Mental Health Services Oversight and Accountability Commission Meeting

Assessing Adult Mental Health Needs in California: Using the California Health Interview Survey (CHIS)

Sergio Aguilar-Gaxiola, MD, PhD
Professor of Clinical Internal Medicine
Director, Center for Reducing Health Disparities

Sacramento, CA
July 28, 2011

Assessing Adult Mental Health Needs in California: Using the California Health Interview Survey (CHIS)

• Report prepared for the Mental Health Services Oversight and Accountability Commission (MHSOAC)
• Based on a contract with the UC Davis Center for Reducing Health Disparities
• Prepared in collaboration with the California Health Interview Survey Director and staff, UCLA Center for Health Policy Research
Severe Psychological Distress (SPD)

- SPD is based on the Kessler-6
- Series of questions about the frequency of feelings over
  - the past 30 days (SPD 30-day)
  - the worst month in the past year (SPD 12-mos)
- Individual items are scored to provide an index, with range (0, 24) with K6 > 13 indicating SPD
- SPD provides a robust estimate of the population with severe mental illness (SMI) within a population
- Is a non-specific, general indicator of psychological distress

Source: Grant, 2011

Six Items in Kessler 6 (K6), Adults 18 and over, K6 ≥ 13, N = 4,010, CHIS 2007

<table>
<thead>
<tr>
<th>In the past 12 months, about how often did you......</th>
<th>All of the time</th>
<th>Most of the time</th>
<th>Some of the time</th>
<th>A little of the time</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feel nervous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30.8</td>
<td>42.6</td>
<td>19.9</td>
<td>4.4</td>
<td>2.3</td>
</tr>
<tr>
<td>Feel hopeless</td>
<td>22.0</td>
<td>39.8</td>
<td>30.7</td>
<td>5.9</td>
<td>1.6</td>
</tr>
<tr>
<td>Feel restless</td>
<td>30.1</td>
<td>35.2</td>
<td>25.7</td>
<td>6.5</td>
<td>2.6</td>
</tr>
<tr>
<td>Feel depressed</td>
<td>19.4</td>
<td>35.9</td>
<td>34.8</td>
<td>7.3</td>
<td>2.6</td>
</tr>
<tr>
<td>Feel everything is an effort</td>
<td>31.3</td>
<td>38.1</td>
<td>24.0</td>
<td>4.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Feel worthless</td>
<td>17.0</td>
<td>26.6</td>
<td>34.4</td>
<td>12.0</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Source: Grant, Padilla-Frausto, Aydin, Streja, Aguilar-Gaxiola, Caldwell, 2011
Serious Psychological Distress (K6 > 13)

DSTRS12

All Adults
N = 26,769,450

No Psychological Distress (K6 < 13)
DSTRS12 = 2
N = 24,482,848
**No Mental Health Need**

At least Moderate impairment in at least ONE Domain (IMPAIR2 ≥ 1)
N = 2,224,400
**Mental Health Need**

No Impairment (IMPAIR2 < 1)
N = 62,002
**Serious Psychological Distress, no impairment**

Level of impairment from Sheehan Disability Scale, Adults 18 and over, K6 score ≥ 13, N = 4,010, CHIS 2007

<table>
<thead>
<tr>
<th>Did your emotions interfere a lot, some, or not at all with your...</th>
<th>Severe (a lot)</th>
<th>Moderate (some)</th>
<th>No Impairment (not at all)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance at work*</td>
<td>44.0%</td>
<td>37.1%</td>
<td>18.8%</td>
</tr>
<tr>
<td>Household chores</td>
<td>49.5%</td>
<td>33.4%</td>
<td>17.0%</td>
</tr>
<tr>
<td>Social life</td>
<td>57.6%</td>
<td>32.0%</td>
<td>10.5%</td>
</tr>
<tr>
<td>Relationship with family and friends</td>
<td>48.6%</td>
<td>39.3%</td>
<td>12.1%</td>
</tr>
</tbody>
</table>

*Note: Performance at work is only asked of adults, age 18 – 70.
Conceptual Model for Assessing Mental Health Need in CA: CHIS 2007

All Adults
N = 26,769,450

No Psychological Distress
(K6 < 13)
DSTRS12 = 2
N = 24,482,848
**No Mental Health Need**

No Impairment
(IMPAIR2 < 1)
N = 62,202
**Serious Psychological Distress, no impairment**

Source: Padilla-Frausto, Grant, Aguilar-Gaxiola, 2011

Rates of Mental Health Need by Poverty Level, CHIS 2007*

<table>
<thead>
<tr>
<th>Poverty Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-99% FPL</td>
<td>11.3%</td>
</tr>
<tr>
<td>100-199%</td>
<td>10.6%</td>
</tr>
<tr>
<td>200-299%</td>
<td>9.7%</td>
</tr>
<tr>
<td>Statewide</td>
<td>8.3%</td>
</tr>
<tr>
<td>&gt; 300%</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

*Adjusted for age and sex

Source: Padilla-Frausto, Grant, Aguilar-Gaxiola, 2011
Rates of Mental Health Need by Insurance Type, CHIS 2007*

- Public (Non Medicare): 10.0%
- Uninsured: 10%
- Statewide: 8.3%
- Medicare: 7.8%
- Private: 7.0%

* Adjusted for age and sex

Source: Padilla-Frausto, Grant, Aguilar-Gaxiola, 2011

---

Rates of Mental Health Need by Race/Ethnicity, CHIS 2007*

- American Indian/Alaskan Native: 15.3%
- Other: 12.6%
- African American: 9.2%
- White: 8.5%
- Latino: 8.3%
- Asian Only: 5.6%

* Adjusted for age and sex

Source: Padilla-Frausto, Grant, Aguilar-Gaxiola, 2011
Rates of Mental Health Need by Nativity Status for Latino and Asian, CHIS 2007*

<table>
<thead>
<tr>
<th></th>
<th>U.S. Born Latino</th>
<th>Statewide</th>
<th>Latino Born Abroad</th>
<th>Asian Born Abroad</th>
<th>U.S. Born Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10.8%</td>
<td>8.3%</td>
<td>6.7%</td>
<td>5.7%</td>
<td>3.7%</td>
</tr>
</tbody>
</table>

* Adjusted for age and sex

Source: Padilla-Frausto, Grant, Aguilar-Gaxiola, 2011

Languages Spoken in HH Among SPD 12-mos, CHIS 2007

- English & Spanish: 19
- English & Asian: 6
- English only: 64%
- Spanish only: 3
- Asian only: 7%

Source: Grant, 2011
Mental Health Need and Co-morbidity

Rates of Current Smokers and Binge Drinkers by Mental Health Need, CHIS 2007*

- Smokers w/ MHN
- Smokers w/o MHN
- Binge Drinkers w/ MHN
- Binge Drinkers w/o MHN

1 Confidence Interval
* Adjusted for age and sex

Source: Padilla-Frausto, Grant, Aguilar-Gaxiola, 2011
Mental Health Treatment

Measures

QA07_F20 In the past 12 months have you seen your primary care physician or or general practitioner for problems with your mental health, emotions, nerves or your use of alcohol or drugs?

AF74

YES ................................................................. 1
NO ................................................................. 2
REFUSED ......................................................... -7
DON'T KNOW .................................................... -8

QA07_F21 In the past 12 months have you seen any other professional, such as a counselor, psychiatrist, or social worker for problems with your mental health, emotions, nerves or your use of alcohol or drugs?

AF75

YES ................................................................. 1
NO ................................................................. 2
REFUSED ......................................................... -7
DON'T KNOW .................................................... -8

Mental Health Treatment

Measures (Rx)

QA07_F27 During the past 12 months, did you take any prescription medications, such as an antidepressant or sedative, almost daily for two weeks or more, for an emotional or personal problem?

AJ5

YES ................................................................. 1
NO ................................................................. 2
REFUSED ......................................................... -7
DON'T KNOW .................................................... -0
Mental Health Treatment Findings

- Among those identified as having a mental health need, about half (49.6%) reported that they received treatment by either a primary care physician or mental health professional, while the other half (50.4%) reported that they did not receive needed treatment.

Mental Health Need by Treatment Source, CHIS 2007*

* Adjusted for age and sex

Source: Padilla-Frausto, Grant, Aguilar-Gaxiola, 2011
Discussion of CHIS Mental Health Findings

• Findings are preliminary and need further analysis

• In California, mental health status (as measured by SPD) differs by age, gender, income, insurance, and race/ethnicity and nativity, and other factors ... but
  
  o Serious psychological distress (PSD) is in large part a function of economic position
    • Latino immigrants
    • Single parents with children
  
  o Economic status is important, but just one of many factors associated with mental health outcomes

Source: Modified from Grant, 2011

Mental Health Need

• The concept of need is fundamental to understanding, planning and tracking mental health services in California.

• Those with a “mental health need” are those with serious psychological distress (K6 ≥ 13) and at least a moderate level of impairment in one or more domains (SDS ≥ 1).

• Those without a mental health need are all others who do not meet this threshold of combined symptoms and impairment
Prevalence of Mental Health Need by Race/Ethnicity, Adults 18 and over, CHIS 2007

Prevalence of Mental Health Need by Nativity Status for Latino and Asian, Adults 18 and over, CHIS 2007
Met and Unmet Need

• *Met need* is defined as the proportion of people with a disorder who see a health professional.

• The concept of *unmet need* is of critical importance in assessing whether or not people with mental health needs are accessing and receiving adequate mental health services.

• *Unmet need* is the proportion of people who meet a threshold for problems with their mental health, emotions, nerves, or use of alcohol or drugs and did not received *minimally adequate treatment* (MAT).

Minimally Adequate Treatment (MAT)

• *Minimally Adequate Treatment (MAT)* is based on evidence-based guidelines for the treatment of a serious mental illness (SMI).

• Evidence-based MAT includes either 1) four or more visits with a health professional and at least two months of prescribed medication, or 2) eight visits of psychotherapy lasting at least thirty minutes.

• CHIS doesn’t capture the duration of prescription medication use nor the duration of psychotherapy sessions.

Source: Andrews, 2000; Grant, Padilla-Frausto, Aydin, Streja, Aguilar-Gaxiola, Caldwell, 2011; Grant, Padilla-Frausto, Aydin, Streja, Aguilar-Gaxiola, Caldwell, 2011
Improving mental health in California’s increasingly diverse population will require diverse approaches and serious consideration of factors such as:

- Language
- Culture
- Stigma and discrimination
- Health insurance coverage
- Comprehensive resources to address economic and other sources of stressors:
  - Job training
  - Housing
  - Parenting and childcare resources
  - Other

Source: Modified from Grant, 2011
Discussion and Recommendation

- MHSA and healthcare reform provide new opportunities to address and improve mental health services and outcomes, and to do so more efficiently

- Data and evidence can and should be part of the decision-making process
  - CHIS
  - DMH and Medi-Cal administrative data
  - County data (CSI)
  - Hospitalization and law enforcement data
  - California Behavioral Health Services Needs Assessment

Recommendations for an Enhanced CHIS Mental Health Survey

Purpose: to obtain an accurate “Baseline” assessment of mental health services need and treatment utilization in California.

1. Incorporate a follow-back study to validate the estimates of SMI/SPD and calibrate the cut point of the K-6 in a state-wide population (rather than the national population).
   a. To be done with a random sample of CHIS respondents who scored moderate to high on the K6 scale (SPD) using a diagnostic interview tool like the WHO-CIDI.
Recommendations for an Enhanced CHIS Mental Health Survey (2)

2. Increase the CHIS sample size for low-income persons by oversampling households with incomes below 200% of the federal poverty level.
   a. A subset of randomly selected telephone numbers (stratified by region, gender, age, and race/ethnicity) from the Medi-Cal database would also be included in the enhanced survey.

3. Increase CHIS sample size for key subpopulations such as diverse race/ethnicity/nativity subpopulations, the institutionalized, the homeless, etc. CHIS is a household survey and does not capture the prevalence of mental health needs among those who live in group quarters (e.g. nursing homes, dormitories, residential treatment centers, prisons, etc.), or homeless.

Conclusion

• California policy makers, decision makers, consumers and their families, providers, researchers need to know:
  o Who needs (prevalence) and receives (current users) services?
  o How much of this need is met (met need) and how much need is unmet (unmet need)?
  o What are the gaps? What changes will the health system need to implement in order to improve access to and the quality and effectiveness of care?

• What should the service population look like?
Acknowledgements

David Grant, Ph.D.
Imelda Padilla-Frausto, MPH
May Aydin, Ph.D.
Leanne Streja, PhD
Julia Caldwell, MPH

Estelle Geraghty, MD, MS, MPH/CPH
Marbella Sala

UC Davis, Center for Reducing Health Disparities