Mental Health Measures on the National Health Interview Survey

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National Health Interview Survey

- Collects data on the health status and health care access of US population
- Addresses specific issues of ongoing and emergent public health concern
- Provides estimates for monitoring progress toward public health goals, for research, and for evaluation
National Health Interview Survey

- **Sample:** Multi-stage, clustered national sample of housing units from every state, to be representative of the civilian noninstitutionalized US population
- **Oversampled groups:** Black, Hispanic, and Asian persons; and adults 65+ years or older
- **Mode:** In-person interviews by Census interviewers
- **Data collection:** Continuous, with annual data files
- **Goal:** Complete interviews for 35,000+ households
- **Random selection:** One adult and one child (if any) are selected from each family for additional questions
  - 28,000+ adults; 11,500+ children
NHIS Survey Domains

- Core questions remain basically unchanged year to year
  - Health status and functional limitations
  - Health conditions
  - Health behaviors and risk factors
  - Injuries
  - Health insurance coverage
  - Health care access, utilization, and barriers
  - Demographic and SES characteristics

- Annual supplements collect data on current issues of national importance
Basic Content and Structure of the NHIS Questionnaire Since 1997

- **Family Core**
  - Demographic, general health, and insurance coverage data
  - For all family members
  - Proxy responses allowed

- **Sample Adult Core**
  - Health conditions, risk behaviors, and health care utilization data
  - For one randomly selected adult in each family
  - Self-response only

- **Sample Child Core**
  - Health conditions and health care utilization data
  - For one randomly selected child in each family
  - Knowledgeable adult responds for child
Serious Psychological Distress, Measured Using the K6

- K6 was developed for the 1997 NHIS questionnaire redesign
- Short dimensional measure of non-specific psychological distress
- Developed using Item Response Theory methods
- Self-report of feelings during the month prior to the interview
Serious Psychological Distress, Measured Using the K6

- Now I am going to ask you some questions about feelings you may have experienced over the past 30 days. During the past 30 days, how often did you feel...
  - So sad that nothing could cheer you up?
  - Nervous?
  - Restless or fidgety?
  - Hopeless?
  - That everything was an effort?
  - Worthless?

ALL of the time, MOST of the time, SOME of the time, A LITTLE of the time, or NONE of the time
Percentage of Adults with Serious Psychological Distress, by Sex and Age: National Health Interview Survey, 2009–2013

Figure 1. Percentage of adults aged 18 and over at interview with serious psychological distress, by sex and age: United States, 2009–2013

1Significantly higher percentage of women with serious psychological distress than men.
2Significantly higher percentage with serious psychological distress than other age groups.
3Significantly lower percentage with serious psychological distress than other age groups.


Percentage of Adults with Serious Psychological Distress, by Income and Race/Ethnicity: National Health Interview Survey, 2009–2013

Figure 2. Age-adjusted percentage of adults with serious psychological distress, by income relative to federal poverty level and by race and ethnicity: United States, 2009–2013

National Health Interview Survey (NHIS) Early Release (ER) Program

- NHIS is conducted throughout the year based on monthly random samples.
- Annual files released six months after the completion of data collection.
- Early Release Products are developed prior to final processing and weighting to provide early access to the most recent information.

Every three months, the ER Program produces:
- A report on 15 key health indicators
- A report on health insurance coverage
- Web tables with quarterly health insurance estimates
- Preliminary microdata file used for these reports
Percentage of Adults with Serious Psychological Distress, by Year: National Health Interview Survey, 1997–March 2015

Figure 13.1. Percentage of adults aged 18 and over who experienced serious psychological distress during the past 30 days: United States, 1997–March 2015

K6 Follow-Up Question

- We just talked about a number of feelings you had during the past 30 days. Altogether, how much did these feelings interfere with your life or activities?
  - A lot, some, a little, or not at all

- Asked of all sample adults who reported that at least one feeling was experienced at least some of the time
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  - Health behaviors and risk factors
  - Injuries
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Short Form of the Composite International Diagnostic Interview (CIDI-SF)

- Developed for the 1997 NHIS questionnaire redesign to estimate the prevalence of adults meeting DSM-III-R criteria for several psychiatric outcomes
- Short series of symptom questions to follow diagnostic stem questions (if endorsed)
- Scripted for 12-month prevalence
- Included in the 1999 “Periodic” Adult Mental Health Supplement
  - Only major depression, generalized anxiety disorder, and panic attack
Prevalence Rates for Selected Mental Disorders Among Adults, Past 12 Months: National Health Interview Survey, 1999

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Percentage of Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Depression</td>
<td>6.3</td>
</tr>
<tr>
<td>Generalized Anxiety Disorder</td>
<td>2.8</td>
</tr>
<tr>
<td>Panic Attack</td>
<td>2.7</td>
</tr>
<tr>
<td>Any of the Selected Mental Disorders</td>
<td>8.8</td>
</tr>
<tr>
<td>Single Disorder Only</td>
<td>6.2</td>
</tr>
<tr>
<td>Multiple Disorders</td>
<td>2.5</td>
</tr>
</tbody>
</table>

From Dickey WC, Blumberg SJ. Prevalence of Mental Disorder and Contacts with Mental Health Professionals Among Adults in the United States: National Health Interview Survey, 1999. in Mental Health, United States, 2002 (Chapter 8).
Short Form of the Composite International Diagnostic Interview (CIDI-SF)

- 1999 “Periodic” Adult Mental Health Supplement was never repeated
- CIDI-SF validation studies were never funded
  - Calibrated only to baseline NCS data
  - Confirmatory clinical follow-up interviews and other methodological studies have not been carried out
  - Kessler recommends other short diagnostic interviews
Washington Group on Disability Statistics

- Formed in 2001 following the United Nations International Seminar on Measurement of Disability
- Authorized by UN Statistical Commission
- To develop a small set of general disability measures to be used in censuses and sample-based national surveys throughout the world
- Structured within framework of the International Classification of Functioning, Disability, and Health (ICF)
Do you have difficulty…
- Seeing, even if wearing your glasses?
- Hearing, even when using a hearing aid?
- Walking or climbing steps?
- Remembering or concentrating?
- With self-care, such as washing all over or dressing?
- Communicating, for example, understanding or being understood?

Would you say no difficulty, some difficulty, a lot of difficulty, or cannot do at all?
How often do you feel worried, nervous, or anxious?
- Daily, weekly, monthly, a few times a year, or never?

Do you take medication for these feelings?

Thinking about the last time you felt worried, nervous, or anxious, how would you describe the level of these feelings?
- A little, a lot, or somewhere in between a little and a lot?

These 3 questions are repeated for “depressed”
Field tested in 9 countries
- US, Canada, South Africa, Cambodia, Kazakhstan, Maldives, Mongolia, Philippines, Sri Lanka

Cognitively tested in 15 countries
- Above nine plus six countries in western Europe

Results: The questions on frequency and intensity of affect are well understood and yield a continuum that correlates well with functioning difficulties

Included in NHIS as a supplement since 2010
2018 NHIS Questionnaire Redesign

- **Goals of the redesign:**
  - Improve the measurement of covered health topics
  - Reduce respondent burden by shortening the questionnaire
  - Harmonize overlapping content with other federal health surveys
  - Establish a long term structure of ongoing and periodic topics
  - Incorporate advances in survey methodology and measurement

- **Timeline**
  - 2014 – 2015: Stakeholder engagement, outreach
  - 2015 – 2016: Qualitative and quantitative assessments
  - Summer 2016 – Spring 2017: OMB review and public comment
  - Late Spring 2017: Revised questionnaire programmed
  - January 2018: Revised questionnaire fielded

- **Suggestions?** E-mail healthsurveys@cdc.gov