Psychogeriatric outreach to rural families: the Iowa and Virginia models

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Psychogeriatric Outreach To Rural Families: The Iowa and Virginia Models

Ivo L. Abraham, Kathleen Coen Buckwalter, Diane G. Snustad, Dianne E. Smullen, Anita A. Thompson-Heisterman, Jane Bryant Neese, and Marianne Smith

ABSTRACT. Elderly residents of rural areas are at significant risk for mental health problems, yet have less access to mental health services. Thus, most mental health problems among rural elderly remain either undiagnosed or untreated. We describe two models of mental health outreach programs to rural elderly in Iowa and Virginia, serving demographically, culturally, and epidemiologically different populations in geographically and economically dissimilar regions. Programs are compared on the basis of initiation, community partnerships, target population, target region, clinical disciplines involved, coordinating discipline, referral sources, operational model, initial home assessment, care planning, sustainability, cost, patient demographics, and primary and secondary diagnoses. Outreach programs are argued to be effective models of delivering services to geographically and/or socially isolated elderly populations. The experiences of our programs, though limited to rural populations, may be of relevance to any outreach program attempting to serve elderly presenting with or at risk for mental health problems.

The romanticized vision of tranquility and prosperity that many associate with life in the vast rural areas of the United States may be the privilege of only a few rural residents. About 25% of Americans live in rural areas of the country, yet they constitute 40% of this nation’s poor, with statistics being even higher for minority populations (Buckwalter et al., 1988). For many residents of rural areas, the daily reality is one of deprivation and impoverishment, inadequate housing, inaccessible, or unavailable health and human services, unaddressed health problems, and economic and social isolation (Coward & Lee, 1985). This is particularly the case for rural elderly, placing them at significant risk for physical and mental health problems while compromising them because of the insufficiency of health services.
Mental health problems among the elderly are an underrecognized problem in rural communities. As the President’s Commission on Mental Health (1978) noted, “rural communities tend to be characterized by higher than average rates of psychiatric disorders, particularly depression, by severe intergenerational conflicts, by an exodus of individuals who might serve as effective role models for coping, by an acceptance of fatalistic attitudes and minimal subscription to the idea that change is possible” (p. 1164). Coupled with the (often fierce) sense of self-determination and independence characteristic of many rural Americans, and the pronounced stigmata associated with mental illness, it is safe to say that most mental health problems among rural residents remain undiagnosed and untreated.

Data about the prevalence of psychiatric symptomatology and illness among rural elderly vary, but nonetheless underscore the intensity of a problem that covers the full range of major psychiatric diagnostic categories. According to earlier studies, between 12% and 23% of rural elderly are at risk for mental disorders (Scheidt & Windley, 1982), and up to 25% of rural elderly have significant mental health problems to warrant psychiatric intervention (Rosen et al., 1981). A more recent study found that 56% of rural elderly had serious mental health problems as compared to 24% of urban elderly (Wagenfeld et al., 1988). The variability in rates may be due to differences in operational definitions from one study to another. Even though alcohol abuse or dependence tends to decrease with age, alcohol-related problems are more prevalent in rural areas, especially in the South (Blazer et al., 1985; Blazer et al., 1987). Cognitive disorders have been found to be more common in rural populations (Blazer et al., 1985). Rural elderly admitted to acute care hospitals have longer lengths of stay (Deprez et al., 1987), and those residing in long-term care facilities tend to be younger and more functional than their urban counterparts (Greene, 1984). Even though the need for services is high among rural elderly, service utilization is low. Only between 1% (Scheidt & Windley, 1982) and 7% (Kermis, 1987) of rural elderly use mental health services. This may be due in part to the fact that rural residents are more likely to be without a regular source of health care and without medical insurance than urban residents (Norton & McManus, 1989), and in part to the mere reality that (mental) health services are inequitably distributed in rural as compared to urban/metropolitan areas (Abraham & Neese, in press; Hart et al., 1991).

In addition to primary mental health problems, there are also the issues of comorbidity and severity of illness. For instance, Waltz, Craft, and Walters (1987) reported physical illness comorbidity in 47.7% of chronically mentally ill older adults in Iowa. Because few rural elderly with mental health problems have access to or utilize professional services, those who do enter the mental health system do so more ill, impaired, and disabled than if more timely intervention would have been possible. The mental health issues of rural elderly, then, are best conceptualized within Cohen’s (1989) four models or paradigms of interrelated effects between physical and mental health: (1) effects of severe psychological stress on physical health; (2) effects of physical disorder leading to psychiatric disorder; (3) interplay of coexisting physical and mental disorders; and (4) impact of psychosocial factors on the clinical course of physical health problems.

This paper compares two model outreach programs, serving demographically,
culturally, and epidemiologically different populations, and geographically and economically dissimilar rural regions. Outreach programs have been suggested as effective approaches to health service delivery to underserved elderly, because of the dual problem of insufficiency of services and those people most at risk not presenting themselves at the services that do exist (Jamieson et al., 1989; Raschko, 1985; Reifler et al., 1982; Toseland et al., 1979; Wasson et al., 1984; Yedidia, 1990). Outreach models also address concerns expressed by Palmer and Cunningham (1983), who emphasized the need for coordination and cooperation among mental health, medical, and social service providers; maximizing limited resources; assuring continuity of care; and using professional, paraprofessional, and lay personnel.

COMPARISON OF THE IOWA AND VIRGINIA MODELS

The Iowa program was initiated in 1986 in the east-central counties of Linn and Jones, with the city of Cedar Rapids serving as the central location. The Virginia program was started in 1990 and was built in part upon the experiences of the Iowa program. This program serves the five-county Jefferson area surrounding the city of Charlottesville (Albemarle, Greene, Louisa, Nelson, and Fluvanna). While serving distinctly different populations in a geographically different region through a different program, the Virginia program does share several similarities with the Iowa program. These similarities, we speculate, might be common characteristics of effective programs. In contrast, the dissimilarities come from a sensitivity to local differences in population (education, socioeconomic status, race, sociocultural status), geography, service infrastructure, and epidemiology. Together, both programs might be replicable models of community-based mental health care for rural elderly in midwestern and southern regions. Table 1 summarizes the Iowa and Virginia models along several program characteristics. We highlight here some similarities and differences to complement the information provided in this table.

Both programs are community partnerships involving the local area agency on aging and the community mental health system, with the Virginia program also involving the University of Virginia as a formal partner. Both programs were initiated through grant funding, which is still active for the more recent Virginia program, but which has expired for the Iowa program. The latter, however, has since been formally embedded in the community’s elder health services infrastructure, a goal being pursued in Virginia, as well. While the demographics of east-central Iowa are very homogeneous, Virginia presents with great racial (African-American), cultural (white Appalachian), and economic (chronic poverty) diversity. Similarly, while the Iowa program serves a geographically consistent and accessible area (barring inclement weather), the Virginia program extends from the flatness of the Piedmont plateau to the peaks and hollows of the Blue Ridge Mountains, throughout an area that includes many roads in poor condition and many inaccessible homes. Prior to implementing the outreach programs in both Iowa and Virginia, access and utilization of mental health services by rural elderly was limited and disproportionate to the need. In Virginia this was particularly true for the racial and sociocultural subgroups living in the target region (African-Americans, socioculturally different
### Table 1. Comparison of Outreach Models

<table>
<thead>
<tr>
<th></th>
<th>Iowa</th>
<th>Virginia</th>
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<tbody>
<tr>
<td><strong>Community partnerships</strong></td>
<td>University, area agency on aging, and community mental health agency.</td>
<td>University, area agency on aging, and community mental health agency.</td>
</tr>
<tr>
<td><strong>Target population</strong></td>
<td>Rural elderly age ≥ 55; racially and culturally homogenous; noninstitutionalized unless potential for community outplacement.</td>
<td>Rural elderly age ≥ 60 (or &lt; 60 if functional or cognitive impairments); racially and culturally heterogeneous; noninstitutionalized.</td>
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<tr>
<td><strong>Target region</strong></td>
<td>2-county, 1300 -square mile region; topographically consistent. Total population of 190,000.</td>
<td>5-county, 2200-square mile region; topographically diverse from Piedmont plateau to Blue Ridge Mountains. Total population of 123,000.</td>
</tr>
<tr>
<td><strong>Clinical disciplines involved</strong></td>
<td>Nursing, psychiatry, social work.</td>
<td>Nursing, psychiatry, geriatrics, social work, lay volunteers.</td>
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<tr>
<td><strong>Coordinating discipline</strong></td>
<td>Nursing.</td>
<td>Nursing.</td>
</tr>
<tr>
<td><strong>Referral sources</strong></td>
<td>On-site psychosocial screening at community settings (e.g., clinics, churches, congregate meal sites); interagency case management network involving health department community action agency, area substance abuse council, family practice center, and social services department; gatekeepers, such as carriers, veterinarians, sheriff’s department, extension service, utility workers, and farm implement and grain dealers; mental health outreach specialists assigned to community agencies; hospital discharge planners.</td>
<td>Area agency on aging, community mental health center, social services departments, health department, private physicians, consumer advocacy groups, families, neighbors, home health agencies, hospital discharge planners, university outpatient clinics, self. Intend to expand to include community-based psychosocial screening, gatekeepers, church and civic organizations, EMS, and law enforcement.</td>
</tr>
<tr>
<td><strong>Operational model</strong></td>
<td>Centralized &quot;hub-and spoke&quot; home assessment, in-home services, and case management.</td>
<td>Decentralized &quot;concentric circles&quot; home assessment, in-home services, and case management.</td>
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<td><strong>Initial home assessment</strong></td>
<td>Comprehensive mental health social support network, economic status, stressors, functional status and self-care, interpersonal relationships, ability to remain in community, general physical health. Performed by either nurse or social worker.</td>
<td>Psychogeriatric nursing assessment, including demographics, functional status and self-care, medical history, cognition, mood, home environment, caregiver and family, social support and social functioning, substance abuse, and behavioral issues; financial and social benefits information; quality of life; general physical health. Performed by nurse.</td>
</tr>
<tr>
<td><strong>Care planning</strong></td>
<td>Through clinical staff meeting held every other week. Attended by all clinical disciplines involved. Focus on assessment, identification of additional</td>
<td>Through clinical staff meetings held every other week. Attended by all clinical disciplines involved, as well as occasional community representatives.</td>
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Table 1. (continued)

<table>
<thead>
<tr>
<th>Iowa</th>
<th>Virginia</th>
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<tr>
<td>diagnostic work, diagnosis, discussion of therapeutic issues and modalities, and care planning.</td>
<td>of specific case discussion. Focus on assessment, identification of additional diagnostic work, diagnosis, discussion of therapeutic issues and treatment modalities, and care planning.</td>
</tr>
<tr>
<td><strong>Sustainability</strong></td>
<td>Funding assured until 1994, however with downsloping grant budget to force community integration.</td>
</tr>
<tr>
<td>Since 1989 fully integrated into service delivery structure of community mental health center. Sliding fee scale and third party payers.</td>
<td></td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td>Not yet available.</td>
</tr>
<tr>
<td>$622.29 per patient per year.</td>
<td></td>
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<tr>
<td><strong>Patient demographics</strong></td>
<td></td>
</tr>
<tr>
<td>Female 71.0%; male 29.0%.</td>
<td>Female 67.2%; male 32.8%.</td>
</tr>
<tr>
<td>White 98%; minority 2%.</td>
<td>White 64.2%; minority 35.8%.</td>
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from residents of the Piedmont plateau area and those living in the Appalachian part of the region), as well as for white Appalachians of predominantly English-Scottish descent. The population density of the target area of the Iowa program is approximately 146 per square mile. The Virginia program serves a target region with a population density of about 56 per square mile.

Nursing assumes a pivotal position in both programs, coordinating the input and activities of other disciplines involved in the respective clinical staffs. In the Iowa program, outreach visits are done by either nurses or social workers, while in the Virginia model nurses make the visits (accompanied on some occasions by physicians when medically indicated). In both programs, outreach workers report back to a multidisciplinary team. Remarkably, both programs have had limited difficulties in building effective multidisciplinary programs, perhaps mostly because both emphasized a client-oriented approach to collaboration, rather than a focus on the various providers. Both programs also recognize the critical role of nursing as providing both a health and a social service in designing and implementing effective models of home-based care of the elderly. In addition, nursing can bring home-based problems to the multidisciplinary discussion table. Buckwalter et al. (in press) point out that nurses appear acceptable to rural elderly because of the historical role of visiting nurses in rural areas, and the fact that many people do not associate nursing with the stigmata of welfare or mental illness.

Close working relationships and trust among physicians, nurses, and other health professionals are essential for the optimal functioning of rural mental health outreach programs. Because physical illness can both mimic and cause psychiatric illness, and vice versa, both the Iowa and Virginia programs involve physicians. The Iowa team includes a psychiatrist, while the Virginia team includes both a geriatrician and a psychiatrist. The multidisciplinary team approach common to both programs is necessary given the complexity of biological, psychological, and social problems with which clients and families present.

In terms of client referral, the Iowa program has developed an innovative, broad referral system of formal and informal sources, something to which the Virginia program is only aspiring as yet. The strong coordination among formal organiza-
tions in Iowa attests to the prior collaborative relationships within the target region. In contrast, little prior collaboration existed within the Jefferson area, thus making the outreach program a visible focal point for community integration efforts related to multiagency mental health care for rural elderly.

Because of demographic, epidemiological, and geographic differences, both programs vary in their basic operational model. The Iowa model can be likened to a hub-and-spoke model in which the multidisciplinary team reaches out from a centralized location (the community mental health center), and works within a larger service delivery infrastructure centered primarily in Cedar Rapids. This infrastructure involves various community agencies, an interagency case management referral network, and community workers such as visiting nurses, meal site managers, and community action agency workers. Links to the informal network of assistance include church members, neighbors, family members, and other volunteers. In contrast, the Virginia model is more decentralized and can be summarized as a concentric circles model of multiple layers of informal and formal resources and services. Because of the insufficient availability of (even essential) services, the Virginia model has to actively rely on informal community-based resources. Thus, the inner concentric circles of help include family members, friends, and neighbors. The next layer includes community and church volunteers and community-based services such as congregate meal sites. This is followed by the layer consisting of local primary care providers, such as private physicians, nurse practitioners, health department clinics, and rural health clinics, as well as formal community resources associated with the area agency on aging and the community mental health center. The centralized resources of the Charlottesville area and those of the University of Virginia constitute the peripheral circles. Critical to the Virginia model is that higher layers are activated only when the situation truly warrants intervention.

The services provided by both programs share a focus on in-home assessment and subsequent case management centered on client as well as family — the latter often being multigenerational (several generations living together), or transgenerational (generations living together but with one generation absent), rather than nuclear. Also, they share a highly individualized approach to delivering care, in which client and family needs shape the care that is provided. Thus, there is little standardization of services, as both programs emphasize highly individualized care. This care includes comprehensive assessments in the home, and both programs collect roughly the same information: demographic, referral data, functional status, mental status, mood, cognition, financial and benefits data, key medical data, caregiver and family information, and knowledge about community resources. Standardized measures for use with the elderly are included as part of the assessments as much as possible. In multidisciplinary team meetings, the need for additional diagnostic work is discussed, care plans are developed, and treatment and management strategies are determined. New referrals are presented as well. While the Iowa program strives for short-term involvement by the outreach team, nurses in the Virginia program often engage in care relationships of a longer duration.

The problem with grant-supported services is that they often cease when the funding ends. Sustainability is a dual matter of integrating into a formal service
delivery structure and assuring revenue. In 1989, the Iowa outreach program was absorbed into the services of the local community mental health center, becoming the focal point of the new Elderly Services Division. The services are covered by a sliding fee scale and third party payments. The cost per client per year for the Iowa program is substantially lower than that reported by a local group of mental health providers. The Virginia program aspires to a similar solution. Virginia’s grant support is on a downsloping budget to encourage a gradual transition of the program to self-supported status.

While both programs served roughly similar percentages of women and men, the demographics and socioeconomics of the Jefferson area dictate that the Virginia program assists a significantly greater number of minorities (mostly African-Americans, with some native Americans). Figure 1 depicts the types of mental health problems addressed as either primary or secondary diagnosis and shows the similarity between programs in terms of their case mixes. The majority of diagnoses in both programs fall in the categories of mood disorders, dementia/Alzheimer’s, and coping/adjustment disorder. The latter category consists mainly of clients trying to cope with and adjust to physical/chronic illness or to various psychosocial aspects of aging. The high proportions for these three categories are an indication of the epidemiological need, at least insofar as certain (mental) health conditions necessitate that older adults and their families seek help. The relatively lower percentages in the remaining categories of anxiety disorders, thought disorders, substance abuse, and others (including personality disorders) are roughly in line with known prevalence rates in rural areas (see, for example, Robins & Regier, 1991). This shows that our outreach programs are effective in servicing known (or presumed) rural patient populations who otherwise might not receive needed services.

![Figure 1. Diagnoses of Patients Served in Iowa and Virginia](image)

Figure 1. Diagnoses of Patients Served in Iowa and Virginia
CONCLUSION

The mismatch between rural psychogeriatric needs and the services available cannot be expected to disappear in the foreseeable future, raising the short-term service issue regarding improvement of accessibility to local and regional resources, and the long-term policy issue of determination of reasonable levels of resource development, allocation, and equity. The problems of transportation, poverty, lack of trained personnel, low population density, and large catchment areas will continue to make the delivery of mental health care more difficult in rural areas. While it is unrealistic to expect that rural areas will receive the same intensity of services that urban areas have, model programs such as ours can make substantial gains in overcoming problems and providing mental health care to rural elderly. Individualizing these programs to reflect local culture, geography, needs, and resources will improve not only the delivery of care, but also the ability of model programs to be sustained past initial grant funding.

REFERENCES


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