Setting a Course for Rural Research: Implications for Training and Practice

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Community Mental Health Centers Act of 1963 defined catchment areas and assumed rural persons would travel to urban hubs for services.
Definitional Problems

1. Rurality is a multidimensional variable so it defies categorization.
2. Definitions fail to account for economic base, values, or perceptions of rural inhabitants.
3. No theory of rural has been used to guide development of definitions.
Mental Health Help-Seeking

- Rural persons are at no less risk than urban persons, but are much less likely to be diagnosed, treated, or treated effectively.
- Rural and African Americans seek care, later, somaticize symptoms, and are reluctant to participate in prevention and support activities.
- Mental Health problems are typically viewed as the domain of family and church.
Rural De Facto Mental Health Services Model
Barker and Gump’s Manning Theory - 1964

- In larger behavior settings more opportunities exist for engagement, but the average person participates in fewer activities.
- In smaller settings with limited staffing, there are more opportunities for marginalized persons.
Effects of Geographic Migrations on Service Needs

- Psychiatric admission rates are highly variable from location to location.
- Studies of geographic movement and need for services, while common in Europe, are rare in the US.
Two Competing Theories to explain low SES – MI Associations

- Social Drift – Persons with mental illness become low SES as a result of impairments
- Social Decay – Persons become mentally ill due to the stress of living in poverty
- Both theories have empirical support
## Migration of State Hospital Patients by County Rural-Urban Typology Code, Virginia, 1978-92

<table>
<thead>
<tr>
<th>Rural-urban county type</th>
<th># of Counties</th>
<th># State hospitals</th>
<th>Percent rural$^a$</th>
<th>Percent in poverty$^b$</th>
<th>Est SMI prevalence$^c$</th>
<th>Net patient change$^d$</th>
<th>Relative patient change$^e$</th>
<th>Relative population change$^f$</th>
<th>Relative prevalence change$^g$</th>
</tr>
</thead>
<tbody>
<tr>
<td>All counties</td>
<td>136</td>
<td>8</td>
<td>30.1</td>
<td>10.3</td>
<td>6.0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0 Core metro</td>
<td>21</td>
<td>2</td>
<td>5.1</td>
<td>7.8</td>
<td>6.5</td>
<td>-355</td>
<td>-7.7%</td>
<td>9.6</td>
<td>-17%</td>
</tr>
<tr>
<td>1 Fringe metro</td>
<td>10</td>
<td>0</td>
<td>64.4</td>
<td>5.8</td>
<td>5.7</td>
<td>-115</td>
<td>-27.0%</td>
<td>21.9</td>
<td>-49%</td>
</tr>
<tr>
<td>2 Medium metro</td>
<td>16</td>
<td>1</td>
<td>23.5</td>
<td>10.5</td>
<td>6.3</td>
<td>253</td>
<td>15.1%</td>
<td>-4.0</td>
<td>19%</td>
</tr>
<tr>
<td>3 Lesser metro</td>
<td>15</td>
<td>2</td>
<td>37.2</td>
<td>11.9</td>
<td>5.5</td>
<td>78</td>
<td>4.8%</td>
<td>-11.1</td>
<td>16%</td>
</tr>
<tr>
<td>4 Adjacent SMSA</td>
<td>9</td>
<td>1</td>
<td>49.5</td>
<td>13.0</td>
<td>5.8</td>
<td>243</td>
<td>31.0%</td>
<td>-6.9</td>
<td>38%</td>
</tr>
<tr>
<td>5 Non adj SMSA</td>
<td>2</td>
<td>0</td>
<td>60.8</td>
<td>11.4</td>
<td>5.9</td>
<td>-9</td>
<td>-9.1%</td>
<td>-4.1</td>
<td>-5%</td>
</tr>
<tr>
<td>6 Small adj SMSA</td>
<td>21</td>
<td>2</td>
<td>70.1</td>
<td>14.3</td>
<td>4.9</td>
<td>109</td>
<td>11.8%</td>
<td>-12.5</td>
<td>24%</td>
</tr>
<tr>
<td>7 Small non adj SMSA</td>
<td>10</td>
<td>0</td>
<td>74.5</td>
<td>18.1</td>
<td>4.9</td>
<td>-56</td>
<td>-8.0%</td>
<td>-15.6</td>
<td>8%</td>
</tr>
<tr>
<td>8 Thin adj SMSA</td>
<td>18</td>
<td>0</td>
<td>99.8</td>
<td>15.0</td>
<td>4.8</td>
<td>-59</td>
<td>-15.2%</td>
<td>-8.4</td>
<td>-7%</td>
</tr>
<tr>
<td>9 Thin non adj SMSA</td>
<td>14</td>
<td>0</td>
<td>100.0</td>
<td>19.3</td>
<td>4.8</td>
<td>-89</td>
<td>-19.4%</td>
<td>-18.2</td>
<td>-1%</td>
</tr>
</tbody>
</table>

$^a$Percent of population in communities less than 2,500 persons from 1990 census.

$^b$Percent of population below poverty, 1989 from 1990 census.

$^c$Estimate of persons with serious mental illness per 100 population 18 and older, from Kessler et al. (1997).

$^d$Net change in patient count 1978–92 based on comparison of county of residence at first and last admissions among total of 11,725 persons with three or more admission.

$^e$Relative rate of change in patient study population 1978–92 $[\text{end}%-\text{start} %)/\text{start} % * 100]$.

$^f$Relative rate of change in proportion of general population 18 and older 1980–90 $[\text{end}%-\text{start} %)/\text{start} % * 100]$.

$^g$Patient rate of change minus population rate of change.
Why are there no rural clinical psychologists?

- Doctoral programs have become increasingly specialized.
- Generalists are needed in rural areas to deal with a diverse client base presenting with a wide variety of problems (Hargrove, 1991).
- Psychologists in rural areas are quickly diverted from direct service to administrative roles.
Most services are in the public sector which may result in lower compensation.

Rural areas may have fewer professional supports.

Dual relationships with clients can be difficult to negotiate.

Rural professionals experience high rates of burn-out (65% medium to high on the MBI - Kee et al., 2002).

Low demand for psychologists in rural settings.

Few generalist PhD programs to provide training for rural practice.
President’s New Freedom Commission

- GOAL 1 Americans Understand that Mental Health Is Essential to Overall Health.
- GOAL 2 Mental Health Care Is Consumer and Family Driven.
- GOAL 3 Disparities in Mental Health Services Are Eliminated.
- GOAL 4 Early Mental Health Screening, Assessment, and Referral to Services Are Common Practice.
- GOAL 5 Excellent Mental Health Care Is Delivered and Research Is Accelerated.
- GOAL 6 Technology Is Used to Access Mental Health Care and Information.
NIMH Organization

- Division of Services and Intervention Research
- Division of Adult Translational Research and Treatment Development
- Division of Developmental Translational Research
- Division of AIDS Research
- Division of Neuroscience & Basic Behavioral Science
Division of Services & Intervention Research

- Services Research and Clinical Epidemiology Branch
- Treatment and Preventive Interventions Branch
- Clinical Trials Operations Unit
- Training Programs
- SBIR
Services Research at NIMH

- Consistent with Strategic Plan
- Consistent with the Division of Services and Interventions Research
- Research to establish effectiveness of interventions, optimal access, quality, & outcomes of MH services
Priority Areas for Services Research

- Improve access, quality, & outcomes of care
- Economics of mental health care
- Reduce mental health disparities
- Enhance capacity for services research
- Clinical epidemiology
- Dissemination and implementation of EBP/EST
NIMH Strategic Objectives

- #1: Promote Discovery in the Brain & Behavioral Sciences to Fuel Research on Causes of Mental Disorders
- #2: Chart Mental Illness Trajectories to Determine When, Where, and How to Intervene
- #3: Develop New & Better Interventions for Mental Disorders that Incorporate the Diverse Needs and Circumstances of People with Mental Illness
- #4: Strengthen the Public Health Impact of NIMH-Supported Research
Strategic Objective #3

- Develop New and Better Interventions that Incorporate the Diverse Needs and Circumstances of People with Mental Illnesses

We will improve existing approaches and devise new ones for the prevention, treatment, and cure of mental illness, allowing those who may suffer from these disorders to live full and productive lives.
SO3 Goals

- SO 3.1: Further develop innovative interventions and designs for intervention studies

- SO 3.2: Expand and deepen personalized intervention research

- SO 3.3: Strengthen the application of mental health interventions in diverse care settings by examining community and intervention delivery approaches and how they may affect intervention outcomes

- SO 3.4: Identify and systematically study elements of personalized mental health care
SO 3.3: Connection to service systems

- Partnership for recruitment process
- Deliver interventions in public MH settings
- Data capture through Health IT
- Intervention Delivery through IT?
- Understand Adoption vs. Adaptation
- Plan implementation on front-end
Strategic Objective #4
Strengthen the Public Health Impact of NIMH-Supported Research

Through research, evaluation, and collaboration, to help close the gap between the development of new, research-tested interventions and their widespread use by those most in need.
SO4 Sub-Objectives

- **SO 4.1**: Improve understanding of the factors that affect access to service, quality & cost of services, & the means by which newly discovered effective MH interventions are disseminated & implemented.

- **SO 4.2**: Improve research & dissemination activities through monitoring and evaluation

- **SO 4.3**: Strengthen partnerships between NIMH and its stakeholder groups.

- **SO 4.4**: Strengthen NIMH’s relationships with other Federal agencies that address mental health issues
Leveraging Healthcare Network to Transform Effectiveness Research

- Develop efficient methods to conduct large-scale studies of the effectiveness of treatment, preventive, & services interventions
- Emphasis on IT infrastructure
- Locate within General Healthcare Systems
- Improve ability to identify, recruit, enroll consumers/providers in research studies
- Improve efficiency & quality of effectiveness & services research
Next Steps

- Development of new generalist clinical programs for rural service
- Examine demand side as well as supply side
- Social Marketing for acceptability and effectiveness of treatment
Improving Methods & Measurement

- Valid, actionable measures
- Valid, useful indicators of value of services
- QOC measures at individual, org and system levels
- Innovative sampling strategies, surveys, non-experimental study designs
Use of Existing Data

- Administrative data for assessing policy impact (State Policy Labs)

- Clinical data to increase involvement in research (Leveraging Health Care Networks)

- How can epidemiologic data identify needs, prioritize services initiatives?