

USE OF MENTAL HEALTH SERVICES BY AMERICAN INDIAN AND ALASKA NATIVE ELDERS

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Abstract: American Indian and Alaska Native elders are an important at-risk population in need of mental health services, yet little is known about the factors that influence Indian/Native elders to actually seek mental health services. This study uses the Anderson and Newman conceptual framework to identify need as well as enabling and predisposing factors for mental health service use in a national sample of reservation and urban American Indian and Alaska Native elders. Results indicate that self-perceived need is the strongest predictor of mental health service use for elders living on reservations. However, for Indian/Native elders in urban areas, degree of mental impairment is most likely to predict use of mental health services. For both groups of elders, enabling variables, such as total income, level of education and access to medical insurance, were the least important in influencing whether or not an elder elected to use mental health services.

It has been generally accepted that the elderly have a higher incidence of mental health problems than other age groups (Weyerer, 1983). Some have estimated that 18% to 25% of all elders need mental health services (Persky, Taylor, & Simson, 1989). Yet, the need for mental health services may be greater when risk factors such as minority status are combined with aged status. This may be true for American Indian and Alaska Native elders living in urban centers and on reservations or historically Indian areas, but little empirical research is available which documents the needs and use patterns of mental health services by this special population. The purpose of this study is to identify use patterns by examining factors that best predict mental health service use among urban and reservation American Indian and Alaska Native elders.

Minimal social resources along with poor physical health, limited economic resources, and activities of daily living (ADL) impairment could diminish the mental health well-being of Indian/Native elders, therein, influencing an elder's desire to obtain mental health services. For example, according to the National Indian Council on Aging (1981), the impact of impaired physical health is represented by higher rates of depression among Indian/Native elders when compared to non-Indian elders. In a study by Barón, Manson, Ackerson and Brenneman (1989), it was found that estimates of depression were higher for Indian/Native elders as opposed to elderly whites in studies of the aged with chronic illness. These findings are supported in yet another study where more than 32% of the elders visiting a northwest U.S. Indian Health Service (IHS) clinic were suffering from clinically significant levels of depressive symptoms, more than twice the rate reported for elderly whites with similar types of physical illness (Manson, 1990).

Background

It is known that elders can benefit from mental health treatment (Burckhardt, 1987; Coons & Spencer, 1983; Wisocki, 1983). Yet, previous studies have shown that the elderly are very reluctant to use mental health services (Goldstrom, Burns, & Kessler, 1987; German, Shapiro, & Skinner, 1985; Smyer & Pruchuo, 1984). A study by Lasoki and Thelen (1987) determined that the elderly were less likely to choose outpatient services as appropriate for psychological problems and were also less likely to have had previous exposure to mental health treatment. In another study, it was found that mentally impaired elders were more likely than unimpaired elders to use social and medical services, but there were no observations about this group's specific use of mental health services (Smyer & Pruchuo, 1984).

According to Colen (1983), studies have illustrated that service utilization patterns among the minority aged are neither consistent with those of whites, nor in many cases are the rates of service use commensurate with their own levels of need. Clearly, American Indians and Alaska Natives have unique mental health needs (Manson, Walker, & Kivlahan, 1987). It is known, for example, that less acculturation of American Indians and Alaska Natives means that less mental health problems are apparent, or that less problems are seen in health care facilities (Markides, 1986). Thus, issues related to cultural identification are important considerations in treatment. Additionally, Lockart (1981) believes that use of counseling services may be limited by an historic distrust that American Indians and Alaska Natives possess toward a profession that they may view as culturally foreign.

In terms of American Indian and Alaska Native elders, it is known that older American Indians and Alaska Natives use less mental health

services than other segments of American Indian and Alaska Native populations (Edwards & Egbert-Edwards, 1990). However, unfortunately, there is very little empirical evidence on how to improve use rates based upon knowledge about the emotional and psychological well-being of older American Indian and Alaska Natives. Much of what exists is discriminative in nature and tends to be based upon information of questionable reliability (Markides, 1986). Even less is known about the specific utilization patterns of mental health services by American Indian and Alaska Native elders. Further analysis is necessary.

Conceptual Framework

This study is built upon assumptions represented by the Anderson and Newman (1973) conceptual framework, wherein, three groups of variables explain different service utilization patterns. Specifically, this study looks at (1) need factors, (2) enabling factors, and (3) predisposing factors that may influence service use. *Need factors* comprise both an objective measure of mental impairment and a subjective measure of "perceived need." This perceived need is an individual's own self-perception or individual judgment about their need for services. An "evaluated need" is the objective measure representing a clinical professional perspective of need. *Enabling factors* include possession of both individual attributes and personal resources that would facilitate use or non-use of needed available services. These include attributes such as knowledge of service availability (i.e., level of education), access to insurance, and financial resources. *Predisposing factors* are individual characteristics that influence an objective measure of need or an individual's perception of need. These characteristics may include gender, age, social or environmentally induced psychological stress, and level of social or community support.

Previous studies have shown the Anderson and Newman model to be useful in predicting factors related to health care utilization by the elderly, but this model has not been used with respect to American Indian and Alaska Native elders. For example, some studies have looked only at use patterns of health care by the elderly (Evashwick, Rowe, Diehr, & Branch, 1984; Wolinsky, Coe, Miller, Prendergast, Creel, & Chavez, 1983). Starrett, Decker, Araujo, and Walters (1989) compared health use patterns with social service use among Cuban elderly, and more generally, Starrett, Mindel, and Wright (1983) applied this model to social service use by Hispanic elderly. Finally, Coulton and Frost (1982) employed the Anderson and Newman model to discover patterns for health, social services, and mental health service use in a non-Indian urban elderly population.

Method

National Profile of American Indian and Alaska Native Elders

A national study, conducted by the National Indian Council on Aging (NICOA) in 1981, documented the condition of life for American Indian and Alaska Native elders on reservations and in urban areas. This study examined the economic and social resources, physical and mental health, capacity for ADL, housing conditions, transportation needs, and utilization patterns of social services. Data were collected over a two-year period on a total of 361 variables. A cluster-type probability sample of 712 older American Indians and Alaska Natives was selected from 26 of over 270 federally recognized tribes in the continental United States, four Alaska Native villages, and six major urban areas.

In the NICOA study, Indian/Native elders were administered the Older American Resources and Services (OARS) survey questionnaire. The OARS instrument, originally developed in 1972 by the Duke University Center for the Study of Aging and Human Development (Pfeiffer, 1975), contains two major parts, a multi-dimensional functional assessment and a social services utilization section (cf. Fillenbaum, 1988). For the NICOA study, the actual OARS instrument was modified, first by adapting the questions for Indian culture, and second by adding a section of questions about transportation and housing. Fillenbaum and Smyer (1981) determined interrater reliability to be 92% for the community survey part of OARS and 74% interrater reliability (consisting of complete agreement) for the functional assessment part of OARS. These authors also found the functional assessment of OARS to have high construct, consensual, and criterion validity as well.

Many studies of the elderly have utilized the OARS survey to measure quality of life variables. Some examples include Foxall and Ekberg's (1989) study of the relationship between chronic illness and loneliness. Another study by Milligan, Powell, and Furchtgott (1988) looked at the variables and dimensions of OARS that would best predict the status of the medically disabled elderly. Hughes, Conrad, Manheim, and Edelman (1988) were able to measure the impact of long-term residential care on elders from OARS measurement of functional status and unmet needs. O'Malley, O'Malley, Everitt, and Sarson (1984) used a modified OARS instrument to categorize abused and neglected elders into one of three groupings.

Various other studies have been conducted with the OARS instrument on American Indian and Alaska Native groups, in addition to the NICOA study previously mentioned. Johnson, Cook, Foxall, Kelleher, Kentopp, and Mannlein (1986) studied life satisfaction among elders residing on two midwestern reservations. Joos and Ewart (1988) conducted a study with the OARS of Klamath Indian elders. The latter study

analyzed the health status of these elders 30 years after loss of their tribe's federal recognition. Another study by John (1988) utilized an OARS survey completed previously by the Pueblo of Laguna. According to John, this tribe selected the OARS instrument because it has been used in many large scale studies, including the NICOA study, and the results could be used to compare the status of Laguna Pueblo elders with other American Indian tribes.

Unfortunately, there are limitations in the NICOA data base that need to be identified. A reanalysis of the NICOA data base by John (1991) revealed a number of discrepancies. For example, there were missing cases from the survey and missing data from the supplemental housing and transportation questions. Additionally, some variables such as occupation and number of people who live on the household's income were too questionable to be considered in John's analysis. Another limitation concerns the small sample size of urban elders, thereby, diminishing possibility for generalizing results (U.S. Select Committee, 1982). In this study, the smaller sample size of urban elders, as opposed to reservation elders, makes comparisons between the two groups problematic.

Another limitation of the data set concerns the OARS "interviewer rating" variables. These variables, including the variable "interviewer rating of mental health status" used in this study, call for the subjective ratings of the interviewer about the elder. The problem with the urban sample was that elders were often not selected at random, but instead were selected by the local peer interviewer. These interviewers held preconceived beliefs about the mental health status of an elder perhaps based upon prior knowledge of the elder and his or her use of local social and mental health services. This bias probably also holds true for the reservation sample, as reservations, many times, tend to be isolated communities where relationships between persons are tightly interwoven. Indeed, the fundamental definition of a tribe means a collection of related persons. Thus, it is likely that reservation peer interviewers have much prior knowledge of the elder's history and use of local social and medical services. Overall, given the limitations of the NICOA data base, caution must be exercised when interpreting the findings of this and other studies that use the NICOA data. However, despite these limitations, this data base remains important as no comparable data set exists.

Sample, Variables and Measures

There are six questions in the OARS survey that assess mental health functioning. These questions center on three areas of mental health status, including assessment of life satisfaction, a scale from the Minnesota Multiphasic Personality Inventory (MMPI), and self-assessed mental health information. It is likely that some cultural bias exists in the OARS instrument as survey questions were not developed with American

Indian and Alaska Native populations in mind. For example, John (1991) has found a question asking elders to respond to the statement that "someone is planning evil against them" to have an entirely different, culturally meaning for American Indians. John (1991) states that American Indians in rural/reservation environments often believe that some individuals can practice evil against them through the use of indigenous "bad medicine." He states that belief in this practice extends from the practice of native healers and native healing.

Questions in the OARS survey include the MMPI scale that is an additive score developed from an elder's responses to 15 items. A score of 5 or more indicates impaired psychiatric functioning (Fillenbaum, 1988). According to an analysis of the NICOA data by John (1991), 41% of the sample reservation and urban elders evidence impaired psychiatric functioning. Another area of questions asks elders to self-report their own level of mental health impairment. For example, elders are asked to rate the change in their mental health status as compared to five years ago. Another question asks elders to rate their overall mental or emotional health at the present time. A third type of questions asks elders to identify mental health related concerns such as degree of loneliness, perceived isolation, and level of satisfaction with their present life.

Cases selected in this analysis include Indian/Native elders living in either urban centers or on reservations. In this study, the sample size for urban elders is 66, while the sample size for reservation elders is 252. All of the elders are at least 55 years of age with a mean age of 66 years for urban elders, and a mean age of 67 years for reservation elders. The male to female ratio is 32:68% for urban elders, and 41:59% for reservation elders. Thirty-two percent of the urban sample have completed high school, while 35% of the reservation sample have completed high school.

The data and variable selection for this paper derives from the original OARS data collected by NICOA in 1981. Use of the Anderson and Newman model, prior research and select knowledge allows classification of a total of 13 variables within three blocks to test a predictive model of mental health service use. The statistical analysis consists of multiple regression with the dependent variable, use of mental health services, regressed on the three clusters of variables entered chunkwise. Cases with missing data are deleted listwise from the analysis.

The measure of the dependent variable is a negative or positive response to the question: Have you used mental health services within the last six months? Mental health services in this study are defined as the number of outpatient "sessions" that an elder has had with a doctor, psychiatrist, or counselor for personal or family problems, nervous problems, or emotional problems. For measuring the *need* factor, two concepts are involved. As a subjective measure, the elder is asked about his/her own self-perception as to if s/he believes s/he needs mental health services. The other concepts use two variables to get at an objective

measure of mental impairment. One variable measures satisfaction with quality of life, while the other variable contrasts with an overall mental impairment rating, on a six point scale, of the elder by the OARS survey interviewer. For the block of the *enabling* factor, three concepts are measured within three variables. Income breaks down into 13 levels. Education is categorized into eight levels of achievement from zero to four years through post-graduate college studies, and health and medical insurance coverage is measured by a categorical yes or no response. Finally, the *predisposing* factor is measured by a total of seven variables. Gender and age are important variables in this category. All elders in this analysis are 55 years of age or older. Gender is especially meaningful as Coulton and Frost (1982), in a study of non-Indian elders, found that women were more likely than men to perceive a need for, and utilize, mental health services. Age also is likely to be an important variable since it is known that number of visits to a Indian Health Service clinic by diagnostic category was generally highest in the 45 to 55 age group, and lowest in the 65 and older age group (Rhoades, Marshall, Attneave, Bjork, & Beiser, 1980). Unfortunately, little is known about the effects of age on mental health status of American Indian and Alaska Native elders. Therefore, more longitudinal data on the effects of aging on mental health is needed (Markides, 1986). Psychic distress is measured by a unique combination of three variables — an objective MMPI score, and two subjective self-ratings consisting of an overall four point scale about present mental or emotional health, and another self-rating about self-perception of mental or emotional health as better, about the same, or worse than five years ago.

Results and Discussion

Two multiple regression analyses, one for urban elders and another for reservation elders, reveal a definite pattern for predicting mental health service use. Total R^2 for the urban Indian/Native elders is .48, and the total R^2 for the reservation elders is .12. Both regressions are statistically significant at the .01 level.

Table 1 presents the incremental R^2 contributions for each of the three factors, the standardized coefficients for each variable individually in the equation, the alpha probability level, with the overall R^2 . The need factor explains the most variance and in each equation is statistically significant at the .01 level. The predisposing factor explains a smaller amount of variance, and is significant at the .05 level. Finally, the enabling factor explains a very small amount of variance, and fails in both regressions to be statistically significant.

The MMPI variable is not significant for either the urban or reservation populations. Since the MMPI has been shown to be a highly valid and reliable indicator of mental health status in non-Indian populations, the lack of significance finding is worthy of examination in future studies. It

Table 1
Regression of Mental Health Service Utilization on Need,
Enabling, and Predisposing Factors

BlockNumber	Independent Variables	Urban		Reservation	
		Beta	p	Beta	p
1. Need					
	Self perceived service need	.01	.99	.20	.00
	Mental impairment: interviewer rating	.60	.00	-.10	.24
	Mental impairment: satisfaction	.24	.09	.06	.41
	R ² Change	.23**		.05**	
2. Enabling					
	Total income	.11	.33	.07	.30
	Education	.20	.08	-.01	.90
	Health & medical insurance	.07	.55	.10	.15
	R ² Change	.05		.02	
3. Predisposing					
	Gender	-.10	.38	.04	.49
	Age	-.12	.32	-.10	.16
	Psychic distress: MMPI score	-.08	.57	.04	.60
	Psychic distress: self rating	-.36	.01	-.10	.16
	Psychic distress: trends	-.11	.38	-.13	.05
	Social isolation: lonely	.04	.80	.14	.05
	Social isolation: social resources	-.17	.16	.11	.19
	R ² Change	.14*		.06*	
	Total R ²	.48**		.12**	

* $p < .05$ ** $p < .01$

may be that the MMPI scale used in this OARS instrument lacks cultural relevance for American Indian and Alaska Native elders (Pollack & Shore, 1980). Another variable, level of education completed (while not in a statistically significant cluster), was marginally significant in predicting mental health service use for urban Indian/Native elders. Perhaps urban elders, with better education, are influenced by urban social norms where it is more socially permissible to receive mental health services. On many reservation communities, mental health services may still carry a greater amount of stigma, thus, leading elders to avoid needed therapeutic services.

Of the total number of elders in the NICOA study, 7.1% actually used mental health services within the previous six months. This consumption of mental health services suggests that mental health services are important to American Indian and Alaska Native elders. While the percentage of elders who use mental health services may seem low overall, it is about the same as non-Indian elderly populations. Given that the aged, in general, are not inclined to use mental health services, but that Indian/Native elders use mental health services at a rate equal to other populations, it is apparent that American Indian and Alaska Native elders constitute a meaningful client-base.

The Anderson and Newman model provides a useful tool to analyze the mental health service use patterns for both urban and reservation American Indian and Alaska Native elders. When examining the role of the variables entered, need is most predictive of an elder's use of mental health services. For reservation elders, self-perceived need is the strongest predictor, whereas, degree of mental impairment for urban elders is most likely to predict actual use of mental health services within the previous six months. This contrast between the two groups may suggest that urban elders are more likely to receive mental health services based upon the recommendations of professional service providers, whereas, reservation elders are more isolated, less influenced by a professional service provider, and thus have more freedom to render service use decisions based upon their own personal preferences. Another possible explanation, among many others, might be because of greater availability of mental health services in urban areas as compared to reservations.

It also should be noted that reservation elders have an important advantage over urban elders when deciding that they may need mental health services. Generally, reservation elders have the opportunity to choose not only conventional clinical treatment, but sometimes, they may have the opportunity to select traditional, spiritual healing. American Indian and Alaska Native elders living in urban areas usually lack this alternative. Traditional healing, as an option, may assist reservation elders in having more control over their own self-perceived need for "treatment," thus, explaining why this variable was so strong in predicting mental health service use for reservation elders, and so weak in predicting service use for urban elders.

For both urban and reservation American Indian and Alaska Native elders, enabling variables were the least important in influencing whether or not they elected to use mental health services. This finding is expected for two reasons. First, elders constitute a low-income, aged population for whom services are often available regardless of ability to pay. Second, due to the federal-tribal trust relationship, the federal government has treaty obligations to provide complete medical services (interpreted to include mental health services as presently provided through IHS) at no cost to American Indians and Alaska Natives. Additionally, many elders

have veterans benefits and a continuum of services and benefits from the Bureau of Indian Affairs. Thus, elders should have the ability to access mental health services regardless of enabling factors. Findings in this study indicate that income levels and/or possession of health/medical insurance do not adequately predict mental health service use.

This study also illustrates that mental health services may be more discretionary, like social services, than medical or health care services. Specifically, predisposing variables tend to play a more important predictive role than they would for more "mandatory" types of medical care that emphasize need factors. In terms of these predisposing variables, it is noteworthy that the pattern of service use in this study differs from the mental health use pattern of non-Indian elders described by Coulton and Frost (1982). Specifically, these authors found a much smaller contribution for predisposing variables among non-Indians than for the elders in the NICOA study. The reasons for this difference are not clear. Thus, this issue remains as a topic for future research. However, it is important to note that there is a difference between Indian elders and non-Indian elders in the mental health service use pattern. Therefore, mental health service providers may want to provide services and design programs that are culturally specific and relevant to the unique needs of American Indian and Alaska Native elders.

In terms of differences between urban and reservation elders, the latter rate themselves as more isolated than the former. This difference can influence mental health service use. Isolated and lonely elders on reservations may be in greater need of mental health services to deal with decline of the extended family or adjustment to being alone and independent. However, this reality does not directly or adequately address the issue of actual mental health service use patterns. It suggests that the mechanisms influencing help-seeking should be examined. Tribal social service programs for elders, usually offered through a community or senior citizen's center, and by community health representatives employed by tribes under IHS contracts, may be able to encourage elders to seek mental health services. Therefore, these individuals should be targeted for specific training to identify of unserved or underserved (isolated) elders, and coordinate referral services to appropriate agencies or clinics.

On the other hand, since urban Indian/Native elders are not as isolated, they may receive information through a wider variety of channels, such as outreach efforts by a local community mental health center, neighbors, or through increased accessibility to medical services and other social/recreational programs. Urban elders may have another advantage in terms of greater accessibility to public transportation, thereby, enhancing access to community-based services. Social service and medical referral systems in metropolitan centers should be aware that Indian/Native elders, because of their accessibility to information from the mass media and public transportation, constitute a viable service

population. The sophistication of urban elders is underscored in Weibel-Orlando and Kramer's (1989) study in which elders in Los Angeles listed "classes in coping with the problems of aging" as one of the services that they desired. Other factors associated with urban life styles, such as relative anonymity or advertisements for stress-related disability payments also reduce the stigma association with seeking mental health services. Overall, these urban elders may be more able to effectively gain access to specialized mental health services than their reservation counterparts.

Further analysis of the strengths and weaknesses inherent in factors defined by the Anderson and Newman model may be valuable for future development of outreach and program planning efforts by mental health service providers. In this study, the model shows that American Indian and Alaska Native elders are a unique population to be served in the context of how urban and reservation elders gain access to the mental health service system. For these two groups of American Indian and Alaska Native elders, future studies may wish to build upon these findings to determine situational barriers to the use of mental health services within the context of need, enabling, and predisposing factors.

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