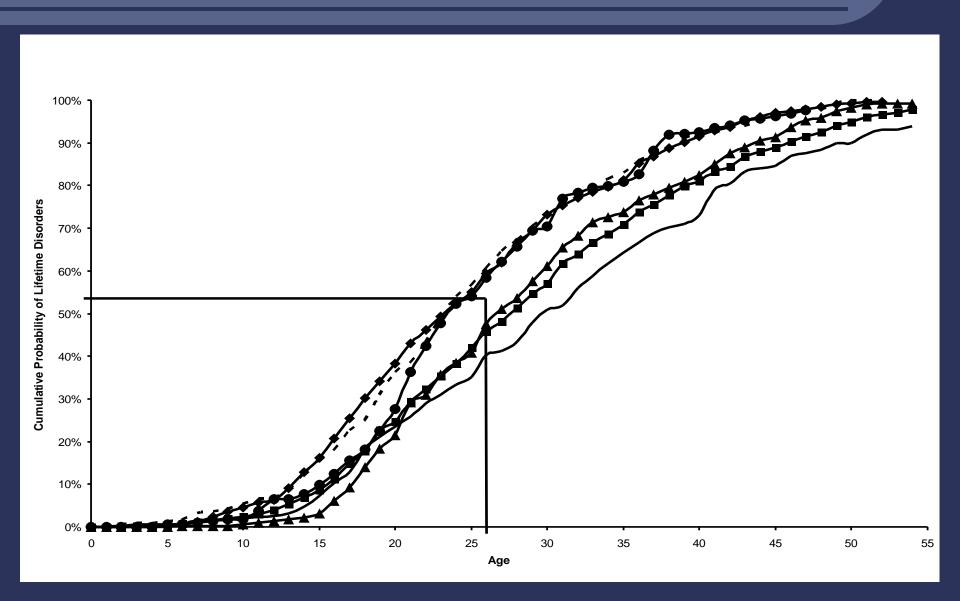
They are usually not severe when they begin.

More typically, they become severe over time.

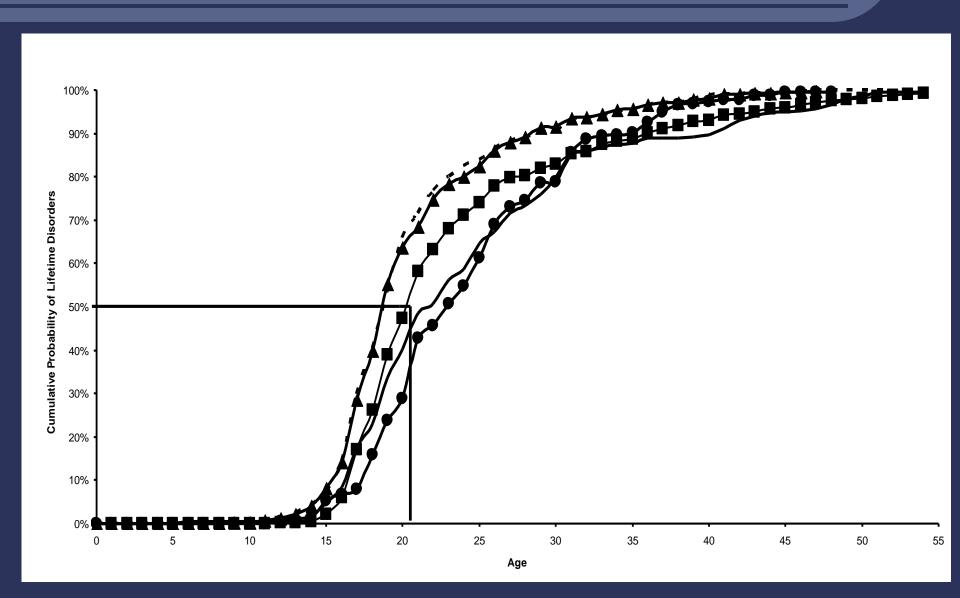
#### AOO distributions – anxiety disorders



#### AOO distributions – mood disorders



#### AOO distributions – substance disorders



## Associations (odds-ratios) between 1992 illness severity and 2002 outcomes

	Hospitalization	Suicide Attempt	Any <sup>1</sup>
	<u>OR</u>	<u>OR</u>	<u>OR</u>
Severe	29.7*	11.7*	15.1*
Moderate	3.0*	2.9*	3.8*
Mild	2.7*	2.0	2.4*
Non-Cases	1.0	1.0	1.0

<sup>&</sup>lt;sup>1</sup> Hospitalization, work disability, suicide attempt, or serious mental illness.

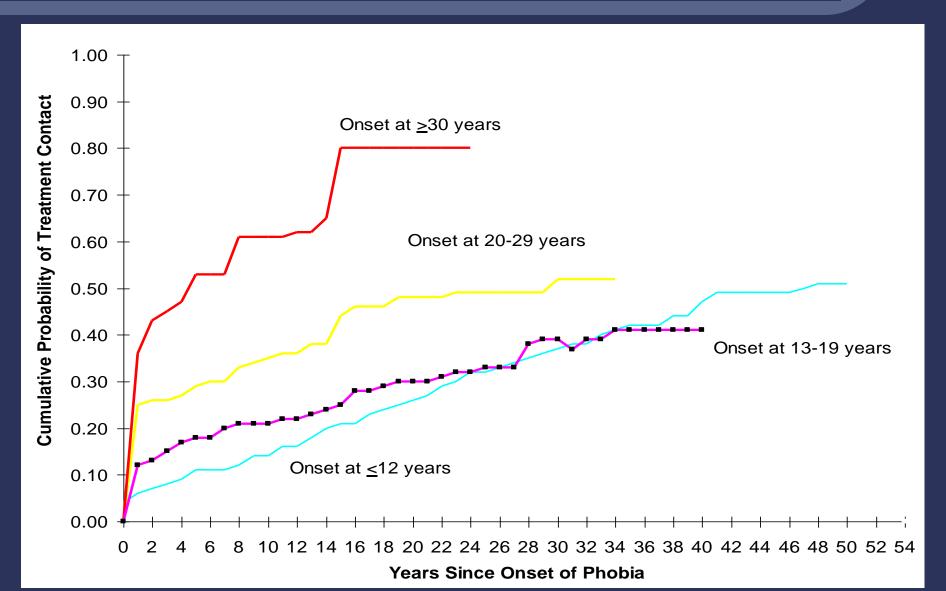
#### Initial WMH findings (cont.)

- Most chronic cases eventually get treatment.
- Treatment delays are pervasive.
- Treatment quality is often poor.
- Demonstration projects show that treatment quality can be improved.

### Lifetime treatment percent and median years between onset and treatment

	Treatment %	<u>Median Delay</u>
Panic Disorder	70-90	1-4
GAD	60-82	4-6
Major Depression	63-92	5-8
Addictive Disorder	35-51	10-14

# Speed of initial treatment contact by age at onset (phobias)



## Adequacy of 12-month treatment by severity, US 2002

	Total Sample	Treatment Sample
	<u>%</u>	<u>%</u>
Severe	32.7	47.4
Moderate	14.5	35.0
Mild	10.3	28.8

	1992	2002
:	<u>Total</u>	<u>Total</u>
Specialty	3.9 %	6.2 %*
General medical	3.3	9.2 *
Human service	5.4	7.1 *

1992	2002	
<u>Total</u> <u>Severe</u> <u>Other</u>	<u>Total</u> <u>Severe</u> <u>Other</u>	
Specialty 3.9 % 18.1 % 2.6 %	6.2 % 20.7 % 4.8 %*	
General medical 3.3	9.2 *	
Human service 5.4	7.1 *	

_	1992		2002	
:	<u>Total</u> <u>Severe</u>	<u>Other</u>	Total Severe Other	
Specialty	3.9 % 18.1	2.6 %	6.2 % 20.7 % 4.8 %*	
General medical	3.3 14.6	2.6	9.2 * 31.9 * 6.7 *	
Human service	5.4		7.1 *	

	1992		2002
	Total Sever	<u>e</u> <u>Other</u>	<u>Total</u> <u>Severe</u> <u>Other</u>
Specialty	3.9 % 18.1	2.6 %	6.2 % 20.7 % 4.8 %*
General medical	l 3.3 14.6	2.6	9.2 * 31.9 * 6.7 *
Human service	5.4 21.7	4.2	7.1 * 20.9 * 5.7 *

## What are the implications of these results?

- Barriers to seeking treatment are falling.
- But delays in initial help seeking are still pervasive.
- This is especially true for early-onset disorders.
- We need to develop school-based early screening, outreach, and treatment programs.

### What are the implications of these results? (cont.)

- Does early intervention work?
- We don't know.
- New efforts to develop effective early treatments.
- Long-term evaluations of developmental effects.

### What are the implications of these results? (cont.)

Quality of care has to improve.

Quality assurance initiatives need to be evaluated.

 Quality assurance programs need to be embraced by payers.

### Disorders in the comparative analysis of impairments in physical and mental disorders

<u>Physical</u> <u>Mental</u>

Arthritis ADHD

Asthma Bipolar

Back/neck Depression

Cancer GAD

Chronic pain IED

Diabetes ODD

Headaches Panic disorder

Heart disease PTSD

High blood pressure Social phobia

Ulcer Specific phobia

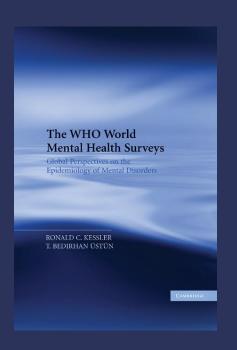
#### Overview of design

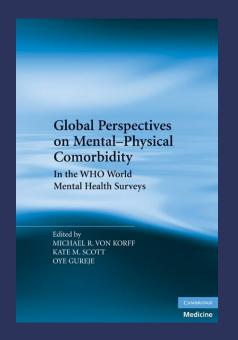
- One randomly selected physical condition was selected for each respondent who reported one or more such conditions.
- Respondents were asked to assess the impairment caused by the selected condition using the Sheehan Disability Scales and a question about days out of role due to the condition.
- Data were weighted to adjust for differential probability of selection of conditions as a function of extent of comorbidity.
- Parallel information was collected about each of the 10 mental disorders.
- Physical-mental comparisons were made both in the aggregate and in within-person paired analyses.

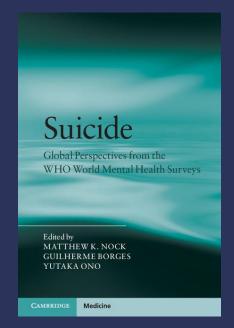
#### Overview of findings

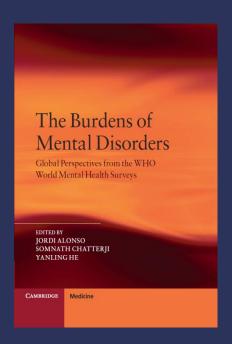
- Respondents in both developed and developing countries attributed highest impairment to mental than physical disorders.
- This pattern held whether we examined all disorders, those in treatment, or physical disorders in treatment compared to all mental disorders.
- The higher impairment of mental than physical disorders was more pronounced for social and personal relationships than for productive role functioning.
- Despite the higher impairments, only 11.9% of the seriously impairment mental disorders were treated in the developing countries vs. 64,.0% of comparably impairing physical disorders. In the developed world, the comparable proportions were 35.3% mental disorders vs. 77.6% physical disorders.

### Volumes published so far in the Cambridge University Press WMH book series









www.hcp.med.harvard.edu/wmh