HIV Education, Prevention, and Outreach Programs in Rural Areas of the Southeastern United States

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ABSTRACT. This study describes HIV education, prevention, and outreach activities, including barriers to providing these services, to clients in rural areas of Alabama, Louisiana, Mississippi, North Carolina, and South Carolina. We present responses from 222 AIDS service and public health organizations. The questionnaire defined rural "as a town, village, or county with fewer than 50,000 people that is not part of a larger metropolitan area." About one-fourth of the clients served by these organizations were female and about one-third were African American. Among the perceived most successful programs provided were outreach efforts, health education and risk reduction, and one-to-one client education or outreach. However, major challenges to providing these programs

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were lack of funds and a lack of qualified staff. Social stigma, privacy concerns, and community attitudes also presented additional obstacles to providing services in rural areas. *[Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <http://www.HaworthPress.com> © 2005 by The Haworth Press, Inc. All rights reserved.]*

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People living in rural areas of the United States are at increasing risk for contracting HIV/AIDS (National Rural Health Association [NRHA], 1997). During 2001 the southern U.S. had the greatest number of people estimated to be living with AIDS. Although the South has about one third of the U.S. population, it accounted for 40% of U.S. AIDS cases and 46% of new AIDS cases (Kaiser Family Foundation, 2002). The southern U.S. also has the largest number of AIDS cases among people living outside metropolitan statistical areas (MSA), with about two in three people with AIDS living outside MSAs residing in the South during 1999 (McKinney, 2002). Women accounted for about 27% of AIDS cases living outside MSAs in the South, the highest proportion of any region of the U.S. and in addition, about 61% of people living with AIDS outside MSAs in the South were African American (McKinney). Heterosexually transmitted HIV infection is greater among African Americans than whites, especially in the rural, southeastern U.S. (Adimora et al., 2003). African American adolescents living in rural areas, particularly females, may be at greater risk for HIV infection than their counterparts living in other areas (Milhausen et al., 2003).

Many states in the southeastern U.S. with large rural populations have rates of HIV infection and AIDS that are among the highest in the nation. For example, during 2003 the AIDS rates in Florida, Georgia, Louisiana, Mississippi, and South Carolina exceeded the national average, even surpassing the AIDS rate in California. Alarmingly, the AIDS rates for women in these states were among the highest in the U.S. (Centers for Disease Control and Prevention [CDC], 2001). During 2003, Alabama, Florida, Louisiana, Mississippi, North Carolina, South Carolina, and Tennessee had estimated rates of HIV infection (not AIDS) that greatly exceeded the national rate of 127.8 per 100,000 population (CDC, 2004).

Since development of a vaccine or cure for HIV is unlikely in the near future, providing HIV education and prevention programs is a fundamen-

tal public health need in rural America (NRHA, 1997). AIDS service and other community-based organizations serving rural areas can be well positioned to offer HIV prevention activities. However, "culturally contextualized interventions" are necessary to effectively reduce the high-risk behaviors of many HIV-infected people living in rural areas (Heckman, Silverthorn, Waltje, Meyers, & Yarber, 2003). As the prevalence of HIV infection and AIDS continues to increase in rural areas, those organizations serving rural areas will be challenged to develop effective prevention services and programs. Planners will develop new programming ideas from their public-health-related experiences, the scientific literature, and the activities of their peers in community-based organizations and health departments (Goldstein, Wrubel, Faigeles, & DeCarlo, 1998).

The HIV prevention literature includes descriptions of a number of effective behavioral and educational intervention programs with diverse outcomes. For example, the literature describes interventions that have increased condom use (CDC, AIDS Demonstration Project Research Group, 1999) and also improved condom negotiation and usage skills (Smith & DiClemente, 2000; Anderko & Uscian, 2000). The literature also demonstrates that other programs were shown to delay initiation of intercourse (Siegel, Aten, & Enaharo, 2001), reduce unprotected anal intercourse (Kegeles, Hays, & Coates, 1996), and decrease drug use (McCoy, McCoy, Lai, Weatherby, & Messiah, 1999). With some exceptions, these interventions were developed for urban settings but they can be adapted for implementation in rural areas. However, the literature to guide HIV prevention outreach targeted at African Americans living in rural areas of the southeast U.S. is limited (Brown & Brown, 2003).

Rural program planners may be able to adapt and incorporate into local interventions those elements of successful programs implemented in other areas. The CDC (1997) identified effective behavioral interventions to reduce risk for HIV/AIDS. Effective intervention and consumer/participant components were described as: culturally competent and developmentally appropriate, as well as gender specific. A clearly defined audience, goals and objectives, as well as a focus on specific risk behaviors and the provision of opportunities to practice relevant skills, were also components common to successful interventions. Planners for rural areas can use these criteria to evaluate their present and planned HIV prevention activities.

As previously discussed, program planners typically look toward their peers for new programming activities. Due to the central role that AIDS service organizations (ASOs) and local health departments play in inspir-

ing new prevention activities, it is important to know what HIV prevention services are now offered in rural areas. Are there services or activities that program personnel perceive as effective for *rural populations?* What services do personnel think are needed by their rural constituents? To date there have been few, if any, published reports on the extent and type of HIV prevention activities offered by organizations serving rural communities. This information on HIV prevention and education services provided in rural areas, along with the scientific literature, can help planners develop future rural prevention interventions. In addition, information on effective rural HIV prevention and education services, along with the scientific literature, will help identify current and future organizational needs to implement effective programming.

To learn about HIV education, prevention, and outreach activities targeted at people living in rural areas of the southeast U.S., we surveyed over 500 AIDS service organizations and public-health related organizations in Alabama, Louisiana, Mississippi, North Carolina, and South Carolina. The objectives of this rural services HIV study are to:

1. identify and describe the current HIV education, prevention, and outreach activities of organizations serving rural communities in the southeast U.S.
2. identify any gaps in the provision of HIV education, prevention, and outreach activities to rural clients in the southeast U.S.
3. assess perceptions of organization personnel about the effectiveness of their current HIV education, prevention, and outreach activities for rural clients in the southeast U.S.
4. identify perceived barriers to providing desired HIV education, prevention, and outreach activities to rural clients in the southeast U.S.

SURVEY METHODOLOGY

To gain insights into HIV education, prevention, and outreach efforts in rural areas of Alabama, Louisiana, Mississippi, North Carolina, and South Carolina, 521 organizations were surveyed beginning in July, 2003. The organizations responding to the survey fell into two broad categories: ASOs and related non-governmental health service organizations such as Red Cross and school-based services (32% of respondents), and public health departments/government organizations (68% of respondents). Contact persons and mailing addresses for each organization sur-

veyed were obtained from the CDC National Prevention Information Network (2002).

Survey Questionnaire

Both the questionnaire and the accompanying cover letter defined rural areas as "a town, village, or county with fewer than 50,000 people that is not part of a larger metropolitan area." The questionnaire provided a list of HIV education, prevention, and outreach programs, with a request to check all those that the organization provided to people living in rural areas. The questionnaire also provided the opportunity for the responding organization to mention other HIV education, prevention, and outreach programs provided. In addition, the questionnaire requested that the respondents identify their most successful programs and to explain why these programs were successful. The survey asked about HIV education, prevention, and outreach programs provided to public schools in rural areas, as well as programs provided to pre-teens and teenagers. To address unmet needs, the survey asked if there were new HIV education, prevention, and outreach programs the organization would like to provide to people living in rural areas that were not offered at that time and why they were not offered.

The questionnaire also asked the organizations to identify difficult to serve rural populations and barriers to serving them. The survey collected data on the percentage of people receiving the organization's services who lived in rural areas, as well as the percentage of people receiving services who were women, African American, or Hispanic. The questionnaire concluded by asking each organization about how the need for the HIV education, prevention, and outreach programs they provide in rural areas, as well as how the availability of resources to provide these services, was expected to change in the future.

Survey Process

The survey questionnaire was finalized and sent on June 9, 2003 to the Institutional Review Board (IRB), Protocol for Human Subjects in Research, at Texas A&M University for review (approved on July 22, 2003). Questionnaires were initially mailed in late July 2003 to 527 organizations in Alabama, Louisiana, Mississippi, North Carolina, and South Carolina. However, six envelopes were returned by the U.S. Postal Services as undeliverable. No updated address or contact information could be found for these six organizations, either through directory assistance

or the internet, resulting in a net survey cohort of 521 organizations. An additional mailing of the questionnaires was sent in late September, 2003 to organizations that had not responded to the survey. By November, 2003 completed questionnaires were received from 275 organizations, for a response rate of 53 percent. Of these 275 responding organizations, 222 reported that they provided HIV education, prevention, or outreach programs to people living in rural locations during 2003 (81% of all respondents). Of the 222 organizations participating in the survey that served clients living in rural areas, 31 percent of respondent organizations were located in North Carolina, 24 percent were in Mississippi, 18 percent were in Alabama, 16 percent were in South Carolina, and 12 percent were in Louisiana. Responses from the organizations providing HIV education, prevention, or outreach services to people living in rural areas are summarized into Tables 1 through 4.

SURVEY RESULTS

Respondent organizations reported various demographic estimates of the people they served. One in four clients (25%) lived in rural areas, ranging from a low of 21 percent in Mississippi to a high of 32 percent in Alabama. One client in five was female (20%), ranging from a low of 11 percent in Mississippi to a high of 29 percent in Alabama. These organizations also served significant proportions of minority clients. African Americans averaged 32 percent of all rural clients served, ranging from 25 percent in Mississippi to 41 percent in Alabama. However, Hispanics averaged only 3 percent of all rural clients served, ranging from 1.4 percent in South Carolina to 4.3 percent in North Carolina.

Programs Provided

Table 1 demonstrates that 94 percent of the organizations responding to the survey provided HIV/STD education, counseling, or testing programs to people living in rural locations of their service areas. These organizations reported that health education and risk reduction, condom distribution, and one-to-one client education or outreach were the most successful HIV education, prevention, or outreach programs they provided to people living in rural areas. The success of a program is based on the individual self perceptions as reported by each respondent. Table 1 also presents the perceptions those respondents had concerning elements of successful HIV education, prevention, or outreach programs, citing

TABLE 1. HIV/AIDS Education, Prevention and Outreach Programs Provided to People Living in Rural Areas

Characteristic	Percentage of Respondent Organizations (n = 222)
Programs Provided	
HIV/STD Education, Counseling, or Testing	94%
Condom Distribution	82%
Prevention Counseling	78%
Case Management	35%
Partner Elicitation	29%
Outreach/Street Outreach	27%
Transportation/Gas Voucher	17%
Emergency Assistance	4%
Treatment Alternatives to Probation	3%
Perceived Most Successful Programs	
Health Education and Risk Reduction	73%
Condom Distribution	66%
One-to-One Client Education/Outreach	60%
School Presentations	28%
Case Management/Service Coordination	24%
HIV Prevention in Jails/Prisons/Detention Centers	18%
Outreach/Street Outreach	16%
Elements of Successful Programs	
Free Services	84%
Non-Judgmental Delivery of Services	74%
Privacy/Confidentiality/Discretion	67%
Development of Confidence/Trust	60%
Sole Resource in the Area	23%
Bi-lingual/Cultural Sensitivity	22%
Mobility/Services Travel to Rural Areas	19%

free services, non-judgmental delivery of services, confidentiality, and trust as the most frequently mentioned elements of successful programs. Table 2 summarizes some of the lessons learned from providing the perceived successful HIV education, prevention, or outreach programs. A non-threatening approach to service delivery was the most frequently mentioned lesson learned (82% of respondents). Table 2 also presents

TABLE 2. Lessons Learned from and Access to HIV/AIDS Education, Prevention and Outreach Programs

Characteristic	Percentage of Respondent Organizations (n = 222)
Lessons Learned in Providing Successful Programs	
Approach Must be Non-Threatening	82%
Coordinate/Network with Other Agencies	63%
Outreach Workers Must Know Population Served/Culture	54%
Maintain Same Schedule for Services	26%
Provide Community-Level Services for Visibility	22%
Cultivate Formal and Informal Community Leaders	21%
Food Attracts Clients	18%
Access Clients Through Schools	14%
Use Media Advertising - Especially TV	13%
Rural Access to Programs	
Access Through Clinics	80%
Health Fairs	59%
Telephone/800 Number	40%
Present Programs at Other Organizations	37%
Outreach Worker	34%
Community Visits	29%
Group Meetings	26%
Access Through Schools	24%
Web Page	21%
Visits to Rural Jails/Prisons	20%
Street Outreach	19%
Mailings	10%
On-Line/Chat Rooms	3%

how people living in rural areas accessed HIV education, prevention, or outreach programs, with access through clinics mentioned by 80 percent of respondents.

New Programs

Survey participants were asked what new HIV education, prevention, or outreach programs they would like to provide that are currently not

offered to those living in rural locations in their service area. Table 3 presents an array of needed new programs identified by responding organizations. The most frequently mentioned responses were programs for schools/adolescents, programs for Hispanics, and for parents and teachers. The questionnaire then asked why these programs were not currently offered in rural areas, with lack of funds the overwhelming response (67% of respondents). Other frequently mentioned reasons why these programs were not offered include lack of qualified personnel, lack of bi-lingual staff, conservative political sentiment, lack of community support, and religious attitudes.

Difficult to Serve Populations

The survey asked what populations living in rural areas were difficult to reach with HIV education, prevention, or outreach programs. As Table 3 illustrates, over one half of the responding organizations reported that undocumented migrant workers (56%) and men having sex with men (51%) were the most difficult to reach. Among the barriers to reaching these difficult to serve populations were fear of loss of privacy, social stigma, community and religious attitudes, and lack of transportation; the two most frequently cited being concerns of privacy and social forces.

Organization Collaborations

The questionnaire asked if the respondent organization involved other organizations in the delivery of HIV education, prevention, or outreach programs to people living in rural areas. Table 4 shows the range of other organizations involved in collaborative efforts to provide HIV education, prevention, or outreach programs to people living in rural areas. The most frequently mentioned collaborations were with ASOs, local health departments, social service agencies, churches, and medical care providers. The questionnaire also asked if the respondent organization provided HIV education, prevention, or outreach programs in public schools in rural locations. Table 4 demonstrates that most organizations (53%) did not provide these programs in rural public schools, although more than one third of respondents (37%) reported providing HIV education, prevention, or outreach programs in public high schools located in rural areas. However, about three survey respondents in four (73%) replied that they did provide HIV education, prevention, or outreach programs to teenagers living in rural areas.

TABLE 3. The Need for New Programs and Difficult to Serve Populations in Rural Areas

Characteristic	Percentage of Respondent Organizations (n = 222)
Needed New Programs	
HIV Programs for Schools/Adolescents	41%
HIV Programs for Hispanics	36%
HIV Training Programs for Parents	32%
HIV Training Programs for Teachers	30%
HIV Programs for High-Risk Groups	22%
Mobile HIV Outreach Programs	22%
Collaboration with Faith-Based Groups	21%
HIV Programs for Women	19%
HIV Training Programs for Health Professionals	19%
HIV Programs for African Americans	17%
Places to Leave Literature	14%
HIV Programs for Outlying Areas	10%
Barriers to New Programs	
Lack of Funds	67%
Lack of Qualified Personnel	32%
Lack of Bi-Lingual Staff	32%
Conservative Political Sentiment/Attitudes	32%
Lack of Community Support	31%
Religious Attitudes	29%
Cost of Travel to Rural Areas	17%
Lack of Cultural Sensitivity Training	9%
Changing Target Populations	5%
Difficult to Serve Populations	
Undocumented Migrant Workers	56%
Men Who Have Sex With Men	51%
Intravenous Drug Users	45%
Hispanics	41%
People in Remote Rural Areas	35%
Formerly Incarcerated Persons	26%
African Americans	13%

TABLE 3 (continued)

Characteristic	Percentage of Respondent Organizations (n = 222)
Barriers to Reaching Difficult to Serve Populations	
Fear of Loss of Privacy	54%
Social Stigma	50%
Community Attitudes	45%
Religious Attitudes	39%
Language Barriers	37%
Lack of Transportation	34%
Mobility of Migrant Workers	31%
Lack of Staff/Qualified Personnel	31%
Lack of Compassion for HIV+ People	27%
Distance/Large Service Area	26%
Lack of Access to Schools	24%
Distrust of Government Agencies	21%
Lack of Access to the Incarcerated	10%

Future Need and Future Resources

The survey asked if the need for HIV education, prevention, or outreach programs in rural areas would increase, decrease, or remain the same in the future. Table 4 shows that 63 percent of all respondents reported that the future need for these programs will increase, ranging from a low of 62 percent of respondents in South Carolina to a high of 71 percent in North Carolina. The questionnaire also asked if future resources available to provide HIV education, prevention, or outreach programs would increase, decrease, or remain the same. Only 22 percent of all respondents reported that resources will increase in the future, ranging from 17 percent of respondents in Alabama to 31 percent in Mississippi. About 21 percent of all respondents replied that resources for rural HIV education, prevention, or outreach programs will decrease in the future, ranging from a low of 13 percent of respondents in Louisiana to a high of 39 percent of organizations in South Carolina.

TABLE 4. Organizational Collaborations, Services to Young People, and Future Program Delivery

Characteristic	Percentage of Respondent Organizations (n = 222)
Collaboration with Other Organizations	
AIDS Service Organizations	49%
Local Health Departments	45%
Social Service Agencies	44%
Churches	40%
Medical Care Providers	37%
Substance Abuse Providers/Counselors	30%
Public Schools	27%
Minority Organizations	25%
Jails/Prisons	24%
Housing Agencies	24%
Universities/Colleges	19%
Youth Organizations/Agencies	18%
Probation Services	8%
Planned Parenthood	6%
Gay Organizations	6%
Programs Provided to Schools	
No Programs Provided to Schools	53%
Elementary Schools	11%
Junior High Schools	26%
High Schools	37%
Programs Provided to Young People	
Pre-Teens	33%
Teenagers	73%
Future Need for Programs	
Increase	63%
Decrease	3%
Remain the Same	29%
No Response/Missing	5%
Future Resources for Programs	
Increase	22%
Decrease	21%
Remain the Same	50%
No Response/Missing	7%
Client Demographics	
Women	20%
African Americans	32%
Hispanics	3%

DISCUSSION

The southern U.S. has experienced the most rapid increase in AIDS cases, with southern states leading the nation in the number of Americans living with AIDS and the proportion of women and African Americans with AIDS living in rural areas (Kaiser Family Foundation, 2002; McKinney, 2002). A vaccine for HIV or cure for AIDS is not in the imminent future, therefore making HIV education and prevention programs a fundamental public health need in rural America (NRHA, 1997). AIDS Service Organizations, health-related organizations, and local health departments currently provide a range of HIV education, prevention, and outreach programs to people living in rural areas of the southeastern United States, based on responses to the survey conducted for this study. Among the most successful programs provided are health education and risk reduction, condom distribution, and one-to-one client education or outreach, according to survey responses.

According to the survey results, major challenges to providing new programs are a lack of funds and a lack of qualified and bi-lingual staff. However, the challenges to providing new programs are not only due to a lack of funding. Conservative political sentiment, lack of community support, and community and religious attitudes are additional obstacles to providing new and necessary HIV education, prevention, or outreach programs in rural areas. Privacy concerns, social stigma, community and religious attitudes, and a lack of transportation were frequently mentioned barriers to reaching difficult to serve populations. Contrary to popular belief, lack of funds is not the only barrier to reaching difficult to serve populations.

A large majority of the organizations responded that they expect the need for HIV education, prevention, and outreach programs to increase in the future in rural areas that they serve. Current HIV prevention, education, or outreach programs in rural areas of the southeastern U.S. are not reaching many Hispanics. According to survey responses, only about 3 percent of the rural clients served were Hispanic. Undocumented migrant workers, many of whom are Hispanic, were identified in the survey as the most difficult to serve population. HIV programs targeted at Hispanics were mentioned by more than one third of respondents as a needed new program for rural locations of their service area.

New programs targeted at schools or adolescents, parents, teachers, and people living in outlying areas are also needed in rural areas of the southeastern U.S., according to the results of the survey. The National Rural Health Association recommends intervention in public schools as

the first line of HIV/AIDS prevention (NRHA, 1997). However, more than half of our survey respondents reported that their organization did not provide HIV education, prevention, or outreach programs in rural public schools. Continued collaborations among ASOs, local health departments, social service agencies, and health providers can help reach and serve these diverse, targeted groups. Collaboration not only helps identify new groups to be served, but also can help to understand their culture and how to overcome barriers to effectively reach difficult to serve populations.

One half of all respondents to our survey mentioned social stigma as a barrier to reaching difficult to serve populations. In addition, concerns of privacy, confidentiality, or disclosure were mentioned by more than two thirds of survey respondents as elements of successful HIV education, prevention, or outreach programs. Stigma has been identified as an important factor to consider in efforts to control sexually transmitted infections ([STI], Battelle Centers for Public Health Research and Evaluation, 1998). Lichtenstein (2003) found that visibility of a small city clinic and "patient spotting" were major barriers to STI screening and treatment (p. 2442). Sensitivity to patient confidentiality and disclosure in the delivery of rural services in the politically and socially conservative southeastern U.S. are essential to the success of HIV education, prevention, or outreach programs.

IMPLICATIONS FOR SOCIAL WORK SERVICE IN RURAL COMMUNITIES

AIDS service and other organizations now provide many valuable HIV prevention and educational services to their constituents in rural areas. However, these organizations also recognize the need for developing future programs and are aware of many of the barriers to providing these programs.

In this survey "lack of funds" was a frequently identified barrier to creating needed new programs for rural populations. Given shifts in national concerns and recent federal spending priorities (e.g., homeland security, etc.) funding both new and ongoing HIV prevention projects is likely to become an even greater challenge. Should the proposed federal budget for FY 2006 be approved by Congress, spending for the CDC's HIV/AIDS prevention and surveillance program will be reduced from FY 2005 by $4 million (Department of Health and Human Services, 2005).

Programs for schools, adolescents and for parents and teachers were identified as needed by 40%, 32%, and 30% of survey respondents respectively. Providing school-based HIV prevention education will also become increasingly difficult particularly for programs that promote other than "abstinence only" prevention messages. Despite evidence showing that abstinence only programs have not been effective in delaying onset of sexual intercourse or decreasing number of sexual partners among teenagers (see, for example, Kirby 2002a), the proposed federal FY 2006 budget calls for a $39 million increase for funding these programs. Social workers must advocate both for restoration of funding for HIV prevention programs that have been shown to be effective and for increased funding of comprehensive school-based sexuality education programs that have demonstrated positive impacts on adolescent HIV risk behaviors (see, for example, programs such as those evaluated by Kirby 2002b).

Inadequate funding is not the only perceived obstacle to providing needed HIV prevention services in rural communities. Serving hard to reach populations and addressing concerns about privacy while dealing with other social forces (e.g., community attitudes, stigma, etc.) also present significant challenges. Can social workers in rural communities surmount these non-financial barriers?

As members of rural communities themselves, social workers in rural ASOs may do the most to break down social barriers and stigma around HIV and HIV prevention by actively participating in other groups in their communities. As a member of a parent-teacher association, faith community, or other affinity group rural social workers can not only serve as resource persons but can keep HIV prevention education on local "radar screens." Serving as a resource person may also include connecting with or recruiting volunteers to connect with "hard to reach" populations.

An example of this is Daniel Newman's HIV prevention education program for rural non-gay identified men who have sex with men, which reaches out to men in public environments where sexual activities are known to take place or be arranged (e.g., parks, parking lots, etc.) Newman's rural program was adapted from an urban program developed by Beckstein (Beckstein, 1990; Newman D. M., personal communication, March 1, 2005; Newman, 2005).

Although faced with innumerable challenges, it is possible for social workers in rural ASOs to adapt, advocate for, and advance HIV prevention in their communities. This survey has begun a process of identifying service and intervention priorities for this HIV affected, but underserved rural population. It can serve ASOs in these areas to better identify gaps

and barriers for these services. Regarding populations, the ASOs need to make informed efforts to make contact with groups who may not be counted, may be difficult to find, but are at greater risk. Certainly, programs need to pay greater attention to stigma and confidentiality concerns of their HIV affected clients if they expect to have an impact on this epidemic.

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