National College Depression Partnership: Improving Disparities in Depression Treatment for Underrepresented Populations

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Agenda

- Brief Literature Review on Mental Health Treatment of some Underrepresented Groups
- Stigma and Mental Health Treatment
- Promise and Perils of Primary Care Screening for Depression
- NCDP Model and Data Review – Decreasing Disparity in Outcomes?
- Synthesis and Discussion – Cultural Competence and Measurement Based Approaches
Preponderance of Findings on Racial/Ethnic Minority Groups and MH Treatment

- Lower lifetime rates of psychiatric disorders
- Greater persistence of illness: lower rates of quality care; and later identification

- **Lower acceptance rates of outpatient MH treatment; lower acceptance of medication treatment; preference for counseling**

- **Greater attrition rates in MH treatment compared to Whites**

- Problem solving and cognitive therapies may have greater acceptance than psychodynamically oriented treatments

- Greater sensitivity to side effects of medication treatment
Preponderance of Sex (Gender) Issues in Mental Health

- Males are less likely to report depression/anxiety disorders but significantly greater alcohol misuse than females.
- Males are generally underrepresented in treatment; both primary care and mental health settings.
- Lower suicide attempts but significantly greater death rates by suicide than females.
- LGBT Students report significantly greater mental health needs; utilization rate of mental health services is not clearly established.
Risk Factors for Suicide in College Students

2000 NCHA analysis for those seriously considering suicide attempt

- 9.5% had seriously considered an attempt and 1.5% had attempted
- Over 90% had depressed mood several times in past year
- Issues of sexual identity, problematic relationships, being of self identified Asian background, and obesity were predictors
- <20% were receiving any treatment

Kisch et al, Suicide and Life Threatening Behavior 2005
Counseling Utilization by Ethnic Minority College Students

- 1997-1998 Study Design and Sample – 30% participation rate with oversampled minority students: yielded 1166 African, Asian, White and Latino American helpseeking students at 40 state supported universities counseling centers, OQ-45 at first and last therapy sessions

- Mean age 22.3 yrs, 66% females; 11.6% African Amer; 16% Asian Amer; 29.5% Latino Amer; 26% Caucasian Amer; 17.1% international; GPA similar, but demographics different, place of birth (50% non US)

- Majority of counselors female (64%) and White (79%)

- Overall; 57% were judged clinical cases (OQ-45 >63); 65% Asian; 60% Latinos; 55% African; and 51% White

Source: Kearney L et al, 2005
Counseling Utilization by Ethnic Minority College Students

- Results – no significant differences in outcome for total group from intake to termination

- Mean sessions (after intake) = 2.2 African American; Asian 1.9; Latino 1.6; White 3.5

- Summary – Racial Minority Students generally more severe symptoms, earlier termination, but generally no differences in clinical outcome; no effect seen for counselor matching (but likely insufficient power): Major limitations – no diagnostic specificity in this study

Source: Kearney L et al, 2005
Stigma concepts in Healthy Minds Study (Eisenberg, Downs, et al, 2007)

Public Stigma: Negative stereotypes and prejudice about mental illness held by the general population.

Perceived public stigma: An individual’s perceptions of public stigma.

Personal stigma: One’s own stigmatizing attitudes.
Socio-demographic differences

Higher perceived public stigma among:

- Male, compared with female students
- Students of color, compared with white students
- International students, compared with U.S. born students
- Students from lower income families
Stigma and help-seeking in HMS

Low perceived public stigma was associated with:

- Higher likelihood of perceiving a need for help \([1.18, p =0.05]\)

- But there was no association with actual use of therapy (counseling) or medication
Stigma and formal help-seeking

High Personal stigma was significantly associated with each measure of formal help-seeking:

- Lower perceived need for help
  \[0.67, \ p < 0.01\]
- Less use of psychotropic medication
  \[0.57, \ p < 0.01\]
- Less use counseling or therapy
  \[0.57, \ p < 0.01\]
Socio-demographic differences

Higher personal stigma among:

- Male, compared with female students
- Younger, compared with older students
- Asian students, compared with all other racial/ethnic groups
- International, compared with U.S. born students
- Heterosexual, compared with GLB students
- More religious students
Gap between perceived need and use of services

Among students with depression based on current PHQ-9 screen [n = 971].
Healthy Minds Study, 2007
Can we improve detection and access through Primary Care screening?
Pilot Depression Screening in PC at NYU – An Overview

- 3,713 consecutive students screened Jan – April 2006

- Two tiered approach used
  - 731 scored positive on PHQ-2
  - 6.0% scored in the clinically significant range ≥10

- Close to 50% of those with depression and significant symptoms were not in treatment; and when referred for treatment, only one third had engaged in treatment in the subsequent month
**PATIENT HEALTH QUESTIONNAIRE (PHQ-9)**

**NAME:** John Q. Sample  
**DATE:**

Over the last 2 weeks, how often have you been bothered by any of the following problems? (use “✓” to indicate your answer)

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td>0</td>
<td>1</td>
<td>✓</td>
</tr>
<tr>
<td>2. Feeling down, depressed, or hopeless</td>
<td>0</td>
<td>✓</td>
<td>2</td>
</tr>
<tr>
<td>3. Trouble falling or staying asleep, or sleeping too much</td>
<td>0</td>
<td>1</td>
<td>✓</td>
</tr>
<tr>
<td>4. Feeling tired or having little energy</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5. Poor appetite or overeating</td>
<td>0</td>
<td>✓</td>
<td>2</td>
</tr>
<tr>
<td>6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down</td>
<td>0</td>
<td>1</td>
<td>✓</td>
</tr>
<tr>
<td>7. Trouble concentrating on things, such as reading the newspaper or watching television</td>
<td>0</td>
<td>1</td>
<td>✓</td>
</tr>
<tr>
<td>8. Moving or speaking so slowly that other people could have noticed. Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual</td>
<td>✓</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9. Thoughts that you would be better off dead, or of hurting yourself in some way</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PHQ-9 SCORING CARD FOR SEVERITY DETERMINATION**

for healthcare professional use only

**Scoring—add up all checked boxes on PHQ-9**

For every ✓:  Not at all = 0; Several days = 1; More than half the days = 2; Nearly every day = 3

**Interpretation of Total Score**

<table>
<thead>
<tr>
<th>Total Score</th>
<th>Depression Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>Minimal depression</td>
</tr>
<tr>
<td>5-9</td>
<td>Mild depression</td>
</tr>
<tr>
<td>10-14</td>
<td>Moderate depression</td>
</tr>
<tr>
<td>15-19</td>
<td>Moderately severe depression</td>
</tr>
<tr>
<td>20-27</td>
<td>Severe depression</td>
</tr>
</tbody>
</table>

10. If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

- Not difficult at all
- Somewhat difficult
- Very difficult
- Extremely difficult

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Depressive symptomatology by sex

FIGURE 1. Rates of depressive symptomatology severity for males and females

<table>
<thead>
<tr>
<th>Symptomatology</th>
<th>Female (n = 574)</th>
<th>Male (n = 157)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe major depression (PHQ-9 = 20 - 27)</td>
<td>2.8%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Moderately severe major depression (PHQ-9 = 15 - 19)</td>
<td>7.7%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Moderate depressive symptoms (PHQ-9 = 10 - 14)</td>
<td>18.6%</td>
<td>23.6%</td>
</tr>
<tr>
<td>Mild depressive symptoms (PHQ-9 = 0 - 9)</td>
<td>70.9%</td>
<td>63.7%</td>
</tr>
</tbody>
</table>
Depression severity for 731 students administered full PHQ-9
Treatment status by Race/Ethnicity

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>In treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>API</td>
<td>47%</td>
</tr>
<tr>
<td>AA*</td>
<td>44%</td>
</tr>
<tr>
<td>H/L</td>
<td>39%</td>
</tr>
<tr>
<td>UN</td>
<td>46%</td>
</tr>
<tr>
<td>MR*</td>
<td>50%</td>
</tr>
<tr>
<td>WH</td>
<td>50%</td>
</tr>
</tbody>
</table>

*small sample size for AA & MR

~20% lower for Hispanic/Latina
## Table of Findings

<table>
<thead>
<tr>
<th>Significant Differences</th>
<th>PHQ-9 Severity</th>
<th>Treatment Engagement</th>
<th>Positive Referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>Multiracial &gt; CSD</td>
<td>Hispanic - Lower A.A. - Lower</td>
<td>No difference</td>
</tr>
<tr>
<td></td>
<td>Hispanic &gt; CSD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>Males &gt; severe</td>
<td>No difference</td>
<td>No difference</td>
</tr>
</tbody>
</table>

### Depression and role impairment among adolescents (13-21) in primary care clinics (YPICS)

#### Results of logistic regression analyses predicting to impairment variables

<table>
<thead>
<tr>
<th></th>
<th>Educational Attainment</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>OR [95% CI]</td>
<td>P Value</td>
</tr>
<tr>
<td>Probable depression only</td>
<td></td>
<td>1.47</td>
<td>0.001</td>
</tr>
<tr>
<td>CES-D only</td>
<td></td>
<td>1.74</td>
<td>0.001</td>
</tr>
<tr>
<td>Medical condition only</td>
<td></td>
<td>1.05</td>
<td>0.644</td>
</tr>
<tr>
<td>Combined model: Probable depressive disorder and medical condition entered simultaneously</td>
<td>Depression</td>
<td>1.47</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Medical condition</td>
<td>0.99</td>
<td>0.984</td>
</tr>
<tr>
<td>Combined model: CES-D depressive symptoms and medical condition entered simultaneously</td>
<td>CES-D</td>
<td>1.75</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Medical condition</td>
<td>.97</td>
<td>0.787</td>
</tr>
</tbody>
</table>

**Source:** Journal of Adolescent Health 37 (2005) 477-483 / Authors: Joan Rosenbaum Asarnow, PhD et al.
Summary

1. Newly Identified Cases via Screening in just 4 months = 115

2. Disparities = yes, with high level of specificity
   - Hispanic students had BOTH higher rates of CSD and lower rates of treatment
   - Males have higher rates of severe depressive Sx

3. Illustrates the power of outcomes-based system analysis
NCDP Model and Progress Review: Focus on Racial/Ethnic Diversity
What is the National College Depression Partnership?

- Quality Improvement Training & Development program for clinicians (counseling, primary care, health promotion, etc.) using the collaborative care model and shared learning approach

- Maximizes existing health resources for evidence-based processes of care including:
  - depression screening in primary care,
  - measurement and outcomes based in medical and counseling settings,
  - development of a safety net and focused on student function and academic engagement

- Yearlong intensive coaching and faculty facilitation
Time for a Community Health Approach to Depression

- Detection and screening in high prevalence populations (e.g., those seeking clinical health care)
- Multiple portals of entry for evidence based treatment which allow for patient preference
- Tracking of individual patients to maximize evidence based care and monitoring outcomes at individual level and group level
- Quantifiable Collaboration at Services and Community Levels
- Measurement is Key to assess quality and outcomes
NCDP CAN Collaborators

- Baruch College of The City of New York*
- Case Western Reserve University*
- Colorado State University
- Evergreen State College
- Finger Lakes Community College
- Louisiana State University
- Michigan State University
- New York University*
- Penn State - Altoona
- Rio Hondo College
- Saint Lawrence University*
- Sarah Lawrence College
- School of the Art Institute of Chicago
- Texas Christian University
- University of Missouri
- University of Nevada, Las Vegas
- Wagner College
- West Valley College
CBS-D and NCDP Alumni Colleges/Universities

- Bowling Green State University
- Columbia University
- Cornell University*
- Hunter College/CUNY*
- Louisiana State University
- Northeastern University*
- Tufts University
- Princeton University*
- Rensselaer Polytechnic Institute
- Skidmore College
- The New School
- University of Arizona
- University of California, Los Angeles
Chronic Care (Collaborative) Model

Community Resources and Policies

Health System Health Care Organization

Self Management Support
Delivery System Design
Decision Support
Clinical Information Systems

Informed, Activated Patient
Prepared, Proactive Practice Team

Productive Interactions

Functional and Clinical Outcomes

Source: Wagner, 1996
Key Elements of Collaborative Care Model of NCDP

- Screening in Primary care
  - Improved Detection among groups that typically underutilize mental health services

- Early initiation of treatment
  - Decrease symptoms since students may be more severe on presentation

- Care management
  - Decrease higher treatment dropout rates
  - Attempt efforts at psychoeducation and self management
  - Follow high risk treatment drop outs

- COMMUNITY ENGAGEMENT
## PHQ - 9 Symptom Checklist

**Over the last 2 weeks, how often have you been bothered by the following problems?**

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Not at all (0)</th>
<th>Several days (1)</th>
<th>More than half the days (2)</th>
<th>Nearly every day (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Little interest or pleasure in doing things</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>b. Feeling down, depressed, or hopeless</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Trouble falling or staying asleep, or sleeping too much</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>d. Feeling tired or having little energy</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>e. Poor appetite or overeating</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Feeling bad about yourself, or that you are a failure</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>g. Trouble concentrating on things, such as reading</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>h. Moving or speaking so slowly</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Thoughts that you would be better off dead</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subtotals: 3</th>
<th>4</th>
<th>9</th>
</tr>
</thead>
</table>

**TOTAL:** 16
## Process Measures and Outcomes

<table>
<thead>
<tr>
<th>Measure</th>
<th>Pre-set Goal</th>
<th>% of Sites Meeting Goal (n = 20)</th>
<th>Aggregate NCDP Performance (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Initiation</td>
<td>60%</td>
<td>90%</td>
<td>94.6% (1981)</td>
</tr>
<tr>
<td>Follow up PHQ-9 Reassessment</td>
<td>80%</td>
<td>15%</td>
<td>53.7% (1981)</td>
</tr>
<tr>
<td>Documented Self-management Goal</td>
<td>60%</td>
<td>50%</td>
<td>45.2% (1606)</td>
</tr>
</tbody>
</table>

*based on APA dataset, Duffy et al., 2008
## Treatment Outcomes I

<table>
<thead>
<tr>
<th>Outcome Description</th>
<th>Pre-set Goal</th>
<th>% of Sites Meeting Goal (n = 20)</th>
<th>NCDP Aggregate Performance (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Treatment Response at 8 weeks (PHQ 5 pt. reduction)</td>
<td>40%</td>
<td>60%</td>
<td>42.1% (n=1510)</td>
</tr>
<tr>
<td>Improved Function - “none or somewhat difficult”</td>
<td>40%</td>
<td>75%</td>
<td>49.9% (n=1168)</td>
</tr>
<tr>
<td>Partial Remission (PHQ-9 &lt;=9)</td>
<td>40%</td>
<td>65%</td>
<td>39.5% (n=1168)</td>
</tr>
</tbody>
</table>
## Sex Differences

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n=421)</td>
<td>(n=888)</td>
</tr>
<tr>
<td>Treatment Initiation at 4 weeks</td>
<td>94.3 %</td>
<td>92.79%</td>
</tr>
<tr>
<td>Follow up @ 4 Weeks</td>
<td>47.27%</td>
<td>50.34%</td>
</tr>
<tr>
<td>5 pt reduction</td>
<td>36.34%</td>
<td>40.65%</td>
</tr>
<tr>
<td>Baseline PHQ-9</td>
<td>16.68</td>
<td>16.79</td>
</tr>
</tbody>
</table>
## Process Measures by Race/Ethnicity

<table>
<thead>
<tr>
<th></th>
<th>% Follow up @ 4 weeks</th>
<th>% At least 1 follow-up PHQ-9 (no specified time frame)</th>
<th>% Self Management Goal by 8 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>All (n=1773)</td>
<td>55%</td>
<td>66%</td>
<td>45%</td>
</tr>
<tr>
<td>Male (n=544)</td>
<td>52%</td>
<td>66%</td>
<td>45%</td>
</tr>
<tr>
<td>Female (n=1229)</td>
<td>56%</td>
<td>67%</td>
<td>44%</td>
</tr>
<tr>
<td>A.A./Black (n=112)</td>
<td>58%</td>
<td>81%</td>
<td>42%</td>
</tr>
<tr>
<td>Asian/Pacific Islander (n=167)</td>
<td>55%</td>
<td>67%</td>
<td>61%</td>
</tr>
<tr>
<td>Hispanic/Latino (n=103)</td>
<td>61%</td>
<td>78%</td>
<td>68%</td>
</tr>
<tr>
<td>Multiracial total (n=33)</td>
<td>64%</td>
<td>76%</td>
<td>55%</td>
</tr>
<tr>
<td>Native American/AK native</td>
<td>73%</td>
<td>91%</td>
<td>91%</td>
</tr>
<tr>
<td>Other total (n=51)</td>
<td>59%</td>
<td>69%</td>
<td>43%</td>
</tr>
<tr>
<td>White total (n=1133)</td>
<td>53%</td>
<td>69%</td>
<td>45%</td>
</tr>
<tr>
<td>Unknown total (n=159)</td>
<td>59%</td>
<td>77%</td>
<td>36%</td>
</tr>
</tbody>
</table>

*Data from 15/20 sites though Aug 2009*
Transformation of Health Care at the Front Line

- Quality Measurement tied to resources
- Health Information Technology
- Comparative Effectiveness (Decision Support)
- Quality Improvement Collaboratives and Learning Networks
- Clinician Training - practice based learning and systems based practice

Source: Conway and Clancy, JAMA, 2009
Does Collab Model in mental health come at the Expense of Cultural Competence/Sensitivity?

- **Concern:** Does the Collaborative Care Model not account for patient individuality?

1. Offers more choice and honors student preference

- **Concern:** Does measurement create an unintended barrier to exploration of cultural factors?

2. Setting goals in a short term treatment enhances alliance if the effort is collaborative in nature
Summary

- The Collaborative Care Model addresses several key barriers for underrepresented groups who might not enter counseling on their own.
- Patient preference can be more easily honored especially if there is followup and measurement.
- Care management assists the therapy in between appointments and assures follow up.
- Collaboration between medical and counseling systems are integral. Cultural competence is important but it is nested within a systematic treatment framework.
NCDP
Collaborative Action Network

For information and application
www.nyu.edu/ncdp