

Contemporary Rural Social Work Journal

Volume 3 Number 1 2011

Article 8

Fall 9-1-2011

Factors That Impact Service Delivery to Individuals Living With HIV/AIDS in Rural Northeastern Texas

Wilma Cordova Stephen F. Austin University

Stephen Cooper Stephen F. Austin University

Freddie L. Avant Stephen F. Austin University

Follow this and additional works at: https://digitalcommons.murraystate.edu/crsw



Part of the Social Work Commons

Recommended Citation

Cordova, Wilma; Cooper, Stephen; and Avant, Freddie L. (2011) "Factors That Impact Service Delivery to Individuals Living With HIV/AIDS in Rural Northeastern Texas," Contemporary Rural Social Work Journal: Vol. 3: No. 1, Article 8. Available at: https://digitalcommons.murraystate.edu/crsw/vol3/iss1/8

This Feature Article is brought to you for free and open access by Murray State's Digital Commons. It has been accepted for inclusion in Contemporary Rural Social Work Journal by an authorized editor of Murray State's Digital Commons. For more information, please contact msu.digitalcommons@murraystate.edu.

Factors That Impact Service Delivery to Individuals Living With HIV/AIDS in Rural Northeastern Texas

Wilma Cordova, H. Stephen Cooper, and Freddie L. Avant Stephen F. Austin University

Abstract. This study surveyed participants in focus groups to identify factors that affect individuals living with HIV/AIDS in rural northeastern Texas. The average age of the respondents was 45.44. Participants included a diverse group of American Europeans, Hispanics/Latinos, and African Americans. Although results are inconclusive, other studies have supported similar results regarding factors that impact treatment and services (Zuniga, Buchanan, & Chakravorty, 2005). Some of the factors include lack of financial resources for the consumer, stigma and discrimination, and lack of understanding on the part of the consumer and the community. More studies in rural areas serving people living with HIV/AIDS (PLHA) are needed to begin the work towards breaking down barriers to provide healthier environments and achieving social and economic justice.

Keywords: people living with HIV/AIDS (PLHA), factors/barriers, social justice, northeastern Texas

Living in rural areas compounds the barriers/factors of stigma and discrimination for people living with HIV/AIDS (PLHA). And for those living in rural areas, services are limited and difficult to access due to geographic distances and scarce availability of medical staff. Other problems permeate rural communities and contribute to the barriers faced by people who live with HIV/AIDS. When barriers exist, individuals hesitate to seek services and treatment causing the risk for others to become infected. Eradicating these stigmas and barriers is especially challenging for social workers in their attempts to advocate for social and economic justice.

These stigmas and factors are prevalent in rural communities and impact attempts to provide health and dental services to PLHA. Stigmas in communities are largely attributed to the fact that it is a shame-based disease that is contracted by sexual contact, mostly by men having sex with men, (Centers for Disease Control [CDC], 2010), by sex work, (Valdiserri, 2002), and promiscuity. It is sometimes viewed as drug related and that those who contract HIV/AIDS "get what they deserve." Rural communities may attribute to the severity of stigmatization where attitudes and lifestyles are conservative. Often when one is not familiar or educated about disease, especially where there is a notion of eminent death, fear becomes a contributing factor. Fear is derived not only from the possibility of contracting the disease, but also from the lack of knowledge as to how it is transmitted. Death is the ultimate fear and the lack of knowledge causes intense rumination of this fear. Shame and blame are mostly associated with how HIV/AIDS is acquired and not necessarily the disease itself (Cao, Sullivan, Xu, Wu, & The CIPRA Project 2 Team, 2006).

Although stigma and discrimination are major contributing factors to the barriers individuals experience, there are other factors unique to rural areas such as lack of individual responsibility/ability, accessibility of services (especially dental), service quality, and need for more support and concrete services contribute to the lack of treatment and spread of HIV/AIDS.

The literature supports that the overall barrier to services is the inability to access services due to lower socioeconomic status and poverty (Castañeda, 2000; Godin, Naccache, Brodeur, & Alary, 1999; Kaplan, Tomaszewski, & Gorin, 2004; Marcus et al., 2000; Shiboski, Palacio, Neuhaus, & Greenblatt, 1999; Tobias, Martinez, Bednarsh, & Fox, 2008; Zuniga et al., 2005). Those living in rural areas experience unique barriers to accessing services due to lack of providers, transportation, lack of education and funding, small-town politics, attitudes and values, and lack of education on the part of both patients and residents. Social and socioeconomic factors are germane for social workers in regard to their need to remain vigilant about the injustices for PLHA and those living in rural areas.

As the United States enters its third decade battling the disease, the numbers remain stable and medical advancements continue to prolong life for the individuals suffering from the disease. According to the CDC (2009), an estimated 42,011 people were diagnosed with HIV and estimated 34,247 were diagnosed with AIDS. The total estimation of those living with HIV is estimated to be 1.2 million (CDC, 2009). Data regarding rural communities reports 48,000 new cases in nonmetropolitan areas compared to 83,372 in the metro areas in 2005; a decrease in new cases from 2007 (Zukoski & Thorburn, 2009). Rural areas make-up 20% of the population and though the spread of AIDS appears to be on the decline, rural areas are more susceptible to have an increase if services are underutilized and ineffective due to perceived barriers (Zukosi & Thorburn, 2009).

Texas is a major state with a large population living in rural areas. The Texas Department of State Health Services Surveillance Report, (2010) reports that there were 65,077 people living with HIV and 2,291 new cases of AIDS diagnosed for the year 2010. This report dates back to 2003 and reported that since record keeping there has been 21,582 cases of AIDS diagnosed. Mortality rates beginning from 2002 through 2010 averages between 12,000-13,000 deaths per year (Texas Department of State Health Services Epidemiologic Profile, 2010). Texas is home to a diverse population with a high poverty level and a high percentage of individuals living without health insurance. This contributes to some of the factors preventing PLHA from obtaining the treatment and support they need. In 2011, 24.6% of the entire Texas population had no health insurance. This is the highest of all states in the U.S. (Center for Public Policy Priorities [CPPP], 2011). Poverty in Texas for 2008 was reported to be at 15.8% ranking Texas 8th in the nation per individual living in poverty (U.S. Census, 2010).

Special Health Resources for Texas

In 2006, Special Health Resources for Texas, Inc. (SHRT) received a Special Projects of National Significance (SPNS) grant through the Health Resources and Services Administration (HRSA). The purpose of the grant is to increase the availability of dental and oral health care services to clients diagnosed with HIV/AIDS who reside in the northeastern region of Texas. One of the related activities is the development of a regional provider network to assist with service delivery and planning. In December 2008, SHRT contracted with the School of Social Work at Stephen F. Austin State University to evaluate the services provided by the grant. The evaluation component included the facilitation of regional focus groups for the purpose of identifying factors that impact service delivery. Specifically, the study was designed to answer the following question: "What factors impact the delivery of dental, oral, and primary health

care services to clients who have been diagnosed with HIV/AIDS?" The intent was to inform decisions regarding service delivery.

Before discussing the method and results, it is important to describe the context in which SHRT delivers services. SHRT's service region is comprised of the Tyler and Texarkana HSDAs (Health Service Delivery Areas), which includes 23 northeast Texas counties and covers 15,522 square miles (see Figure 1). Within this area, public health services are provided by the Texas Department of State Health Services (DSHS), with the exception of seven counties that rely on a local health department (county). Of great concern is that SHRT has one dentist to serve the area, although there are others not providing services within the region. In terms of clients, SHRT was serving approximately 850 clients at the time of this study. One hundred-fifty of these clients were being served under the SPNS dental grant. Of the 850 clients, approximately 30% were female, 70% were male, and less than 1% was transgendered. As for ethnicity, 55% were African American, 33% were Caucasian, and 12% were either Hispanic or of another ethnic group. Client age ranged from 18 to 68 with an average age of 42 years.

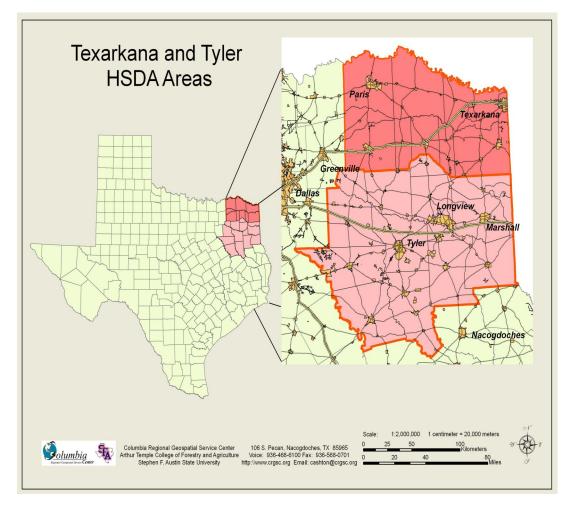


Figure 1. Special Health Resources for Texas (SHRT) Service Region. Copyright 2009 by Columbia Regional Geospatial Service Center. Reprinted with permission.

Rural, for the purpose of the study, refers to those towns, communities, and small cities with populations of less than 50,000. Although some of the communities are adjacent to cities with larger populations they are considered rural due to the geographical distance clients must travel to receive services because of limited resources. The region is consistent with rural lifestyles including conservative attitudes and beliefs due to the geographical location. It is located in the Bible Belt area (see Figure 2) where religion is an integral aspect of the lifestyle. Much of the populations in the area have been there for generations and ties to family and land are strong. Their views are inherent and rooted in Christian beliefs.

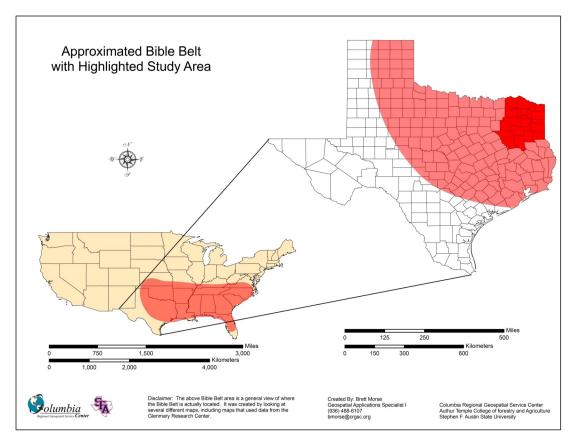


Figure 2. Bible Belt area. Copyright 2009 by Columbia Regional Geospatial Service Center. Reprinted with permission.

Living in the area can be difficult for those viewed as a newcomer or "different" since both experience a sense of unwelcomeness and isolation. Those living with HIV/AIDS may experience a sense of hostility and are unable to develop a support system within the community. Rural communities do respond differently towards newcomers and PLHA, depending on the community. Bible belt rural communities attempt to "do the right thing" or "Christian thing" and their response becomes exalted. Assistance often occurs in the form of attempting to meet concrete needs and social needs on a superficial level but can include offering spiritual guidance and prayer. Although there is diversity in these rural areas, communities seem to share some common bonds such as a sense of pride, good-will, and strong religious beliefs.

In other rural communities distance served as a factor for isolation as neighbors tended to live geographically far from each other and make no attempts at seeking extensive social support. Isolation adds to this factor but living in larger communities can also be a factor for PLHA. The area studied did include cities with larger populations of 50,000 and they too were quite diverse in terms of providing a supportive environment. One community embraced its residents and provided a very active and social life for all citizens including gay and lesbian populations. This is an interesting phenomenon due to its location and historical position.

One of the larger communities had the opposite attitude and did not seem to acknowledge its residents as gay or lesbian. It might be important to note that this community's stakeholders did not participate in the focus group. Participants in the focus groups expressed various reasons for the lack of acceptance in the community where they identified the attitude as apathetic. The community takes pride in its history and is embedded with tradition and beauty. It is progressive and in the last several years experienced a growth in its general population including an increase in diversity. Focus group participants indicated that there is much discrimination towards individuals living with PLHA due to the belief that those inflicted tend to be gay or lesbian. Some of these religious beliefs tend to create an attitude of unwelcomeness and though the community is of an urban size they tend to maintain rural lifestyles and attitudes. However, there does appear to be a sense of change and progressive thinking in some communities within the area.

Methods

Four locations were identified to accommodate focus groups which included stakeholders from the communities, employees, and clients. The focus groups were conducted for the purpose of identifying barriers to treatment and increasing the availability of dental and oral care services to those diagnosed with HIV/AIDS. Due to the large geographical area, the four largest communities were selected to host the groups because they each had a clinic and a room allocated in which to hold the meetings. Transportation was offered to those consumers who lived in the rural areas and they were encouraged to participate by staff members. As is often the case, some were unable to arrive due to lack of transportation, illness, and other issues. Illness and living in rural communities can be unpredictable and complicated; and for those living with HIV/AIDS stigma, discrimination and lack of resources contributes to their inability to participate in opportunities for empowerment. The consumers who did participate assisted in creating the initial list of barriers. The focus group of providers also assisted in generating the list of barriers and tended to keep the consumer in mind while identifying these barriers.

Focus Groups

Subjects. Potential participants for the focus groups were adult stakeholders residing in the region covered by SHRT, including: dental care providers, primary health care providers, hospitals, health educators, and consumers. Potential participants were identified and recruited by SHRT staff using non-probability purposive sampling. Once a potential participant was identified, he/she was contacted by a representative of SHRT who explained the purpose of the project, including the dates/times of meetings, expectations, methods, risks/benefits, and

confidentiality. Whereas the authors had hoped for a total of 75 participants (15 per each of the five focus groups), there were only 38 participants.

Of the 38 participants, 26 were service providers (68.4%), nine were consumers (23.7%), one self-identified as other (2.6%), and two chose not to identify their role (5.3%). It is important to note that all of the service providers were employees of SHRT and the one community-member was a SHRT volunteer. Twenty of the participants were female (52.6%), 16 were male (42.1%), and two did not respond (5.3%). The average age of the respondents was 45.44. Twenty of the respondents self-identified as White/European (52.6%), 11 as African American (28.9%), four as Latino/Hispanic (10.5%), one as Native American (2.6%), and two chose not to respond (5.3%). In terms of education, four had a high school education without a diploma (10.5%), six had a high school diploma or GED (15.8%), one had completed a trade school/training program (2.6%), 12 had some college (31.6%), four had an associate degree (10.5%), five had a bachelor's degree (13.2%), two had a graduate/professional degree (5.3%), and four did not include their educational status (10.5%).

Procedures. Given the large geographical area and number of participants, multiple focus groups were held throughout the region. Specifically, focus group meetings were held in the following towns: Longview, Paris, Texarkana, and Tyler. These towns were chosen because SHRT has a clinic in each one. Two focus group meetings were held in each town: one for providers and one for consumers. The meetings lasted approximately two hours were held in SHRT's facilities and refreshments were provided. The focus group meetings were facilitated by the authors, all of who are experienced focus group facilitators.

Each of the eight focus groups met separately to generate a set of statements that represented the various factors that impact service delivery. Although the process was facilitated by the authors, the participants guided it and were ultimately responsible for the final list of statements. The meetings began by introducing the purpose of the meeting and providing participants with a consent form and a demographic profile form. They were then provided with written instructions for the focus group session, which were explained by a facilitator. At this point, participants were asked to work independently to identify three responses to the following focus prompt: "One factor that impacts the delivery of dental, oral, and/or primary health care services to clients is...." When they had completed the task, one by one each participant was asked to share one of his/her action statements. Once everyone had shared one statement, the process started over again and continued until each person had shared his/her three statements. As the statements were being read, a facilitator recorded them. When all of the statements had been recorded, the group reviewed them and worked together to eliminate duplicate statements. However, the focus group only edited the statements it generated, not the statements produced by previous groups. In order to reduce the amount of duplication, the second and subsequent focus groups were provided with a list of the statements generated by This process resulted in the identification of 98 factors that impact the previous groups. delivery of services. These factors served as the basis of a rating instrument that was subsequently distributed to stakeholders.

Rating

Subjects. All of the focus group participants were asked to participate in this phase of the process. Additional participants were also recruited using a method similar to the one used for focus group recruitment. All potential participants were identified by SHRT and provided a packet containing a consent form, demographic profile, rating instruments, and a postage paid self-addressed envelope. Potential participants included SHRT staff, consumers, and other relevant community stakeholders. It is important to note that the envelopes were addressed to the researchers and SHRT did not have access to completed survey forms. A total of 525 packets were distributed among the various stakeholder groups and 81 were returned (15.4% return rate). It is important to note that only 45 of 350 consumers chose to return the survey (12.9% return rate).

Of the 81 participants, 31 were service providers (37.8%), 45 were consumers (54.9%), three were advocates (3.7%), one identified as other (1.2%), and two were SHRT board members (2.4%). Twenty-seven of the 42 respondents were female (51.2%) and 40 were male (48.8%). The average age of those responding was 45.24. In terms of ethnicity, 44 self-identified as White/European (53.7%), 32 as African American (39.0%), four as Latino/Hispanic (4.95%), one as Asian American/Pacific Islander (1.2%), and one chose not to respond (1.2%). Eight of the respondents reported having less than a high school education (9.8%), seven had a high school education without a diploma (8.5%), 14 had a high school diploma or GED (17.1%), five had completed a trade school/training program (6.1%), 20 had some college without a degree (24.4%), nine had an associate degree (11.0%), 12 had a bachelor's degree (14.6%), and seven had a graduate or professional degree (8.5%).

Procedures. The first step in the rating process involved organizing all of the statements into groups based on their perceived conceptual similarity. This process was completed by the authors and based on a thematic analysis as well as consensus. Once the statements were organized, a rating instrument was developed and distributed to participants. Specifically, participants were asked to identify the frequency at which they experience each of the identified factors. The following scale was employed for this purpose: 1 = none of the time, 2 = very rarely, 3 = some of the time, 4 = most of the time, 5 = all of the time, and 6 = not applicable. In addition to rating the factors and ideas, participants were asked to complete the following open ended items:

- Can you think of any factors, other than those listed above that impact the delivery of services (dental, oral, and/or primary health)? If so, please explain.
- Comments

Once the rating data was collected, SPSS was used to calculate the mean score and standard deviation for each item (factor and idea). Whereas the original intent was to conduct comparisons among the various stakeholder groups, the low return rate significantly limited the number of comparisons. The results of the analysis are discussed in the results section.

Limitations

The low level of participation from consumers limits the degree to which the results can be generalized to the population. In other words, there is concern as to whether or not the opinions of the consumers who chose to participate are representative of the larger group of consumers. This concern also holds true for service providers. Specifically, the majority of the service providers were employees of SHRT. Whereas it may be safe to generalize the results to SHRT employees, the results cannot be generalized to the larger population of service providers who work with the client population. Given that the main focus of the project was to inform decisions regarding service delivery, the lack of representation from other community service providers significantly limits the utility of the results. The concerns with the sample also restricted the authors' ability to analyze the data and make comparisons among the various stakeholder groups.

Due to the low participatory involvement from clients in the large area these preliminary results are inconclusive (n = 45) and do not represent the responses of all clients. It does encourage and support the need for more such studies and advocacy on behalf of those suffering with the disease. The study is preliminary and exploratory to begin the process of service delivery in a more cost effective and client-centered manner.

Results

As previously noted, the eight focus groups identified a total of ninety-eight factors in response to the following focus prompt: "One factor that impacts the delivery of dental, oral, and/or primary health care services to clients is...." The authors organized these factors into groups based on common concepts or themes. The resulting groups or domains were then reviewed for the purpose of identifying domains that were similar enough to be combined. The process was terminated once the researchers were satisfied that the remaining domains were too different to be merged. The process resulted in 21 domains of statements encompassing 98 factors. In addition to presenting the factors and domains, the table (see Appendix) reports the ratings for all participants, service providers, consumers, and dental service consumers. The responses were rated based on the following scale: 1 = none of the time, 2 = very rarely, 3 = some of the time, 4 = most of the time, 5 = all of the time, and 6 = not applicable.

Those factors with the rating of "most of the time" to "all of the time" will be discussed from the list of 98 factors. Sixteen factors were identified under client concerns and included the consumer's current health condition, social isolation, ability to pay utility bills, and the fear of being identified as a consumer of a provider that serves people with HIV/AIDS. Those responding felt that these factors occur most of the time to some of the time. Other factors of concern included the consumer's mental status, work schedule, literacy level, and willingness to disclose HIV status. The category with the second highest number of factors was service quality. Thirteen factors were identified under the category of service quality and are actually identified as strengths and not necessarily factors, most likely reflecting the respondent representation. Ten factors are identified under the category of client ability/responsibility and include such factors as willingness to seek medical care, ability to address basic hygiene, comply with treatment, ability to take responsibility for health care needs, comply with

medication, willingness to accept responsibility for oral health care, actively participate in services, seek and utilize dental services, and ability to keep appointments. These factors were identified to occur most of the time. One other factor identified occurring some of the time included consumer's no-show for appointments. This again, reflects the responses of the majority of respondent representation and implies that it is the consumers' fault for the underutilization of services due to their lack of ability and responsibility.

Two of the 21 clusters identified seven barriers relating to community attitudes and beliefs and community-based health care services. Respondents viewed community as fearful of individuals with HIV/AIDS and as engaging in sexual activity that places them at risk of contracting the disease. Respondents indicated this occurred most of the time. Similar ratings resonated in the area of availability of affordable health care and access to primary care physicians. These two clusters suggest that stigmas do exist and that financial resources are a challenge for the consumer.

Six of the six factors identified under knowledge/understanding of health ranked as "most of the time" and included such factors as consumer's understanding of how HIV/AIDS impacts their overall health, understanding of basic health care needs, understanding how their health status impacts treatment, understanding basic dental and health care needs, understanding of the impact or oral health care on their overall health, and lack of interest in preventative dental care. Service accessibility has five identified factors and some of them are seen as strengths. Transportation is provided for some of the consumers. Distance to services is a problem for clients in receiving dental services and believed to occur "most of the time". Under the cluster of dental services, all factors are identified as barriers with five. All are ranked to be a barrier "most of the time" with availability of dental services ranked to be "most of the time". The remaining clusters identify four or less factors and some are strengths and not necessarily barriers. The general response indicates that services are limited and fragmented with long distances to travel. One consumer participating in the focus groups recounts this:

"We begin our trip early in the morning and return late in the evening jus' to see the dentist in Dallas . . . sometimes, we don't even have food the whole day . . . if, you know, we don't pack us some. Sometimes we don't feel good . . . with this sickness and all"

Social Justice

As rural communities work towards removing barriers for PLHA so does the need for providers to create a more sensitive and competent healing environment. One case manager recounts this statement from a provider:

Services are not culturally sensitive . . . there was one Mexican client who went to see the physician with his whole family and the doctor said, "Don't come in here (referring to his office and holding up his hand in a stopping motion), you have AIDS and you are going to die." Forget cultural sensitivity . . . but compassion and empathy in general. The client spoke English but his family did not . . . probably a good thing.

One major effort towards changes in care is marked by the recent passing of the Ryan White Treatment Modernization Act of 2006. It proposes a more confluent manner among agencies and providers in their delivery of services (Pizzi, 2008). One of the most comprehensive studies conducted in rural Alabama, Louisiana, Mississippi, North Carolina, and South Carolina identified some of the barriers for new programs and their delivery of services (Zuniga et al., 2005) Identifying these barriers will assist in a process for change. Some barriers included lack of funding, lack of qualified personnel, lack of bi-lingual staff, conservative political sentiment/attitudes, lack of community support, and religious attitudes. Other barriers are identified but the condensed list resonates some of the same barriers of this study. East Texas and especially northeastern Texas are geographically located in the Bible Belt area of the United States and has a long-standing record for voting with the more conservative representation. Not only are views conservative, but belief systems are inherent Views and beliefs about PLHA can go against mainstream Protestant teachings. The research suggests that where there is lack of understanding about the disease and its treatment, stigma and oppression occurs (Cao et al., 2006). Research supports the fact that economics is a major factor in the treatment for PLHA not only due to lack of resources on the part of the consumer, but also due to lack of funding for resources for those who provide services (Castañeda, 2000; Godin et al., 1999; Kaplan et al., 2004; Marcus et al., 2000; Shiboski et al., 1999; Tobias et al., 2008; Zuniga et al., 2005). Factors specific to the research in this study include homelessness and inability to pay for utilities as identified by all participants at a rate of some of the time to most of the time with a higher ranking by the consumer.

One of the most comprehensive studies regarding unmet oral treatment for PLHA conducted by Marcus et al. (2000) identifies social and economic factors as the most common barriers for individuals not seeking treatment. Another study conducted by Zuniga et al. (2005) in rural southeastern United Sates identified rural attitudes, conservatism, lack of community support, and community and religious attitudes as having a negative influence in the funding for programs providing services to PLHA. In northeastern Texas, other factors include the distance one travels for services and the lack of resources such as transportation, concrete assistance to individual consumers, and lack of providers for oral treatment.

Implications for Practice

The literature supports much of the results of the study in regards to the barriers those living with HIV/AIDS endure. Poverty and socioeconomics certainly have a great impact on whether or not one receives services, but there are other factors as well, such as the continued stigma, discrimination, and oppression inflicted on a vulnerable group of individuals. In rural communities these factors are more prevalent due to collective systems of beliefs and values. Community involvement, interest, and collaboration are all important factors in assuring the success of any program.

The researchers are very much aware of the lifestyle of people living in rural communities and the significant influence of historical, political, religious, economic, social, cultural, demographic, and the global contexts engaging these factors. Understanding rural communities and the contextual implications need to be considered to assure the delivery of culturally competent services. Specific tactics and techniques must be considered to engage

rural communities in advocating for social and economic justice. The researchers assert this project begins the process of understanding rural communities, rural people, and the blending of innovative ideas in the development of quality services to those living with HIV/AIDS.

Social workers must begin to serve as the change agents in breaking down the barriers, stigmas, and oppressive attitudes inflicting PLHA. They can begin by making policy makers aware of the need for services, particularly in rural communities, and for dental services. They must begin to educate important systems that will reach large populations such as schools, churches, hospitals, and community agencies about the need to break down factors that prevent individuals from seeking treatment. More importantly they must begin a campaign to educate community about prevention and treatment.

References

- Cao, X., Sullivan, S. G., Xu, J., Wu, Z., & The CIPRA Project 2 Team. (2006). Understanding HIV-related stigma and discrimination in a "blameless" population. *AIDS Education and Prevention*, 18(6), 518-528.
- Castañeda, D. (2000). HIV/AIDS-related services for women and the rural community context. *AIDS Care*, *12*(5), 549-565.
- Center for Disease Control and Prevention (CDC). (2009). *AIDS in the United States by geographic distribution*. Retrieved from http://www.cdc.gov/hiv/resources/factsheets/PDF/geographic.pdf
- Center for Disease Control and Prevention (CDC). (2010). *HIV among gay, bisexual and other men who have sex with men*. Retrieved from http://www.cdc.gov/hiv/topics/msm/index.htm
- Center for Public Policy Priorities (CPPP). (2011, September 13). *New census data show Texas'* uninsured rate tops nation. Retrieved from http://www.cppp.org/files/091311_PovertyDay_PolicyPage_HealthIns.pdf
- Godin, G., Naccache, H., Brodeur, J., & Alary, M. (1999). Understanding the intention of dentists to provide dental care to HIV+ and AIDS patients. *Community Dentistry and Oral Epidemiology*, 27(3), 221-227.
- Kaplan, L. E., Tomaszewski, E. & Gorin, S. (2004). Current trends and the future of HIV/AIDS services: A social work perspective. *Health & Social Work, 29*(2), 153-159.
- Marcus, M., Freed, J. R., Coulter, I. D., Der-Martirosian, C., Cunningham, W., Andersen, R., . . . Shapiro, M. F. (2000). Perceived unmet need for oral treatment among a national population of HIV-positive medical patients: Social and clinical correlates.

 *American Journal of Public Health, 90(7), 1059-63.
- Pizzi, A. (2008). Considering the human consequences of policy-level changes: The impact of the Ryan White HIV/AIDS treatment modernization Act. *Social Work & Christianity*, *35*(3), 325-334.
- Shiboski, C. H., Palacio, H., Neuhaus, J., & Greenblatt, R. M. (1999). Dental care access and use among HIV-infected women. *American Journal of Public Health*, 89(6), 834-839.
- Texas Department of State Health Services. (2010). *Texas HIV surveillance report: 2010* annual report. Retrieved from http://www.dshs.state.tx.us/hivstd/reports/default.shtm

- Texas Department of State Health Services. (2010). *Texas integrated epidemiologic profile for HIV/AIDS prevention and services planning*. Retrieved from http://www.dshs.state.tx.us/hivstd/reports/default.shtm
- Tobias, C., Martinez, T., Bednarsh, H., & Fox, J. E. (2008, December). *Increasing access to oral health care for people living with HIV/AIDS: The role of dental case managers, patient navigators, and outreach workers*. Boston, MA: Boston University School of Public Health, Health & Disability Working Group. Retrieved from http://www.hctx.net/rwpc/images/Documents/09%20HTBMN/Workgroup%201/Oral%20Health%20-%20Dental/11%20The%20Role%20of%20Dental%20Case%20Managers%20in%20HIV%20Oral%20Health.pdf
- U.S. Census Bureau. (2010). *State rankings: Persons below poverty level, 2008*. Retrieved from http://www.census.gov/compendia/statab/2012/ranks/rank34.html
- Valdiserri, R. O. (2002). HIV/AIDS stigma: An impediment to public health. *American Journal of Public Health*, 92(3), 341-342.
- Zukoski, A. P., & Thorburn, S. (2009). Experiences of stigma and discrimination among adults living with HIV in a low HIV-prevalence context: A qualitative analysis. *AIDS Patient Care and STDs*, 23(4), 267-276.
- Zuniga, M. A., Buchanan, R. J., & Chakravorty, B. J. (2005). HIV education, prevention, and outreach programs in rural areas of the southeastern United States. *Journal of HIV/AIDS & Social Services*, *4*(4), 29-45. doi:10.1300/J187v04n04 03

Authors' Note

This study was conducted by H. Stephen Cooper, School of Social Work, Stephen F. Austin State University; Wilma Cordova School of Social Work, Stephen F. Austin State University; Freddie L. Avant, School of Social Work, Stephen F. Austin State University.

This study was supported by a program evaluation contract with Special Health Resources for Texas, Inc. (SHRT). The authors wish to acknowledge the support provided by Kara Easley, Melinda Hodges and Shambre Kelly. The authors are also grateful for the assistance provided by the Columbia Regional Geospatial Service Center, Arthur Temple College of Forestry and Agriculture, Stephen F. Austin State University.

Correspondence concerning this article should be addressed to Wilma Cordova, School of Social Work, Stephen F. Austin State University, Box 6104, SFA Station, Nacogdoches, TX, 75962, wcordova@sfasu.edu.

Appendix

Factors Ratings for Service Providers and Consumers (Mean Score)

#	Group/Statement	All	Providers	Consumers	Dental		
Knowledge/Understanding of Health							
1.	Client's understanding of the impact of oral health care on their overall health.	3.70	3.04	4.12	4.39		
2.	Client's understanding of how his/her health status impacts treatment.	4.03	3.46	4.40	4.46		
3.	Client's understanding of basic health care needs.	4.19	3.48	4.58	4.75		
4.	Client's understanding of how HIV/AIDS impacts their overall health.	4.27	3.81	4.6	4.71		
5.	Client's understanding of basic dental and health care needs.	3.93	3.31	4.37	4.44		
6.	Lack of interest in preventative dental care.	2.89	3.42	2.67	3.00		
Service	e Accessibility						
7.	Convenience of hours of operation.	4.03	3.64	4.31	4.33		
8.	Availability of transportation.	3.78	3.64	3.89	4.17		
9.	Distance to services.	3.79	3.57	3.92	4.35		
10.	Impact of travel to dental services upon clients.	3.42	3.38	3.44	4.04		
11.	Convenience of services.	4.09	3.65	4.29	4.38		
12.	Client's understanding of the agency's protocol for delivering oral health care services.	3.54	3.00	3.82	4.12		
13.	Knowledge of available services.	3.92	3.54	4.21	4.16		
Service	e Efficacy						
14.	Ability to maximize services when clients are in the office.	3.96	3.68	4.12	4.22		
15.	Ability to make appropriate referrals.	4.00	3.96	4.06	4.18		
Client	Client Contact						
16.	Maintaining current client contact information.	4.12	3.68	4.39	4.33		
17.	Difficulty maintaining contact with clients.	2.75	3.20	2.45	2.53		
Client	Ability/Responsibility						
18.	Client's willingness to accept responsibility for his/her oral health care.	3.85	3.08	4.31	4.64		
19.	Client's ability to keep appointments.	4.03	3.30	4.51	4.68		
20.	Compliance with medications.	4.09	3.75	4.29	4.42		
21.	Compliance with treatment recommendations.	4.16	3.80	4.34	4.46		

#	Group/Statement	All	Providers	Consumers	Dental
22.	Client no-shows for services.	2.85	3.19	2.58	2.68
23.	Client's willingness to actively participate in services.	3.99	3.65	4.20	4.36
24.	Client's ability to take responsibility for his/her health care needs.	4.14	3.50	4.52	4.63
25.	Client's willingness to seek and utilize dental services.	3.77	3.33	4.10	4.41
26.	Client's willingness to seek medical services.	4.21	3.80	4.50	4.48
27.	Client's ability to address basic hygiene (general and oral).	4.18	3.38	4.64	4.68
Dental S	ervices				
28.	Availability of dental services.	3.65	3.54	3.71	4.00
29.	Ability to provide specialized dental health care.	3.40	3.33	3.46	3.80
30.	Limited number of appointment slots for dental services.	3.42	4.00	2.94	3.35
31.	Inability to schedule initial and follow-up dental appointments in advance.	3.03	3.61	2.69	2.92
32.	The number of appointments necessary to address major dental issues.	3.33	3.27	3.32	3.54
Service	Quality				
33.	Friendliness of staff.	4.49	4.32	4.63	4.58
34.	Ability of staff to be sensitive and empathetic to client needs.	4.47	4.22	4.59	4.52
35.	Provider's knowledge of the current interventions.	4.33	4.28	4.41	4.28
36.	Staff's willingness to go above and beyond to help clients.	4.35	4.35	4.37	4.25
37.	Staff's acceptance of clients.	4.51	4.35	4.58	4.42
38.	Staff's treatment of clients with dignity and worth.	4.57	4.42	4.63	4.50
39.	Communication between providers and clients regarding scheduling.	4.27	4.04	4.46	4.28
40.	Willingness of health care providers to listen to client concerns about treatment.	4.34	4.08	4.53	4.42
41.	Communication among providers about coordinating services.	4.13	4.04	4.24	4.16
42.	Staff's personal fears of the clients.	2.17	2.04	2.34	2.42
43.	The service provider's patience.	4.07	3.48	4.43	4.29
44.	The quality of services provided.	4.22	4.00	4.42	4.29
45.	Honesty of service providers.	4.46	4.24	4.63	4.54

#	Group/Statement	All	Providers	Consumers	Dental
Staffing					
46.	Regionalized case management services.	4.26	4.22	4.35	4.17
47.	Client to staff ratio.	4.18	3.67	4.57	4.50
48.	Staff turnover.	2.98	2.88	3.03	3.45
Translati	ion				
49.	whose primary language is Spanish.	3.61	3.54	3.87	3.63
Client Su					
50. 51.	Lack of client support services.	2.42	2.29	2.47	2.83
	Lack of community support for clients.	2.83	3.12	2.40	2.82
52.	Lack of social support for clients.	2.52	2.72	2.33	2.60
53.	Family support.	3.34	3.31	3.40	3.72
Medicati					
54.	Ability of clients to obtain medications.	3.81	3.52	4.05	4.25
	nity Attitudes/Beliefs				
55.	Lack of community understanding of HIV/AIDS and related risk factors.	3.21	3.72	2.71	3.05
56.	Lack of community acceptance of gays and lesbians.	3.19	3.52	2.76	3.50
57.	Perception of gays and lesbians as engaging in sexual activity with multiple partners.	3.47	3.63	3.29	3.54
58.	Perception of gays and lesbians as engaging in sexual activity that places them at risk of contracting HIV/AID.	3.80	3.92	3.76	4.08
59.	Belief that same sex relationships are wrong.	3.38	3.41	3.37	3.85
60.	Community perception of HIV/AIDS being a "gay disease".	3.18	3.36	3.03	3.37
61.	Community's fear of individuals with HIV/AIDS.	3.52	3.61	3.45	3.70
Client C	oncerns				
62.	Fear of being identified as a client of a provider that serves people with HIV/AIDS.	3.17	3.30	3.17	3.41
63.	Lack of self-esteem.	2.84	3.29	2.49	2.83
64.	Willingness to disclose HIV status.	3.07	3.39	2.81	2.79
65.	Social isolation.	2.97	3.30	2.78	3.05
66.	Substance abuse and/or addiction.	2.96	3.41	2.48	2.71
67.	Homelessness.	2.70	2.82	2.58	3.14

#	Group/Statement	All	Providers	Consumers	Dental
68.	Ability to pay for utilities (electricity, water, sewage, etc).	3.33	3.15	3.53	3.80
69.	Client's literacy level.	3.17	3.08	3.27	3.36
70.	Fear of dental care.	2.33	2.80	2.00	2.04
71.	Client's work schedule.	3.23	2.88	3.57	3.62
72.	Nutritional issues.	2.95	3.08	2.94	3.19
73.	Client's mental status.	3.25	3.40	3.12	3.30
74.	Client's current health condition.	3.64	3.68	3.52	3.55
75.	Client's criminal history.	2.62	2.76	2.57	2.85
76.	Client's age.	2.91	2.43	3.41	3.46
77.	Childcare.	2.64	2.29	3.07	3.63
Liability					
78.	Liability of transporting clients to dental services.	2.65	2.29	2.92	2.94
Funding					
79.	Funding.	3.26	3.04	3.36	3.68
80.	Availability of funds to pay for dental lab fees.	2.81	2.43	3.06	3.45
81.	Availability of funds to pay for partials and denture.	2.75	2.38	3.03	3.50
Insurance	e/Payment for Services				
82.	Client dumping (passive refusal to serve clients who are unable to pay for services).	1.77	2.21	1.53	1.62
83.	Inadequate dental insurance coverage.	2.73	3.57	2.03	2.26
84.	Inadequate health insurance coverage.	2.85	3.79	2.18	2.25
85.	Client's out-of-pocket expenses for health care services.	2.54	2.62	2.42	2.33
Commun	nity-Based Dental Services				
86.	Lack of local dental service providers.	3.06	3.46	2.72	2.72
87.	Lack of local emergency dental care services.	3.37	3.59	3.17	3.17
88.	Unwillingness of dental care providers to serve clients with HIV/AIDS.	2.80	3.44	2.33	2.48
89.	Availability of clinics that make crowns and dentures.	2.96	3.17	2.78	2.45
Commun	nity-Based Health Care Services				
90.	Unwillingness of primary health care providers to serve clients with HIV/AIDS.	2.68	3.42	2.20	2.22

#	Group/Statement	All	Providers	Consumers	Dental	
91.	Lack of local physicians who specialize in treating HIV/AIDS.	2.96	3.68	2.45	2.58	
92.	Reluctance of local hospitals to serve clients with HIV/AIDS.	2.63	3.00	2.40	2.29	
93.	Reluctance of local emergency rooms to service clients with HIV/AIDS.	2.67	3.04	2.40	2.36	
94.	Access to primary physicians.	3.15	3.50	2.95	2.88	
95.	Availability of affordable health care.	3.42	3.50	3.37	3.52	
96.	The wait for primary healthcare appointments.	2.93	3.31	2.73	2.96	
Community-Based Vision Care Services						
97.	Affordability of vision care services.	3.10	3.58	2.79	2.77	
Community-Based Mental Health Services						
98.	Unwillingness of mental health care providers to serve clients with HIV/AID.	2.64	3.00	2.29	2.43	