SPECIAL COMMENTARY

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Mental health professionals working in American Indian and Alaska Native communities are often impressed by the immense talent, wisdom, and cultural richness of this special population (Vogt & Jerde, 1994). Many reservation mental health providers (RMHPs) not only enjoy their work but even prefer practice in American Indian communities. However, other RMHPs are dissatisfied with their jobs, and many reservation areas continue to be plagued by high RMHP turnover (Nelson, McCoy, Stetter, & Vanderwagen, 1992).

American Indians are one of the most underserved groups in the U.S.; less than half of their needs for ambulatory mental health services are being met (Blum, Harmon, Harris, Bergeisen, & Resnick, 1992; Indian Health Service, 1990). High RMHP turnover further compounds preexisting reservation mental health service deficits, creating a vicious cycle as turnover necessitates hiring new employees who in turn are a higher risk for resignation (Weisman, Alexander, & Chase, 1981). Obviously, underserved reservation areas can ill-afford further reductions in their mental health services due to high RMHP turnover.

Why do a considerable number of RMHPs leave their jobs? To answer this question, four issues are reviewed:

1.   *Health Provider Turnover* - Little is known about RMHPs turnover, but studies have been conducted on turnover of general health providers from non-reservation areas. Several complex models of health provider turnover have been advanced. Most of these models consider job satisfaction to be a critical variable for job retention (Hinshaw & Atwood, 1985; Hinshaw, Smeltzer, & Atwood, 1987; Lucas, Atwood, & Hagaman, 1993).

    In general, these studies have found that while some health providers resign for unavoidable reasons, job dissatisfaction is the primary cause. For instance, a review of nurse job satisfaction studies estimated one-third of observed resignations to result from job dissatisfaction rather than personal factors (Weisman, Alexander, & Chase, 1981; Hanson, Jenkins, & Ryan, 1990). It is known that retention and job satisfaction of rural physicians may be influenced by a number of factors, including practice organization, patient characteristics, community characteristics, and service demands (Manious, Ramsbottem-Lucier, & Rich, 1994). It is likely

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that retention and job satisfaction of RMHPs is influenced by similar factors.

2.   *Mental Health Needs in American Indian Communities* - American Indians are at higher risk than most other U.S. ethnic groups for mental health difficulties (Nelson, McCoy, Stetter, & Vanderwagen, 1992). Mental health service needs are high for all age groups, but the vulnerability of American Indian youth is particularly disturbing (U.S. Congress Office of Technology Assessment, 1990; Blum, Harmon, Harris, Bergeisen, & Resnick, 1992). The American Indian population is remarkably young (Manson, Walker, & Kivlahan, 1987), and if the current state of youth mental health is not improved, the future of many Native communities could be in jeopardy (Inouye, 1993). Therefore, the mental health needs of American Indian and Alaska Native youth require greatest attention. A recent report by the U.S. Congress Office of Technology Assessment (1990) underscores, however, the paucity of trained providers available to address these needs.

3.   *RMHPs' Perceptions of Their Practice* - There is a paucity of research on reservation mental health practice. However, some aspects of reservation mental health practice are often identified as positive. These include: (a) diversity of case load, (b) slow pace of life and reservation lifestyle, (c) professional autonomy, (d) ease of professional networking, (e) friendly and appreciative community, and (f) American Indian culture (Vogt & Jerde, 1994).

     Some aspects of reservation mental health practice perceived to be negative are: (a) professional and educational isolation, (b) remoteness and harsh climate, (c) high service demands, (d) limited resources, (e) staff burnout, (f) low income, and (g) high staff turnover (Nelson, McCoy, Stetter, & Vanderwagen, 1992).

4.   *Challenges Faced by RMHPs* - How does a mental health professional respond to challenges of reservation mental health practice? This question is important because the RMHPs who meet the challenges of reservation settings are likely the ones who adapt and thrive in American Indian country. The challenges of reservation practice include: (a) need for interdisciplinary and generalist skills, (b) dealing with resource paucity, (c) adaptation to American Indian culture, (d) dealing with geographical and transportation barriers, and (e) dealing with professional isolation by involvement in formal or informal health provider networks.

     To improve the quality and quantity of services, a national plan for American Indian/Alaska Native mental health services was developed in 1987 and approved in 1990 (Indian Health Services, 1990; Indian Health Services, 1991). Despite efforts to improve reservation

mental health services, many American Indian communities continue to experience difficulties in retaining mental health professionals. Therefore, RMHP retention strategies are sorely needed. This article presents an educational model for improving RMHP retention, and a pilot South Dakota study. Additionally, we describe some possible strategies that policy-makers, educators or agencies might employ to decrease professional isolation of RMHPs.

An Educational Model For Improving RMHP Retention

According to a typology proposed by Holland (1966), health professionals are classified as having "social personality types" (personalities with high needs for social interactions in their jobs). Holland postulated that when such social personality types experience professional and social isolation, which often is the case in rural and reservation areas, they are likely to become highly dissatisfied with their jobs. Holland's view of health professionals is consistent with our own experience in rural and reservation areas of South Dakota. While RMHPs can be dissatisfied with their job for a variety of reasons, the sources of job dissatisfaction that stand out in our experience and opinion is educational and professional isolation (Bhatara, Fuller, & O'Conner-Davis, 1995). Hence we propose that RMHP turnover can be decreased through an strategic educational intervention.

This approach rests on two premises. First, retention and job satisfaction of RMHPs can be improved through reduction of their professional isolation. Second, continuing education must involve reservation mental health providers of varying backgrounds. Therefore training opportunities should be expanded, especially through informal networking, across disciplinary lines. This is particularly important in rural and reservation areas, where it is unlikely to find a critical mass of professionals in any one discipline (see Figure 1).

Interdisciplinary continuing education can facilitate cross-disciplinary and interagency collaborations and networking, and thereby reduce educational, social, and professional isolation. Also, it teaches diverse health providers the skills for working together (World Health Organization, 1988). The result should be improved job satisfaction and improved retention of RMHPs.

The South Dakota Experience: A Pilot Study

A pilot study was conducted as part of a larger mental health needs assessment project focusing on south-central South Dakota (Fuller, Bhatara, Ricci, LaPierre, & Pederson, 1982; Bhatara, Fuller, & Unruh, 1994). The objective of the study in question was to compare the job satisfaction of RMHPs with those of adjacent non-reservation mental health providers (NRMHPs) by source.
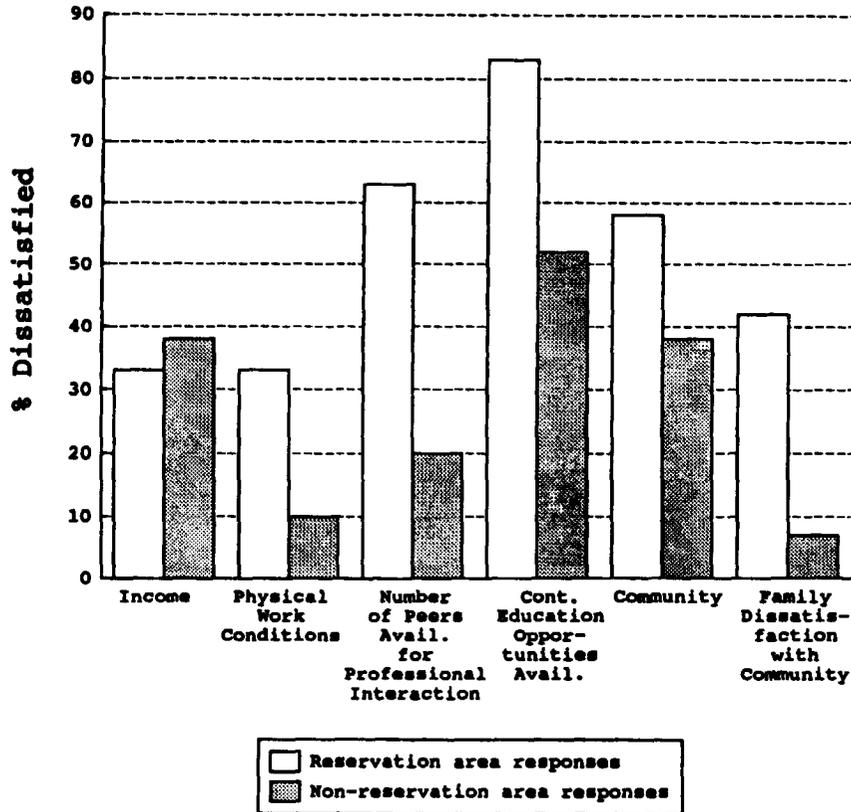
Figure 1.
Reservation vs. Non-Reservation Areas: Job Dissatisfaction Compared.

Subjects were south-central South Dakota mental health providers. A mental health provider was defined as any individual who might be professionally involved with a person with a mental health problem. This was a very broad definition, and included rural health occupations not generally categorized as mental health providers, such as nurses. In many rural and reservation areas the distinction between a provider of general health and that of mental health is blurred. Inclusion of general health providers reflects our experience that in rural South Dakota much of the mental health services are provided by the general health sector. This broad definition included eleven mental health occupations: (a) physicians [primary care and psychiatrists], (b) nurses, (c) social workers, (d) court service workers, (e) parole agents, (f) high school counselors, (g) clergy, (h) nursing home administrators, (i) alcohol/drug counselors, (j)

psychologists, and (k) physicians' assistants. Physicians practicing a specialty other than psychiatry were excluded.

The sample consisted of RMHPs and NRMHPs from an underserved region in south-central South Dakota. The region consists of catchment areas of four adjacent community mental health centers (CMHCs). The CMHCs are located in towns of between 3,800 and 14,000 people, and serve a rural or reservation population. The region around the eastern CMHCs (located in Mitchell and Huron) is a prairie, and agriculture is the main economic activity in this area. By contrast, the western region (served the CMHCs in Pierre and Winner), is an arid ranching area. It is much more sparsely populated than is the agricultural eastern region. All of the RMHPs were employed by the CMCHC located in Winner or by the Rosebud Public Health Service Hospital.

The CMHCs located in Pierre, Huron, and Mitchell were similar in their staffing patterns, and in the socio-economic status of the population they served. However, the CMHC located in Winner differed considerably; it had fewer mental health professionals and higher staff turnover. In contrast to the other three CMHCs, it served a substantially American Indian population from the economically-disadvantaged Rosebud Reservation.

The characteristics of RMHPs and NRMHPs in the sample differed in many respects. None of the RMHPs were in private practice. By contrast, the NRMHP sample was composed of both private practitioners and CMHC employees.

A Job Satisfaction and Referral Questionnaire (Fuller, Bhatara, Ricci, LaPierre, & Pederson, 1982) was developed for the pilot study. It is a 35-item instrument designed to collect information about health provider job satisfaction and attitudes toward collaborations with other health providers. Questions are anchored on a 4-point Likert scale. Questions inquired about the respondent's level of satisfaction with regard to six sources: (a) income, (b) physical work conditions, (c) number of peers available, (d) continuing education opportunities available, (e) community, and (f) family satisfaction with their community.

Mailing lists were obtained from health provider organizations (physicians, nurses, social workers, court service workers, parole agents, high school counselors, and physician assistants), and the directors of agencies such as CMHCs, social service agencies, nursing homes, and substance abuse facilities. The survey questionnaire was sent to all health care providers identified.

The number of respondents (N) varied with the question. Four hundred survey questionnaires were sent, and the overall response rate was approximately 44%. The sample size for RMHPs ranged from 11 to 12, and for non-reservation health providers (NRMHPs) from 139 to 162. Because of the low number of RMHPs, and the inability to match subjects by age and occupation, the data were not considered suitable for comparative statistical analysis.

Results

The results are summarized in Figure 2, which provides the percent response of RMHPs and NRMHPs by source. For both RMHPs and NRMHPs, the greatest source of job dissatisfaction was lack of continuing education opportunities. About one-half of NRMHPs, and over four-fifths of the RMHPs were dissatisfied with the continuing education opportunities available. For RMHPs, the second greatest source of dissatisfaction was the number of peers available for professional interaction. About three-fifths of RMHPs , but only one-fifth of NRMHPs were dissatisfied with the number of peers available. Similarly, a higher proportion of RMHPs than NRMHPs were dissatisfied with their communities and physical work conditions.

The response of mental health providers varied somewhat with their occupation, but almost all groups reported feeling professionally isolated. A majority of mental health providers expressed dissatisfaction on two items measuring professional isolation: opportunities for peer interaction and continuing education. Mental health providers of all backgrounds were dissatisfied with training opportunities. Dissatisfaction with the number of peers was also present among all groups except substance abuse counselors, court service workers, and clergy. The groups feeling most strongly isolated were physicians, psychologists, and physician's assistants. They were most strongly dissatisfied with the number of peers and continuing educational opportunities available. Most mental health providers were also dissatisfied with their income; only the physicians and the clergy were satisfied with their earnings.
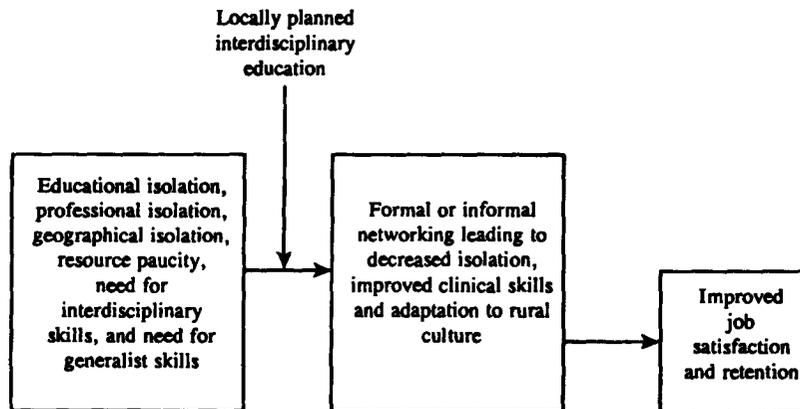
Locally planned
interdisciplinary
education

| Educational isolation, professional isolation, geographical isolation, resource paucity, need for interdisciplinary skills, and need for generalist skills | → | Formal or informal networking leading to decreased isolation, improved clinical skills and adaptation to rural culture | → | Improved job satisfaction and retention |

Figure 2.
A theoretical model of mechanisms by which interdisciplinary education might increase reservation mental health provider retention.

Discussion

The results indicate that a higher percentage of RMHPs than NRMHPs were dissatisfied with their jobs on 5 out of 6 job satisfaction items. Both RMHPs and NRMHPs were dissatisfied with continuing education opportunities, but a higher level of dissatisfaction existed on the reservation than in the adjacent non-reservation areas. On two measures of professional isolation (continuing education opportunities and number of peers available) a majority of RMHPs reported dissatisfaction. By contrast, fewer NRMHPs perceived themselves to be professionally isolated. These findings suggest that strategies need to be developed for decreasing professional and educational isolation of reservation and rural mental health providers.

Strategies to Reduce Professional Isolation

Creative approaches may help to reduce the isolation and dissatisfaction presented in many underserved reservation areas. These approaches might include: (a) reservation-university collaboration, (b) meeting training needs to reduce educational isolation, (c) increasing the numbers of American Indian mental health providers, and (d) using informatics, telemedicine, and other high-tech interventions.

While some of these approaches may seem costly, they are certainly no more costly than the high turnover rate experienced in rural and reservation health care. This turnover leads to a discontinuity of care that is likely to be more costly than the strategies suggested.

Reservation-University Collaborations

Formal networking with university-based providers appears to be a promising strategy for attracting and retaining health professionals to a career in American Indian communities (Vogt & Jerde, 1994). Such reservation-university networking is likely to improve job satisfaction and job retention of RMHPs through improved opportunities for continuing education and professional interaction. Not only can reservation-university collaborations reduce RMHP turnover, but they may also improve accessibility, coordination, and quality of mental health services (Bhatara, Fuller, & Unruh, 1994). These interprofessional and interagency collaborations also teach diverse health providers the skills for working together (World Health Organization, 1988). Such networking can also serve to increase the number of available resources for RMHPs, and help them to deal with local resource scarcity.

An example of such a linkage is an ongoing collaboration between South Dakota Medical School and Indian Health Service (IHS): The Pine Ridge Reservation Indian Health Service primary care resident

rotation (Vogt & Jerde, 1992; Vogt & Jerde, 1994). The rotation was conceived in an effort to help address the problem of recruitment and retention of physicians on the reservation. The rotation offers a unique educational opportunity for primary care residents (family practice, general internal medicine, and general pediatrics). Because the bulk of reservation mental health care is often provided by general health practitioners, such general health collaborations may improve both mental health and general health care. A formal collaboration such as the Pine Ridge Reservation Indian Health Service resident rotation allows clinicians to become more aware of opportunities on the reservation (Vogt & Jerde, 1992; Vogt & Jerde 1994). Once these relationships have been established while a clinician is in residency, continuing contact is much easier to accomplish. One of the important goals of this collaboration is to retain current and future providers through their involvement in the teaching program.

Results to date indicate that the program has been quite successful (Vogt & Jerde, 1994). Three of the original twelve residents have returned following completion of their residency to join the Pine Ridge medical staff, and resident evaluations of the rotation have been generally complimentary.

Meeting Training Needs and Reducing Isolation

The finding of RMHP dissatisfaction with continuing education opportunities is consistent with the IHS' recognition that training is a major need for RMHPs (DeBruyn, Hymbaugh, & Valdez, 1988). Interdisciplinary continuing education can decrease professional isolation and enhance job satisfaction by facilitating informal networking among professionals of diverse backgrounds serving underserved areas. Locally-planned interdisciplinary educational programs have been linked, over a 3-year project period, to mental health providers' reports of less professional and educational isolation (Bhatara, Fuller, & O'Conner-Davis, unpublished).

Some of the possible ways to meet training needs include involvement of professionals in: (a) circuit-training workshops, (b) slow-scan video workshops and case consultations, (c) journal club and grand rounds, (d) mini-fellowships and *locum-tenens* coverage to supplement mental health services, (e) conferences in nearby major towns for reservation mental health providers, (f) community development strategies for more interaction and support among professionals residing on the reservation, (g) collaborative research efforts, (h) developing a volunteer system of support and aftercare with other providers to provide assistance, and (i) continued emphasis on economic and social/cultural development.

Increasing Proportion of American Indian RMHPs

A complimentary recruitment and retention strategy worthy of further study is increasing the number of American Indian RMHPs. Because reluctance of outside professionals to locate on reservations may be due to their misconceptions regarding reservation practice, it may be easier for reservations to recruit American Indians. Similarly, reservations may be able to retain American Indian RMHPs better than non-Natives because the former may show better adaptation and emotional attachment to reservation practices than the latter.

Rhoades, Reyes, and Buzzard (1987) note that the American Indians are seriously under-represented in the health field, and thus few are available to work in American Indian communities. BigFoot-Sipes, Dauphinais, LaFromboise, Bennett, and Rower (1992), examined the importance of ethnicity and gender counseling among American Indian secondary school students. Their overall finding was a preference for talking with an American Indian counselor, particularly among those students who expressed a strong commitment to their culture. The female American Indian student expressed a preference to talk with a female American Indian student counselor. National Health Objectives for the year 2000 have targeted a rise in American Indians awarded health degrees from the 1985–1986 baseline of 0.3% of all degrees awarded (Public Health Services, 1990). Owens, Cameron, and Hickman (1987) compared job achievements of American Indian and non-Indian graduates. They found that on certain job variables (performance, job satisfaction, job dissatisfaction, and income), the two groups did not differ significantly; dispelling myths of native difficulties. They pointed out that the American Indian population is expected to grow further, and the health needs of American Indians will continue to increase. Furthermore, as IHS activities continue to expand, the shortage of highly qualified mental health professionals is likely to get worse.

Using Telemedicine, Informatics, and Other High-Tech Solutions

Effective use of several new technologies may potentially facilitate mental health provider retention through improved job satisfaction (Adamski & Hagen, 1990). A growing consensus exists that the most important contribution of such technologies as teleconferencing is in the improvement of services to underserved people. But the technologies are underutilized (Preston, Brown, & Hartley, 1992). Effective use of telemedicine has been shown to decrease perceptions of isolation, both professionally and socially (McGee & Tagalos, 1994). Not only does it offer traditional continuing education, but every interaction between a consultant and the consultee represents instantaneous continuing education.

Agencies serving reservations might consider the following steps recommended by a recent consensus conference for implementing tele-medicine applications (McGee & Tangalos, 1994): (a) begin with a needs and resources assessment of the community, (b) identify a comprehensive medical center [not in the community] where those needs can be met, and (c) develop a community-medical center communication system.

Similarly, informatics (information science) can facilitate coordination of mental health care in several ways, by: (a) advancing mental health decision science, (b) facilitating multidisciplinary education, (c) integrating database and delivery, (d) providing user interfaces and delivery, and by (e) creating statewide mental health information systems, and facilitating mental health information networks (Ball & Douglas, 1989).

Conclusions and Future Directions

The future of isolated rural and reservation mental health service delivery will likely be heavily influenced by the currently burgeoning demonstration projects in informatics, telemedicine with slow scan television, and more highly organized systems of care. The clinical practice is inextricably entwined with the management of information (Shortliffe, Perreault, Weiderhold, & Pagen, 1990), and it is important for RMHPs to move rapidly towards integration into the information age. Information exchange and communication from the social systems perspective serves a basis: "cement", so to speak, that binds various disciplines in the mental health team. High-tech solutions and informatics can be combined with interdisciplinary training and university support to significantly decrease professional dissatisfaction of RMHPs. It will also be important to build in training funds for RMHPs to capitalize on these emerging opportunities.

Although high-tech solutions can help future RMHPs, people are and will remain the most important environmental component of any RMHP. Therefore, RMHPs must, above all, develop and maintain positive and professional relationships not only with their agency but with their entire community. Administrators need to help RMHPs to obtain community support, and publicize their role in a positive manner. The increased involvement of RMHPs with the community should lead to improvements in their knowledge of culturally-relevant factors, and enhanced community-RMHP relations. RMHPs who do not feel isolated may have a greater chance of not only surviving, but thriving on reservations.

Three questions remain unanswered. First, what are the personality characteristics of those RMHPs who choose to live on the reservations? Second, what are the differences in job satisfaction and retention of American Indian and non-Indian RMHPs? Third, what are the differences

in the cost and effectiveness of different strategies for reducing professional isolation of RMHPs?

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Reply
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This article reemphasizes the wisdom of developing effective ways of meeting providers, personal and employment needs in mental health, social service, and substance abuse programs. Accomplishing this is often

more challenging in American Indian and Alaska Native settings which are frequently characterized by remoteness, few professional staff, and large patient workloads.

With regard to the general issues presented in the paper:

1.   The numbers of trained Indian mental health and social service professionals is increasing rapidly. For the last four years, thanks to the leadership of George McCoy, Ph.D. and Mary Ann O'Neal, ACSW, the IHS has included psychology and social work as disciplines eligible for its professional scholarships. Moreover, training programs and internships have been developed at Utah State (psychology), George Warren Brown School of Social Work in St. Louis (social work) and at the University of Colorado and University of New Mexico (psychology internship and social work child fellowships (UNM only)). The ideal solution for the mental health and social service needs of American Indian programs is to develop American Indian providers who will serve their own communities.

2.   New ways for enhancing the professional training of American Indian persons are being explored, particularly for persons living in remote areas who may be unable to make a geographic relocation. The use of videotechnology and creation of onsite training programs, for example, to allow American Indian persons to obtain bachelor's and masters degrees in clinical fields with supervision through videotechnology at distant university sites is an exciting possibility which will be explored in future years.

3.   Several universities in addition to the University of South Dakota, have developed relationships with service sites and tribes for trainee clinical experiences in American Indian country. These include the Departments of Psychiatry in New Mexico, Colorado, Oregon, and Oklahoma.

Several principles related to effective strategies for recruitment and retention of behavioral health professionals in American Indian country should be noted:

1.   The issue of community satisfaction is not addressed by the paper, but our experience in IHS shows that effective orientation to communities by IHS or tribal programs, demonstration of interest in the tribal community and sensitivity to the culture by providers, and outreach to providers by tribes are all important and effective mechanisms for improving retention in American Indian service sites.

2.   Strategies should be site-specific. Approaches that are individualized to the geography and culture of the American Indian community are much more likely to be effective. For example, pursuit of a university-resident rotation may be difficult when a university is located several hundred miles from a site.

3.   Strategies also need to be individual and group specific. Some providers may not be comfortable with high-technology methods of continuing education as with more traditional methods. The primary issue is to assure that providers' perceived and actual needs are met.

4.   While the issue of cost is minimized in the paper, it cannot be ignored, especially in a time of shrinking resources. Analyses need to be carried out of the cost of such efforts as high-technology continuing education efforts vs. their effectiveness in retention. Some American Indian service programs have financed continuing education for providers based on rates of billing and collection of third-party funds by the program.

Ultimately, the key ingredients to successful recruitment and retention of behavioral health professionals seem to be the commitment of the provider to serve the population, the competence of the provider in delivering service, the sensitivity of the provider to the tribal culture, and the willingness of tribes to accept and reward their service providers. These all depend on development of long-standing trusting relationships between providers and American Indian communities.

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