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Understanding the Barriers to Use of Free, Proactive Telephone Counseling for Tobacco Dependence

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Abstract

We sought to gain an empirical and practical understanding of the barriers experienced by Arkansas Mississippi Delta residents to using the free telephone counseling (quitline) for tobacco dependence. Barriers included lack of knowledge about the quitline, lack of trust in the providers, as well as multiple root causes to seeking and achieving abstinence from tobacco including issues related to the poor socio-economic context and concerns about negative health effects of quitting. A strong belief in the role of faith in the process of quitting was expressed. Participants suggested strategies for increasing knowledge and trust levels, but were not hopeful about addressing root causes. Given the considerable resources being allocated to quitlines and the burden of tobacco use and disease in lower socioeconomic and minority groups, understanding utilization of quitlines by these groups has implications for policy development, the promotion of quitlines, and the provision of alternate tobacco treatment services.

Keywords

addiction/substance use; tobacco and health; smoking cessation; African Americans

Tobacco use is the single most costly health risk behavior and the leading cause of preventable death in the United States. (Centers for Disease Control and Prevention [CDC], 2005). Smoking accounts for over 30% of all cancer deaths, 87% of lung cancer deaths, and contributes greatly to the incidence and progression of coronary heart disease (CHD), the leading cause of death in the US (American Cancer Society, 2009; CDC, 2005; Department of Health and Human Services, 2004; Heron & Tejada-Vera, 2009). Lower socioeconomic status (SES) populations demonstrate significantly higher tobacco use prevalence rates and suffer disproportionately from tobacco-related disease (CDC, 2008; Fiore, 2008). Smoking prevalence in the US for those with incomes <\$35K (~30%) is twice that of those with incomes >\$50K (13%) (CDC, 2008) with significantly more rural residents live below the poverty level than residents of metropolitan areas (Bishaw & Stern, 2006).

African-Americans are more likely to be of lower SES than European-Americans (CDC, 2008; United States Census Bureau, 2010). Despite being no less motivated, African-Americans have less success at quitting and consequently experience substantial excess mortality from tobacco-related disease (Fiore, 2008; Pederson, Ahluwalia, Harris, & McGrady, 2000; Royce, Hymowitz, Corbett, Hartwell, & Orlandi, 1993). This disparity has been linked to a number of clinical, cultural, and genetic influences (Carabello, Giovino, & Pechacek, 1998; Fiore, 2008; Kabat, Morabia, & Wynder, 1991; T. K. King, Borelli, &

Black, 1997; Mo et al., 2009; Orleans, Shoenbach, & Salmon, 1989; Perez-Stable, Herrera, Jacob, & Benowitz, 1998; Royce et al., 1993; Wagenknecht et al., 1998). However, King and colleagues demonstrated that once socio-demographic factors are accounted for, the epidemiological evidence for the difference in quit ratios between African-Americans and European-Americans becomes non-significant (G. King, Polednak, Bendel, Vilsaint, & Nahata, 2004). More importantly, this disparity is also linked to use of evidence-based treatments for tobacco dependence. African-Americans, along with other lower SES groups, are less likely to be offered, aware of, and use evidence-based treatments for tobacco dependence (Bansal, Cummings, Hyland, & Giovino, 2004; Fiore, 2008; Houston, Scarinci, Person, & Greene, 2005; Lopez-Quintero, Crum, & Neumark, 2006; McMenamin, Halpin, & Bellows, 2006; Murphy, Mahoney, Hyland, Higbee, & Cummings, 2005; Okuyemi, Ahluwalia, Richter, Mayo, & Resnicow, 2001).

The evidence-base for the efficacy of cognitive-behavioral therapy (CBT) as a treatment for tobacco dependence is well established (Chambless et al., 1998; Compas, Haaga, Keefe, Leitenberg, & Williams, 1998; Fiore, 2008). Providing CBT by telephone through proactive “quitlines” is a recent innovation (Cummins, Bailey, Campbell, Koon-Kirby, & Zhu, 2007; Fiore, 2008; Stead, Perera, & Lancaster, 2007) {Lichtenstein, #559}. Proactive quitlines provide several sessions of CBT to callers by contacting participants for scheduled sessions after the initial call. The caller is assessed, introduced to cognitive-behavioral concepts (i.e., the trigger-urge response cycle and identification of individualized physiological, situational, cognitive, and/or emotional/stress triggers), and may engage in exercises designed to help the smoker become aware of smoking-related thoughts and behaviors and incorporate behavior changes into daily life. Numerous sessions provide an opportunity to address challenges with medications, withdrawal, weight gain, and relapse prevention. There is considerable evidence for the efficacy of proactive quitlines (Stead et al., 2007). The most effective CBT provides four or more sessions augmented with medications such as nicotine replacement, bupropion, or varenicline (Fiore, 2008).

Arkansas (AR) is a largely rural state with a high proportion of African American and lower SES residents (United States Census Bureau, 2010). (See Table 1.) Nearly 34% of those with incomes of less than \$35,000 in AR smoke daily (CDC, 2008). Several AR counties lie in the heart of the Mississippi Delta region, a predominately African-American, lower-SES, and historically underserved area with some of the lowest health status indicators and the highest CHD and cancer death rates in the United States (ACS, 2007; Barnett, Capser, Halverson, & Elmes, 2001; Bureau, 2000; Capser, Barnett, Halverson, & Elmes, 2000; Felix & Stewart, 2005). The AR quitline provides multiple sessions of proactive, evidence-based treatment for tobacco dependence over the telephone free of charge to all Arkansans; however, the AR Mississippi Delta counties demonstrate some of the lowest rates of participation in the AR quitline services (Sheffer, 2007).

Because access to the quitline requires less time and fewer resources than attended group or individual sessions of treatment, there is an assumption that quitlines are especially attractive and accessible to lower SES groups; however, there is a dearth of information about the utilization of quitlines by these groups (CDC, 2007; Fiore, 2008). Multiple sessions of proactive telephone counseling requires regular, private access to a telephone, as well as other resources that are not available to all smokers. Some studies indicate that reactive quitlines attract a high proportion of lower SES participants (Prout et al., 2002; Sood, Andoh, Rajoli, Hopkins-Price, & Verhulst, 2008). Reactive quitlines provide advice and assistance to callers on an as-needed basis and do not attempt to contact callers after the initial call. There is no evidence that reactive quitlines increase success rates above that found for self-help and they are thus, not an evidence-based treatment {Stead, 2007 #82}. Other studies indicate that quitlines attract a greater proportion of higher SES smokers and,

at the very least, maintain existing disparities (Niederdeppe, Fiore, Baker, & Smith, 2008; Siahpush, Wakefield, Spittal, & Durkin, 2007). The California Smokers' Helpline has programmatically attempted to address differential utilization of quitline services by marginalized groups. Anecdotal "lessons learned" from these experiences include the identification of a number of barriers including a lack of trust, lack of credibility, limited resources, limited or no community knowledge and awareness of quitline services, and cessation not being a priority for the population (Consortium, 2005). This information, however, is not published in the scientific literature and may not generalize to the AR Mississippi Delta.

Examination of disparities in the utilization of evidence-based telephone counseling for tobacco dependence is especially important given the shift in the demographics of the smoking population to lower SES groups and the recent public health emphasis on quitlines. The CDC Best Practices for Comprehensive Tobacco Control Programs recommends that a significant proportion of state tobacco control budgets be devoted to maintaining and promoting quitlines (CDC, 2007). All 50 states and all the provinces in Canada now employ the services of a quitline (Cummins et al., 2007). Further research is needed into disparate access and use of these services as well as the identification of barriers experienced by lower SES and African-American groups.

The aims of this study were to gain an empirical and practical understanding of the barriers to using the AR quitline for this population and how access could be improved. A community-based participatory research (CBPR) approach and democratic deliberative methods were utilized. We anticipated that the suspicion about research within the community as well as the marked power differential between community members and university researchers would inhibit access to potential community partners and participants as well as access to unfiltered responses from participants. An essential aspect of the CBPR approach is fostering an egalitarian relationship with the community. Use of CPBR also acknowledged the important role of the community in decision-making for residents. We expected this approach to be more attractive to potential community partners, to enhance participation within the community, to facilitate the goal of understanding the issues and potential solutions from the perspective of the residents, and to convey a strong message to participants that we were interested in their perspectives. We also expected this approach to enable the university researchers to be more aware of their biases throughout the process. Additionally, we thought that it was important to acknowledge the role of community within the African American population in the delta in order to. A democratic deliberative method was chosen because it supported CBPR principles, was appropriate for our purposes, and was the method of choice for our community partner. Our community partners had already been trained and developed considerable expertise in conducting inquiries using the method. Note: The democratic deliberative method is inductively driven and precluded use of a theory-driven inquiry for data collection. Our community partners were particularly in favor of an inductive approach and the possibility of perhaps uncovering information that might be overlooked in a theory-driven inquiry. This is the first systematic investigation, to our knowledge, into the barriers to use of telephone counseling for tobacco dependence and how access might be improved for a large marginalized group as well as the first inquiry into this topic using this approach and this method.

Method

Approach

This study was approved by the Institutional Review Board at the University of Arkansas for Medical Sciences. Community-based participatory research principles, as described by Israel were employed (2005). The CBPR approach is collaborative in nature, recognizes the

strengths of community partners, and seeks to involve the community as partners in all aspects of the research process. As such, the research team included Walnut Street Works, Inc. (WSW), a nonprofit community organization from within the community of interest. The team discussed the problem and the overall research objectives as well as the social, economic, cultural, environmental, and historical context of the AR Mississippi Delta region. The team then developed the specific research questions: How can we improve access and use of the AR quitline? What are the barriers to use of the quitline in the Delta? and How can the barriers be overcome?

Led by WSW, the study team used democratic deliberative methods to structure the inquiry (Abelson, 2001; Abelson et al., 2003). This approach is widely used to understand a number of sensitive social questions (Abelson et al., 2003). These methods assume that those most affected by use or non-use of a program can most accurately answer questions pertaining to that program. These methods also acknowledge the importance of context in the interpretation of participant responses. Discussion must take place in a setting in which anonymity is supported and values are not judged. In order to reduce demand characteristics, university team members were not present during any portion of the data collection process.

Target Area Selection

We sought to access an area in the AR Mississippi Delta with the lowest rates of participation in the AR quitline. Relative rates of participation were assessed per the adult smoking population for all AR counties in fiscal year July 1, 2005, to June 30, 2006. Lee and Cross counties were selected by the research team as target areas because they demonstrated some of the lowest rates of participation in the region. See Table 1 for county demographic information.

Participants

Participation was voluntary, anonymous, and without remuneration. Smokers or persons who lived with smokers were recruited by an invitation to the community spread through word-of-mouth and local advertising (flyers, ads in local papers, public service announcements). Recruitment was not dependent upon written means. Recruitment messages stated that the groups were for the purposes of discussing a public tobacco cessation program and that all views will remain anonymous, may be used to help understand use of the program, and may be used to improve the program. No identifying information was collected; however, participants were asked to complete a short survey which included race, age, county of residence, tobacco use status, and whether or not they thought residents had a telephone to use for the quitline. The last question was suggested by WSW.

Procedure

The initial step in deliberative democratic methods is framework development, the process by which options or choices for deliberation are developed for the forums. The framing sessions generated lists of reasons why Delta residents did not use the AR quitline. Questioning was designed to access participants' core values. Four framework sessions were conducted, two in each county. Participant comments were recorded on newsprint and posted on the walls for continuous review throughout the sessions. WSW facilitators developed a master list of reasons derived from all the thoughts, options, and alternatives from all framework sessions. A draft of the final choices was developed through a process of naming and clustering these thoughts, options, and alternatives. The draft was then tested with two groups of participants. Feedback from these groups was used to clarify the wording of the final choices.

Forums were focus groups that deliberated about each of the choices developed in the framework sessions. Eight forums were then conducted, four in each county. Participant comments were continuously recorded on newsprint and posted on the walls. At the end of a forum, participants were always asked, “Is there anything else we should add?” and “Has anything been left out?” and “Where or what is the common ground?”

Results

The results are presented in three parts: A description of the participants, the results of the framework sessions, and then the results from the forums.

Participants

A total of 268 residents of Lee and Cross counties participated in the framing sessions and forums from October, 2007 and September, 2008. The majority of participants were African-American (74%) and female (64%); 58% were from Cross county and 42% from Lee county; approximately two-thirds of participants used tobacco daily or occasionally and nearly one-third were former tobacco users. The mean age of participants was 49 years. Approximately half of respondents to the survey thought that residents would not have a telephone to use for the quitline.

Frame-work Results

The frame-work development resulted in the identification of three barriers to use of the quitline: a) lack of knowledge, b) lack of trust, and c) numerous “root causes” of tobacco use. These three barriers were used to develop the choices and questions for the forums. The data that led to the frame-work results are presented below.

Lack of knowledge of the AR quitline—Participants reported that very few people in the Delta knew of the quitline. Comments (from the notes) included:

I didn't know we had such a thing as a quitline [affirmed by group repeatedly]. If we knew, we'd use it. I never heard of it before. We get poor information here. Others don't know about it either. We didn't hear it on the radio or see it in the newspaper. We didn't see it on television, even late at night. We get Memphis, [Tennessee] not Little Rock [Arkansas] television. We didn't have any word-of-mouth information. Can't use word-of-mouth if no one is using it. We may have seen the number but we didn't know what they meant, or if it was for us. This is the first time we have heard about the quitline. We don't have the telephone number. We don't know how it works or anything about it. We never tried it before. If we knew about it, someone might help us figure out our addiction and how to help us.

Questions developed in the frame-work for deliberation in the forums included: How would they go about increasing knowledge about the quitline? How would this increase use of the quitline? Would this be ineffective or even a waste of time and money here? What would be good about making sure that we all know about the quitline? What are the Pros of this choice, what is good about it? What are the Cons of this choice, what is bad about it?

Lack of trust—Distrust of the quitline was reported to be the result of generations of distrust in the Delta reinforced by negative experiences. Comments included:

We just don't trust people from Little Rock or the outside. Someone said they will get our social security number. We don't give out private information to people we don't know. The Tuskegee Experiment is too real to us. We are afraid they are not really interested in helping us. We lack self-confidence. If we do what they say it

might help but we don't want to do what outsiders telling us to do. We might feel intimidated by persons on the other end of the line. We get people with accents and we can't understand what they say. You can't see the person who is talking to you. We are afraid they might get on you when you call. Once we get in their database all kinds of people will start calling. We might have a criminal record and be afraid they will find us. I just do not want people to know my business. Data bases help anybody find us. Creditors might find us. We don't want people in Little Rock to know we smoke. There is probably money involved and we don't have it – no matter what they say at first- there always is. I don't think they can help us here. We don't want to go through someone's process – it would be torture. We are afraid of the words they will say to us on the other end. They are just pretending to us. It would be offered a little while and then be gone. We probably won't like the tone of voice they use on the telephone. It is hard to get us to trust anyone because society is so crooked. If we trusted, we would feel confident in what they are saying to us. Too much has happened here. They can't know who I am. I want to talk to a person not a machine. How can you tell me what to do if you have not been there? People never follow through anyway. We still fear we don't understand their language or accent. Doctors invest in business so doctors get cash flow and don't tell us to stop. Even if they come here it still might be a put-up. Too much money is passed in the dark. We are scared it won't work. Sometimes they will check our medical history. They can check anything with our social security number. Identity theft can't be stopped no matter what they say.

Questions developed in the frame-work for deliberation in the forums included: How would they increase trust in the quitline? Why would this be an effective way to increase use of the quitline? Why would this not be effective? What are the pros of this choice, what is good about it? What are the cons of this choice, what is bad about it?

Numerous “root causes” of tobacco use—Participants indicated that some people don't want to quit, there were many reasons for not wanting to quit, and that these are significant barriers to using the quitline. Factors identified as root causes included the stress of living in an impoverished area, a general lack of resources and opportunity, the desire to exercise control over the choice to use tobacco, and the fear of getting cancer or other health problems after quitting. Comments included:

Smoking reduces our stress and our tension. All of my friends smoke - don't take my friends from me. It is the most enjoyable part of my life. I am afraid of change. I might fail. I will quit when I really want to quit. I am scared. Trying to stop increases stress. If you go to a doctor, you'll get stress big time. It's a mind thing - we will quit when we want to. We'll eat more if we stop and we already weigh too much. Too much poverty here to stop smoking. Some people may have low self esteem. We fear the withdrawals. Smoking makes you feel grown up. We already have health problems so why stop now. It relaxes my nerves. We would have to learn how to live all over again. It is an addiction, like alcohol and drugs. The average person does not want to quit. Smoking covers up problems and is temporary relief just like alcohol and coffee. Bad things – like cancer – show up when people quit. Many are just not interested in their health. We have too many other things to worry about. We will consider quitting when the stress and tension of living in the Delta is less. We don't want to quit so even trusting the system won't help.

Questions developed in the frame-work for deliberation in the forums included: How would they address the reasons why people do not want to stop using tobacco? What root causes

would they address? What are the pros of this choice, what is good about it? What are the cons of this choice, what is bad about it?

Forum Results

The forums used the framework choices and questions to facilitate deliberation about how to improve access to and use of the quitline.

Increase knowledge of the quitline—Forum participants suggested that knowledge of the quitline could be increased by traditional means of advertising on stations and media that reach them (newspaper, billboards, radio, television) as well as other means more specific to grassroots Delta life including flyers in grocery and convenience stores, church announcements, word-of-mouth through getting more people involved. Many indicated that forums like the one in which they were engaged would be helpful. Most agreed that you can't assume people read. Most indicated that the most effective communications would be messaging through trusted people within their communities. The obvious benefit of this approach was that it may increase use of the quitline; however, participants cautioned that increasing knowledge would not automatically result in increased use. Comments included:

Pass out flyers. Talk with each other. More forums like this. Get more people involved. More advertising. Big signs of meetings early in the month. Use businesses for advertisement. Tell people at the Housing Authority when tenants pay rent. Make flyers big. Put flyers where people go like the liquor store or the tobacco store. Pay someone to stand in front of tobacco house with a sign on. Use young people to carry quitline signs. Hire people we know who live in our communities who we already trust to tell us about the quitline, help us with the process, and be on the telephone when we call. Tell us over and over and over again. We don't read signs. Introduce us to people who have stopped smoking because they used the quitline.

Reduce distrust—Many people in the Delta told stories of feeling deceived or receiving unfair treatment from institutions. Distrust of programs and their sponsors appears to be the result of years of experience in an area infamous for failed-programs implemented by outsiders. Strangers from Little Rock (the capital of AR) are generally distrusted and personal information is not generally given out in telephone conversations. Participants agreed that distrust would not be eliminated, but could be overcome with an increase in perceived benefits and/or utilizing local resources. Suggestions included having trusted local residents connect tobacco users to the quitline, sharing positive stories from local people who successfully stopped by using the quitline, and using local residents for support throughout the process. Other suggestions included localizing at least a portion of the program and its counselors; providing local support groups for smokers; reducing the need for personal information; mailing information to homes so that it could be studied and reviewed with family and friends in private; developing a program where they could see who was helping them; paying tobacco users to use the quitline, and providing free patches and gum. However, participants noted that some people are not going to trust regardless and that some are afraid that if they let their guard down that will be taken advantage of. Many participants noted that the feelings of distrust are fueled by concerns that quitline staff would be unable to understand their accent; they would be unable to understand the quitline staff; or that they wouldn't like the tone of voice used by the quitline staff. Comments included:

It would help if someone we trusted would try it and tell us about it. It would help if someone who used it and actually stopped smoking would tell us about it. We need someone in our community to tell us the quitline is worth using. We want someone we know to tell us they have used it and stopped smoking or chewing. It

is more convincing to know someone who has quit. Quitline signs in public would help us trust it. See where money is going if institutions deserved our trust. If they keep their word, we would trust them. So often they don't. If they stop requiring any personal information we might use it. When you put your trust in someone else, you get let down. Fear. We are not going to trust regardless. The same people have been hurt too much. They ask for too much information. Take money from institutions and put it into a program here. We still don't know who we are talking to – we don't know who the person is. We need local people to tell us. We are not going to give out our social security number. We want consistency. We want proof it will work for us. We need a way to be sure it is [the quitline] on the other end of the telephone. How can you ever really know they are who they say they are? There are SCAMS out there that sound so real. We don't and won't trust outsiders no matter what. To trust we'd trust more everywhere.

Address the root causes of tobacco use—Forum participants agreed that addressing the “root causes” of tobacco use would increase use of the quitline, but few thought that actually reducing root causes was possible. Skepticism dominated this discussion and the topic often led to the importance of faith. Tobacco was identified as one of the few available enjoyments and was repeatedly identified as a method to help cope with both personal stress and the “tensions” built into realities of life in the Delta. Tobacco use was linked with too few and low-paying jobs, lack of access to health care, low educational achievement, inadequate housing, and being treated as second class citizens. Also mentioned was the perception of mixed messages from government and health care providers. When attempting to list the benefits of addressing root causes, most participants reported that they did not believe it was possible. Some called it a “hopelessness” or “impossible” choice. When asked how they would address root causes as a way to overcome barriers to using the quitline, suggestions included working with the community to achieve more jobs, better housing, eliminating smoke breaks, going after the tobacco companies, building support within smokers' families, getting the government to stop supporting tobacco crops, and asking or relying on God to assist them. Comments included:

Remind people it is against your health. Remind people stopping smoking reduces nerves problems because that's the reason for smoking. Show more negatives about smoking. More enjoyment so we wouldn't have to smoke. More jobs so less stress and more money. Pay me money, I'll quit. More houses. More after school activities. We wouldn't feel like we needed a cigarette. We'd think we were in heaven. Our nerves would be calm. No worries. Healthier lives. Cigarettes wouldn't be made so we wouldn't have temptation Government could tell farmers what they could plant (no tobacco). Tobacco makers haven't been sued yet. If they were really interested in improving our health, they would burn down the tobacco stores to put them out of business. If they really want to help in the Delta, they would go after the tobacco companies instead of us. Government should stop cigarette businesses from making tobacco because it hurts people. If they were really serious about wanting us to stop smoking, they would force tobacco companies to stop selling tobacco products. If the government was serious they would take it off the market like they did DDT. This is not even possible. No one will do that for us. First things first-“show me” because this is not real. Even if we had utopia, we still want to enjoy our cigarettes. We trust only in the Lord. “Ask Him in all thy ways and He will direct thy path.” But that's a long way from reality so it has to be our choice. No one believes it was possible to reduce root causes in the Delta. We wouldn't know what to do with ourselves. We still have bad nerves. We don't value life. Lung cancer comes when smoking stops. If doctors would bluntly say “You will be dead. Smoking kills you.” We'd stop. Rather than tell us

nicely that we shouldn't be smoking. We don't want to quit. Regardless of conditions we want to smoke. Smoking is a disease and habit forming so it won't help. We'd eat more and get fat. Tobacco stores would be empty – loss of business in town. Standing before Jesus is what matters. Everyone has their faults. Mine is smoking. If you go to Jesus, Jesus will work it out. If Jesus wants to, He will take it from me. Before then, don't judge me. It just isn't possible to reduce root causes here. Look at the Big Leagues – everything in the world they want and they still smoke. There is no money here to make things better. We still wouldn't want to quit and still would lack trust. If you want to do something you will do it. You must have a made up mind. If there is the least crisis, we will smoke and there is always a crisis. Peer pressure, blend in with the crowd. Education might help, but everyone knows it is bad. The fear factor doesn't work for many. Higher crime rate if people stop smoking because you can't really reduce stress in the Delta. You may take a life if you have to steal a cigarette or if you have to get rid of stress some other way.

Common ground and other information garnered from the participants—At the end of each forum participants were encouraged to identify topics and themes that were repeated and that everyone seemed to agree upon. Although these points are not new, when appearing as common ground they help to provide insight into participants' priorities and values. Community, trust and protection, and faith were brought to the fore as common ground and appeared vitally important to participants. Participants wanted information that was from and relevant to their communities and that they could trust given their perceived vulnerabilities. Participants underscored the role of God and faith in their lives. Comments stated while discussing common ground included:

Witnesses and testimonies are most important communication. Use local people we can trust. Prayer is the answer. When you go to the Lord in prayer, you stop cold turkey. The Lord, not doctors, determine our lives and our health. It seems impossible to improve life in the Delta but if we could it would decrease smoking. Everyone is concerned and wants to find solutions. You must have God.

Discussion

This was the first systematic investigation, to our knowledge, into the barriers to use of proactive telephone counseling for tobacco dependence by a large marginalized group. The results indicate that the barriers include a lack of appropriate telephone service, a general lack of knowledge about the quitline, a lack of trust in the providers of the service, environmental factors associated with increased tobacco use, and cultural and other beliefs surrounding the circumstances and consequences of quitting. In general, the results confirm the experience reported by the California Smokers' Helpline (North American Quitline Consortium, 2005). Numerous suggestions were provided by participants for addressing these barriers.

Although the California quitline (North American Quitline Consortium, 2005) reported limited community knowledge about the quitline as a barrier, we were somewhat surprised at the complete lack of awareness of Arkansas quitline services reported by participants, given the scope and budget of quitline promotion for several years prior to this research. The Arkansas Department of Health's Tobacco Control budget for media promotion was approximately \$2 million per year, and included a special marketing program targeting African Americans. Although possible, it is difficult to accept that all of the participants were not at least exposed to information about the quitline. One reason for this lack of awareness might be because the Arkansas quitline might have been advertised on only

Arkansas television and radio stations. Many Delta residents listen to broadcasts from the closest major metropolitan area: Memphis, Tennessee. We also interpreted this overall lack of awareness to mean that even if they had been exposed to information about the quitline, the message was not effectively communicated as pertaining to or of use to them, and thus the content of the message was not retained.

After learning more about the quitline, participants appeared to see the value in it, but recognized that if no one was using it, traditional methods of gaining knowledge in the Delta, such as word of mouth, would be ineffective. The suggestions provided by the participants for communicating information about the quitline included traditional and nontraditional means, but all agreed that tobacco users would be more likely to perceive the messages as pertaining to them if trusted members of the community conveyed the information. Most agreed that literacy-based communications about the quitline would not be effective. None of the suggested methods of communication were particularly novel, but would require a significantly different approach to promoting the quitline in this region of Arkansas.

An unexpected result was that about half of the participants reported having the belief that many residents did not have a telephone available that was suitable for obtaining quitline services. Additional inquiry is needed to determine if this is, in fact, accurate, but if these perceptions are accurate, they have far-reaching ramifications. Providing treatment services by telephone only to a community that does not have adequate resources to access the services is not only highly ineffective, but is also likely to contribute to the community's collective feelings of being overlooked, not getting their needs met, or being second-class citizens.

Distrust of the quitline provider and the quitline counselors was readily apparent. Participants linked their expression of distrust to negative personal experiences with institutions and outsiders and an underlying assumption that their needs will not be acknowledged and Delta residents need to be especially vigilant or else someone will take advantage of them again. Addressing long-standing feelings of deep distrust in this community are probably made more difficult in the case of the quitline because the services originate in a place that one cannot easily identify, from a vendor that changes from year to year, and from a person one cannot see, who speaks differently, and who may or may not be culturally competent for this community. All agreed that having trusted members of the community convey information would help to increase the level of trust in the program. The intention of many of the suggestions was to address these factors by connecting the program to something or someone local. Creative suggestions included localizing a portion of the program or having local residents help facilitate contacts with quitline. The later suggestion might also help address issues with counselor accents and "tone of voice," as well as the counselors' cultural competence and ability to understand residents and vice versa. Although the suggestion of mailing materials to residents' homes so that they can be reviewed in private with family and friends appears to rely heavily on literacy, the use of family and friends to help evaluate the information may help to address issues of trust as well as literacy. Most participants thought that encouraging trust in the program was a good idea, but there was also the concern that if they began to trust this program, they would be more inclined to trust others and that would result in increased vulnerability.

The lack of knowledge about the quitline interacted with the experience of distrust. Distrust extended into some participants' rationale for the lack of information. They assumed that institutions put more effort into advertising and providing information about the quitline into other parts of the state. Participants also seemed to focus on being asked for social security numbers as a barrier, even when informed that the quitline does not and never has asked for

social security numbers. Thus, the experience of distrust affected the consumption of information as well.

The topic of addressing root causes brought forth particularly rich and varied responses that acknowledged the importance of the environment, the cultural context, the socio-economic circumstances, and beliefs. Clearly, participants saw tobacco use as a strategy to manage stress and saw their lives as particularly stressful. Given the historical context and their shared experience of failed attempts to solve the stressful socio-economic and environmental circumstances in the Delta, they were not particularly hopeful about addressing this root cause. Although participants acknowledged the health benefits of quitting, they also associated quitting with significant negative health effects. It was as if when one quit, one not only had to go through the difficulty of quitting, but had to take the chance that one would contract cancer or another serious disease actually caused by quitting. Participants understandably expressed a sense of hopelessness and lack of perceived control about both managing stress without tobacco and the fear of illness. Although participants did not perceive faith and God to be a root cause, faith was used as a method to address the feelings of hopelessness expressed by participants about root causes.

The common ground discussion further elucidated the important role that community, trust, protection, and faith play in the lives of these participants. In a context in which the perceived need for protection is heightened and many basic needs will go unmet, the most trusted and valid sources of information come from people they know and have experience trusting. In the context of persistent unsuccessful attempts to resolve long-standing socio-economic problems, faith is an important method for addressing intractable problems. In this context, faith appears to play a particularly important role in the decision to quit tobacco.

The WSW facilitators, as researchers and members of the community, offered other important insights. They reported that participants appreciated the opportunity to discuss the experience of being a smoker in a non-judgmental environment, felt that the forums themselves were helpful, and wanted more forums. The facilitators were surprised as “the mere discussion among smokers seemed to discharge the emotional defenses so people began to admit that they wished they knew what would lead them to wanting to quit. At times, they moved from wanting to smoke to wanting to test the quitline.” The facilitators reported that they, “began to wonder if providing an opportunity for smokers to talk together about not wanting to quit in a quit-now world might be the best way to promote smoking cessation.” The facilitators also suggested that the group modality might be a particularly attractive method for delivering treatment for tobacco dependence in these communities. The facilitators, in their report, also reminded us that “[our] citizens understand themselves as people who survive in spite of institutions not because of them.” The facilitators also reminded us that when we understand the role of faith and God in their communities, we often immediately see the church as a place to push our own programs. However, the facilitators noted that participants suggested using the strong faith structures of the Delta by utilizing prayer meetings, intercessory prayer, and disseminations of witnesses and testimonies from people who have “turned the addiction over to the Lord,” as lines of research.

These results raise numerous questions that could be further elucidated through quantitative investigations: Although this group lacked knowledge of the quitline, how much more or less did they know than other groups in the state? How were participants defining community? Was their level of trust similar for programs located both within and outside their communities or did it depend on the program provider? Is their level of trust any different than other groups? Is this population any more or less confident about quitting than other groups? Is the level of importance they attach to quitting, their reasons for quitting,

and their reasons for not quitting different than other groups? What is the level of concern about the negative health effects of quitting and are these concerns different from other groups? What is the level of belief that faith plays a role in quitting tobacco and are there any differences in this belief from other groups? What percent of smokers do not have a telephone to use for the quitline and is this different from other groups? These questions are ripe for quantitative investigation that can further elucidate the relationship between these factors and use of the quitline.

As a qualitative study, these results provide us with insights into the barriers to using the AR quitline experienced by AR Mississippi Delta residents as well as what they see as effective solutions. The strengths of this study lie in the community-based participatory nature of the approach, the methods, and the data collection processes. The quality and personal nature of the participants' reports are likely to be a direct result of community members playing a large role in the research and the primary role in data collection. Limitations of the study lie in the somewhat limited scope of the questioning and the inability to ascertain the relative frequency and intensity with which this population of interest might endorse these conclusions. Nonetheless, these results provide insights into what barriers to assess and how to assess them as well as ample fodder for meaningful and pertinent quantitative investigations that can lead to new approaches to promoting the quitline and tobacco cessation that are effective with lower SES and minority groups.

Conclusion

Barriers to use of the quitline include a lack of knowledge about the quitline; a lack of trust in the service providers; environmental factors associated with increased tobacco use; and cultural and other beliefs surrounding the circumstances and consequences of quitting. Having trusted members of the community convey information would help increase the level of trust and increase receptivity of the information. Messages about the quitline and tobacco cessation need to address community members' concerns and beliefs. The assumption that quitlines are acceptable and accessible to lower SES groups may need to be reconsidered.

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Table 1

Socio-demographic characteristics of target areas compared with AR and the United States

	United States	AR	Cross County, AR	Lee County, AR
Population (2008)	304,059,724	2,855,390	18,808	10,782
Percent Bachelor's degree or higher age 25+ (2000)	24.4	16.7	9.9	7.3
Percent persons below poverty (2007)	13.0	17.6	20.7	31.8
Per capita money income (1999)	\$21,587	\$16,904	\$15,726	\$10,983
Median household income	\$50,740	\$38,239	\$33,176	\$24,195
Persons per household	2.59	2.49	2.60	2.59
Percent African-American (2008)	12.8	15.8	23.1	56.8