Journal of Rural and Community Development

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Citation:
Greer-Williams, N., Enoch, K. S., Booth, B., Starlard-Davenport, A., Sarto, G. E., & Kieber-Emmons, T. (2014). Rural African American women and breast cancer: Social determinants of health shape ability to conceptualize health in the Arkansas Delta. *Journal of Rural and Community Development, 9*(2), 51-66.

Publisher: Rural Development Institute, Brandon University.

Editor: Dr. Doug Ramsey

Issue Dedication:
This issue of the JRCD is dedicated to Cheryl Williams who passed away suddenly in 2010. She was in the first semester of her PhD program in Nursing at the University of Saskatchewan at the time of her death. Her co-authored paper in this issue is based on her master's thesis research. Pammla Petrucka was Cheryl's advisor. It was Pammla's wish to publish this peer-reviewed article in honour of Cheryl's work and her family.

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ISSN: 1712-8277 © Journal of Rural and Community Development
www.jrcd.ca

Rural African American Women and Breast Cancer: Social Determinants of Health Shape Ability to Conceptualize Health in the Arkansas Delta

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Abstract

We know that certain components including demographics, cultural background, lifestyle choices and lack of access to health care contribute strongly to health disparities in rural regions of the United States. This paper explores perceptions of health, the environment, and the relationships between them that impact health disparities in the Arkansas Delta. The social-ecological model provides a conceptual approach to relate social determinants to health disparities. Few US rural health community-based studies have utilized this approach, or engaged ecological theory to explore rural contexts. This exploratory study blended a community-based, qualitative approach with social-ecological theory, to identify potential social

determinants of health that impact rural Arkansans. *Methods:* Qualitative data were gathered with (n=79) women, ranging in age from 18 to 84, who were residents of 3 rural Arkansas Delta communities. Respondents poignantly described issues that affect health disparities in their communities. *Conclusions:* The study identified potential social determinants of health at multiple ecological levels among rural African American women. It was the social determinants of health and the legacy of segregation, that impacted their ability to conceptualize health in the resource resisted environment.

Keywords: African American women, focus groups, social determinants of health, community based participatory research, social ecological model

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1.0 Introduction

The Arkansas Delta, located east of the Arkansas River and west of the Mississippi River, consists of 42 counties and residents that have lower life expectancy than urban residents. The Delta Regional Authority (2012) identifies this area as one of the most impoverished in the nation. The largest minority population overall is African-American (15.8%); however, in certain counties the percentages of African Americans are much higher: Phillips (35%); St. Francis (31.4%); and Mississippi (23.5%) (The Kaiser Family Foundation; 2013; US Census Bureau, 2013). African-Americans in these counties have higher rates of chronic disease, disability, and a shorter life expectancy than whites. Mortality rates are 25% higher for African-Americans than for whites. Although, white women are diagnosed more often with breast cancer, African-American women have a 45% higher death rate from the disease (Centers for Disease Control and Prevention [CDC], 2013). The cervical cancer mortality rate for African-American women is twice as high as for white women (CDC, 2012). In addition, 14% of African-American adults in Arkansas have been diagnosed with diabetes; and they are more likely to be without health insurance than are whites (The Kaiser Family Foundation, 2013).

The major aim of the exploratory study was to enhance the researchers' understanding of the multitude of factors that influence chronic disease mortality in African American women living in three communities of the Arkansas Delta. The factors, described as the social determinants of health, can be: biological, socioeconomic, psychosocial, behavioral, or social in nature (U.S. Health & Human Services, 2009). Our emphasis was to understand how rural, impoverished women formed concepts of health and solved social problems in resource restricted environments. In addition, we wanted to determine if an educational intervention would be effective in a rural community setting to educate their clients about chronic disease and provoking a change in their clients' lifestyle to include healthy eating and regular exercise.

2.0 Theoretical Framework

By using the social ecological model (SEM) as an analytical lens, this study explores how African American women in impoverished communities form concepts of health and barriers they face in accessing resources in their communities at the individual, relational, environmental, structural, and superstructural levels (Scott & Wilson, 2011; World Health Organization, 2010). The dynamics of the breast cancer mortality process cannot be properly understood without an understanding of the

lifestyle and sociocultural circumstances of the patient. We found an opportunity to explore these issues in rural African American women, who often have a higher level of breast cancer mortality than the national average.

Our study is based on the SEM, which recognizes the intertwined relationship that exists between an individual and their environment. The SEM developed out of the work of a number of prominent researchers: Urie Bronfenbrenner's Ecological Systems Theory (1989), which focused on the relationship between the individual and the environment; McLeroy et al.'s Ecological Model of Health Behaviors (1988), which classified different levels of influence on health behavior; and Daniel Stokols' Social Ecological Model of Health Promotion (1992, 1996), which identified the core assumptions that underpin the SEM. The work of these and other researchers has been used, modified, and evolved into what is referred to as the Social Ecological Model.

The specific ecological model utilized here is an adaptation of the model developed by Sweat and Denison (1995). This multi-level model organizes potential social determinants of health at five Levels: (1) The individual (traits and behaviors); (2) the relational (relationships, social support); (3) the environmental (built environment); (4) the structural (laws, policies, and politics); and (5) the superstructural (social justice issues such as racism, poverty, or sexism) (Sweat & Denison, 1995).

3.0 Methodology

A qualitative approach was deemed most appropriate due to the fact that there is very little existing research that has been conducted thus far with the rural Arkanas Delta African American women. Thus, the exploration of sociocultural barriers to accessing a healthy lifestyle can best be captured through careful probing using qualitative focus groups (Johnson & Nies, 2005).

3.1 Participants

Minority women were recruited from three communities in the Arkansas Delta: Mississippi, Phillips, and St. Francis counties. The sample included (N=79) consisted of African-American women (97 %) and other (3%). Table 1 shows the demographics of participants, segmented by racial self-identity, educational status, marital status, age and relationship to breast cancer. Ninety-seven percent of the participants self-reported as African American, and 3% as white. In the education status segment, 8% reported having less than a high school education, 20% reported having a high school diploma, 33% reported a college education, and 10% reported having attended graduate school or an advanced degree. Thirty-two percent of the participants were married, while 36% were either divorced, widowed, or single. In the category of age, 14% reported being 18-44 years of age, and 59% were 45 and above. In relationship to cancer, 11% of the participants reported being a survivor of cancer; 23% reported that they had a relative who was diagnosed or died of cancer.

3.2 Study Setting

The Delta is one of the poorest regions in the United States (University of Arkansas, 2013). The area has had high, even extreme, rates of poverty for decades. Median household income there is $16,583; in the country at large it is $30,056. In the Arkansas Delta alone, where 61% of the state's population lives, unemployment is

twice as high as the national average. Five per cent of the houses have no running water. In St. Francis County, per capita income is $13,273; and more than a third of the population lives below the poverty line (University of Arkansas, 2013). In Mississippi County, 35% of children live in poverty and 40% of residents lack a high-school diploma. Phillips County, on the edge of the Mississippi river, ranks among the worst in the nation in life expectancy for men and women. Various agricultural systems have been tried here—slavery, sharecropping, industrial farming—all producing wealth for the White landowners amidst widespread African American poverty (Housing Assistance Council, 2000; University of Arkansas, 2013).

Table 1. *Summary of Women's Focus Groups in Mississippi, Phillips, and St. Francis Counties Characteristics as a Percentage of the Sample*

Characteristic	**Number of Responses**	**Percentage**
Self-identity		
African-American	77	97
White	2	3
Education level completed		
Less than high school	6	8
12th grade	16	20
Some college	15	19
College graduate	11	14
Some graduate school	3	4
Masters' degree	4	5
Professional degree	1	1
Total responses	56	71
Total blank responses	*23*	*29*
Marital Status		
Married	25	32
Divorced	12	15
Widowed	13	16
Single	4	5
Total responses	54	68
Total blank responses	*25*	*32*
Age		
18-44	11	14
45-64	21	27
65-74	19	24
75 & over	6	8
Total responses	57	72
Total blank responses	22	*28*
Relationship to Breast Cancer		
Breast cancer survivor	6	8
Other cancer survivor	2	3
Relative diagnosed with breast cancer	11	14
Relative died from cancer	18	23
Total responses	37	49
Total blank responses	*42*	*53*

3.3 Gaining Access to the Community

Minority populations are noted for their lack of trust of the research and academic community (Renert et al., 2013). Recognizing the difficulty of identifying and recruiting rural minority participants into this research project, we partnered with a community organization that had a branch in each of the Delta counties called Cancer Councils. Cancer councils are a community action group that have a cancer focused agenda, whose members live and work in the communities that they serve, and often share the same cultural background as the target group. Having the collaboration of the cancer council members was essential to our success in recruiting the minority women, because members of our research team were considered outsiders and unknown to the target population. Cultural insiders can bolster the credibility of the research in their ethnic communities and increase the likelihood that potential participants will feel comfortable participating in the study (Renert et al., 2013).

Community participation began with the approved protocol from the Institutional Review Board and continued through the planning process. The planning process was designed to facilitate understanding of each target community's strengths and challenges for a community health intervention. The research team met with the cancer councils on a regular basis in face-to-face meetings and conference calls for the first three months of the research project. The cancer council members were instrumental in providing feedback and guidance on: the proposed research project, determining questions for the focus group interview guide (See Table 3), and referring participants for the focus group discussions.

3.4 Focus Groups

There were ten focus groups held in the three counties at convenient locations, which were easily accessible to participants. The locations included: the Area Health Education Center (AHEC), the Boys and Girls club, the community center, and the Economic Development Center. The initial focus groups were convened with cancer council members, and subsequent focus groups were conducted with general community members. We went back to the cancer council members in each county to share our results and ask their opinion on the focus group statements of the community members in order to verify our findings.

Each focus group included a facilitator, co-facilitator and two master's-level students, who assisted in collecting focus-group data. Methodological coherence in interviewing style and technique was supplied by having all of the focus groups and interviews being conducted by the lead author, an experienced qualitative researcher. A checklist was completed for each participant to ensure all research protocol documents were completed and placed in participant files. At the start of each session, the risks and benefits of participation were discussed and participants were informed about confidentiality. Each session was audiotaped and lasted approximately 60-90 minutes.

An interview guide (See Figure 1) was used by the lead facilitator to ensure coverage of topic areas. Core discussion topics related to the ability of participants to manage multiple components of health, such as eating habits, shopping for food, physical activity and going to a healthcare provider. Other topic areas that evolved from the focus group discussions related to: (1) community health issues, (2) coping strategies used to contend with the social and economic pressure, (3) what health message was

appropriate for getting rural African American women to change their behavior, and (4) were there places in their communities where they [African American women] felt empowerment. At the conclusion of each focus group, the participants were thanked for their time and given an incentive of a $25.00 gift card and lunch.

3.5 Coding and Analysis

Interviewing and data analysis techniques used in this research were consistent with focus group theory advanced by (Morgan & Krueger, 1998). The primary data of this study came from the 10 focus group responses of participants. The audio recordings of the focus groups were transcribed into Microsoft Word documents as transcripts. The verbatim transcripts, interviews, and field notes were entered into a qualitative data analysis and management software package (Atlas TI6.2). The software enabled researchers the ability to mark blocks of text with codes, explore relationships among and between codes, and compare participants' responses. Data collection, coding, analysis, and interpretation were concurrent with each focus group to ensure that interpretations of findings were grounded in the data.

Figure 1: Focus Group Interview Guide.

Overall Health
What does good health mean to you?
What kinds of things do you do to take care of your health?
What does "healthy living" mean to you?
What do you think are the main health problems in your community?

Eating Habits
What are your favorite foods?
What are the foods you eat most frequently?
How many times a day do you eat?
Are the meals that you eat usually prepared at home or fast food?
What does "healthy eating" mean?
Would you consider the foods that you eat healthy?
What do you find as barriers to eating healthy in your community?

Shopping for Food
Where do you buy most of your food?
Do you feel that you have a lot of choices to buy groceries?
Are you able to buy the foods that you and your family enjoy?
Are there any issues in buying food in your community?

Physical Activity
Are there places in your community where you can go for regular exercise?
What activities do you do to be physically active?
What are the barriers to being physically active?
Would you be interested in a program that would help you learn about exercise?

The coding of the transcripts began with the lead author proofreading all of the transcripts for accuracy. An inductive approach was used to condense the raw extensive transcripts into brief summary formats (Morgan & Krueger, 1998). This process made it possible for researchers to make clear links between the research objectives and the summary findings and to create a theory about the underlying experiences of the participants. The lead author and an experienced qualitative

researcher reviewed the transcripts and field notes, and then developed an initial set of inductively derived codes with definitions subsequently incorporated into the socioecological model (See Table 2). After completing the initial coding, codes were collapsed into more general and related constructs and were aggregated into five broad themes. The study's co-leader and a third researcher verified code words and definitions. As the subsequent focus groups were transcribed and coded, the researchers met to ensure that the definitions captured the meanings of the text.

Table 2. *Code Book*

Code	**Definition**	**Socioecological Level**
Mind Set	The way a person thinks or believes.	Superstructural
It is More Than Being Free From Sickness	How people define good health.	Individual
What we do	Participants describe the things they do to have a healthy lifestyle.	Individual
The way Things are	Description of issues that impact on people.	Environmental
Resources	Health resources i.e., doctors, transportation, stores.	Environmental
Barriers to Good Health	Barriers to having good health.	All Socioecological Levels
Our Community Barriers	Community issues that impact on health.	Environmental
Individual Barriers	Things a person does to prevent good health.	Individual
Provider Barriers	Experiences with providers.	Individual, Superstructural
There is Information That we are not Given	What is not being told by providers or experts.	Superstructural
Healthcare Providers	The experiences with doctors, nurses, and healthcare providers.	Environmental, Structural
We are not Educated Enough	Descriptions of what participants describe as not understanding or/are lacking.	Relational, Superstructural
Problem Identification	Identification of problems that impact on participants' health.	Individual, Environmental, Relational
Environmental Things Beyond our Control	Outside factors that impact on our community. The description of things that the participants describe as they could not do anything about.	Environmental, Superstructural
Ways of Coping	The descriptions of how women cope with stress.	Individual, Relational
Support Network	What the participants describe as resources they go to for advice or comfort.	Relational
Age Makes a Difference	Intergenerational strategies for health.	Relational

4.0 Results

In this section, data is organized by the five themes derived from the analysis of what the participants said in the focus groups of things that impact their health. Potential social determinants of health were identified at all five levels of the ecological framework. These issues are summarized (See Table 3) and discussed in depth in the following sections.

Table 3. *Potential Social Determinants of Health Identified at each Ecological Level*

Ecological level	Potential social determinant
Individual	Competing needs and apathy
Relational	Lack of social capital
Environmental	Unhealthy environment: recreation and nutrition
Structural	Political and lingering impact of segregation
Superstructural	Culture and racism

4.1 Theme 1: Competing Needs and Apathy (Individual Ecological Level)

Lack of engagement with personal health and health promotion was a recurring theme, as well as potential individual-level social determinants of health that emerged from focus group transcripts. This idea was voiced by cancer council members, who had been involved with community health education and promotion activities. As expressed by one participant:

> Through the Hometown Health Networks there is so much valuable health information, but we struggle with getting people to these health forums.

Participants agreed that attendance at community health events is low. The reasons for the passivity are doubtlessly complex. It was suggested that more immediate concerns were weighing on people's minds:

> I think people do not take advantage because when you are so interested every day in trying to survive.

Other suggestions were more basic, as expressed by this participant:

> A lot of times people are too stressed and caught up with how they are going to make it this day and how they are going to take care of their family until being healthy you know is at the bottom of the scale.

The lack of response of the community members to health promotion efforts did not dissuade the participants that were involved in health promotion. They were committed to their families and communities:

> Like I have said earlier both sides of my family have high blood pressure, sugar diabetes, and high cholesterol and all of that, and that is one of the reasons I like working with health initiates I learn and I like to teach others.

Focus group participants clearly recognized factors that prevented them from having good health. These were viewed as problems needing to be addressed at not only an individual level but also at the environmental level. The participants knew that obesity, lack of exercise, and poor eating habits were barriers to good health. However, in communities with high levels of poverty and a scarcity of jobs, the value placed on individual health was expressed as being second or third to the needs of families:

> We have a lot of lower income people and some with no income and I think that's a barrier to being healthy.

They expressed the desire to make lifestyle changes, but many participants were not aware of any programs in their communities related to physical activity, nutrition, or general health information. In addition, there was agreement that the environment was not conducive for health:

> …the quality of the air, the water, the pesticides and all of that are adverse factors that you have no control over.

The participants' lifestyles were also hampered by the lack of local grocery stores in each community.

4.2 Theme 2: Lack of Social Capital (Relational Ecological Level)

Social capital has been identified as a significant social determinant of health and a useful construct for understanding health behaviors (Cene et al., 2011). Social capital has been defined as the strength of connections within and between groups—the connection can be economic, political or material. Uchino (2009) said this connection can have either negative or positive effects on health. Community social capital evolved as a potential social detriment at the relational level in the study. Participants complained of fractions within their communities between the needs of wealthy rich land owners, who often times live outside of the region, and community members, as expressed by this participant:

> We have crop dusters that spray crops a half a mile or a mile away and it coats everything in your neighborhood. We have had at least 3 that I can think of, chemical plant explosions. And three weeks later major fish deaths in the local lakes. Birds start dropping out of the air. It is just more than just a momentary exposure.

Another layer of social capital was described as a generational disconnect, in which the old and young community members differed in their approach to health and raising a family:

> A lot of young people do not have insurance and they have a sense of false pride. Our young children are too fat and our younger mothers are not being taught that a fat kid is not cute…and because you see that child big like that right now in a couple of years that child is going to end up having heart problems.

Also many of the younger community members were often described as being depressed or involved with drugs, which often produced intergenerational friction:

> There is a lot of substance abuse in this area and if you are on whatever kind of drug you use, you are not going to have any energy to even want to do anything. They [younger people] will get depressed because this is a depressing area and a lot of substance abuse affects the whole aspect of the health - I do not think they have the get up and go even if they knew about the different health facilities.

The older participants described growing up in connected families with strong ties and values. As described by these participants:

> I try to eat healthy because I was brought up on a farm where we ate our own vegetables and our own milk to make us be healthy and we worked; I still get out and cut the yard for exercise.

4.3 Theme 3: The Unhealthy Environment: Recreation and Nutrition (Environmental Ecological Level)

At the level of the physical environment, the built composition and layout of a community, which include the buildings, spaces, and products, are a key social determinant of health. In communities with spatial concentrations of poverty and wealth, the influence impacts both the physical and social environment (Schulz & Northridge, 2004). In the Arkansas Delta, participants identified multiple aspects of their community that had implications for physical activity, nutrition, and well-being in the negative. In an effort to produce abundant and healthy crops, the wealthy land owners, who often times lived outside of the regions, used harmful chemicals and pesticides that caused underlying health issues of community residents:

> A lot of the communities here literally cannot grow gardens anymore because of the pesticides and the chemicals.

…or as expressed by this participant:

> We just got a recent report that the water in this area was OK but the man told me that there was a high level of sodium and calcium in the water.

At another level, participants described inadequate community resources such as health care services and providers, public transportation, or grocery stores, all were described as being inadequate or not available (material):

> Well in this area you probably have what four or five doctors…and they are often so overcrowded. There is no [public] transportation here…Transportation is something for those that can afford it. Do we have somewhere where we can get fresh vegetables and fruits…? Is there a market?

4.4 Theme 4: Political and the Legacy of Segregation (Structural Ecological Level)

Social determinants of health at the structural level include laws and policies that impact health. These policies can be enacted at any level, national, state, or local. Structural determinants can have effects on health that are direct or indirect. The housing problems of the region result from the fact that the social, political, and

economic agenda of the region was historically created, sanctioned, and nurtured on the economic exploitation and social isolation of the African-American population. The region has had high, even extreme rates of poverty for decades. This continued economic hardship has resulted in policies that have influenced lending, investment, and the community infrastructure development (Housing Assistance Council, 2000). Conventional lending mechanisms are often inappropriate for use in the Delta. The African American's income level, and the levels of risk perceived in serving this population, has prevented many private lending institutions from financing housing and community development activities in the Delta.

According to the data from the focus groups and the demographic survey, a significant number of community members have little or no health insurance coverage and depend heavily on public health clinics or emergency services for their health care. The focus group participants described the lack of local doctors and limited health specialists as barriers on community members' health in the Arkansas Delta. This becomes more paramount, because the health system is perceived to be inherently failure prone when dealing with folks in poverty:

> I deal a lot with the agencies and people that administer health services and I know a lot of times they don't have the people's best interests at heart.

An additional layer to the problems is that many health services and healthcare providers are located more than 80 miles from either community setting, and neither of the three communities have a no public transportation system:

> Transportation is something for those that can afford it.

4.5 Theme 5: Racism and Culture (Superstructural Ecological Level)

Beyond the policies and political milieu of the community are the social justice issues that shape these policies, and that shape experiences at every other ecological level. Racism and other forms of discrimination can serve as determinants of health at the superstructural level. Experiences of racism have been shown to contribute to poor health both directly and through chronic stress pathways (Goldberg, 2011). Racism was an inherent theme in the focus group discussions. For example, many of the participants gave examples of experiences with doctors that they perceived as biased treatment, because they were Black:

> When I used to take my mama to this doctor because she was having trouble with her feet and he would look right down at her feet and would not touch them just like she was poison.

Another example:

> An annual exam to some doctors if you are Black is taking your blood pressure, looking in your ears and then say see you later bye. It is just outrageous and this is 2009.

Another woman agreed simply stating:

> The doctors are White and we are Black.

Culture is a pivotal social determinant of health, functioning both directly and indirectly to compromise health status. The learned and shared beliefs, values, and lifeways of a particular group, which are generally transmitted intergenerationally

and influence one's thinking and actions (Egede, 2006). Culture was another inherent theme that influenced participants' beliefs and standards for life. In other words, their expectancy for life and standards of living were often expressed as being different or lower than for other members of their communities:

> We as a black race have a stigma about telling people what's wrong with us…We didn't talk about this stuff…I think the first a woman came in the lounge and started talking about her health and all the Black people were shocked because we never heard anything like that and I had planned to be one of them; I wasn't going to tell anyone that I had cancer.

Many of the participants perceived that the Black people of their communities were less educated or qualified than others:

> The doctors here are not telling us what you need. So at a certain age I don't know what I need because my doctor hasn't told me.

Another participant expressed that lack of knowledge for food is problematic:

> Some lower income people they make the right decisions because they don't know.

One participant commented that culture impacted people's decisions for chronic disease testing:

> So one of the major problems is the lack of education, we don't want to know. We are scared to hear what the information might be therefore we don't get tested. It is cultural because the people don't want to know.

There were also participants that blamed Black people for their own health problems in their communities, which are another aspect of racism (Goldberg, 2011):

> It is the culture and behavior here that keep up from doing things, and we [African Americans] are the ones who make the startling statistics of chronic diseases for this community.

5.0 Discussion and Implications for Programs

This exploratory study sought to identify perceived beliefs and values of the social determinants of health and to learn how they impact rural African American women's health in the Arkansas Delta. Assessing perceived need and the associated cultural factors that affect individuals' concepts of health and wellness represent important areas for future exploration to explain observed health disparities. The study employed an inductive, formative approach, to illustrate that the participants' health was impacted by all of the social determinants of health, described as biological, socioeconomic, psychosocial, behavioral, and social in nature (US Department of Health & Human Services, 2009). The social determinants identified have the potential to impact a variety of health behaviors and health outcomes. This breadth is congruent with the wide range of health disparities experienced by rural citizens in general and is described in other studies (Johnson & Nies, 2005; Parham & Scarinci, 2007; Scott & Wilson, 2011; Yeary et al., 2011).

The level of understanding of a healthy lifestyle, particularly as it relates to the concept of balanced eating and exercise was found to be superficial among this

population (Parham & Scarinci, 2007). Our findings show a strong culture of indifference to individual health due to perceived racism, limited resources, inequities, spiritual beliefs, and lack of education. It is this culture that influences eating habits and health outcomes in general among this population (Johnson & Nies, 2005; McGee et al., 2008; Baruth et al., 2011). This view-point is consistent with the general findings that racial and ethnic minorities are more likely than whites to have lower-levels of trust and satisfaction with their physician (Hunt et al., 2005). Also consistent with this mistrust of the health system is the necessity of self-reliance and the overarching trust in God to deal with what may come.

Our findings also reveal a strong sense of suspicion and frustration with the community health care system. Health care professionals were perceived as indifferent, lacking in compassion, racist, and unwilling to touch. The environment of distrust was manifested in problematic health behaviors, including 'silencing', refusing to seek out medical help, refusing to take prescribed medications, and using home remedies. Participants expressed 'silencing' in several ways. One most notable aspect of 'silencing' was witnessed in the lack of responses to certain personal questions on the demographics (See Table 1). Another aspect of 'silencing' noted by participants was their lack of response to inquiries by public officials because they did not trust them.

Healthy food was classified as a rare commodity in communities. Participants reflected a lack of information on how to shop and prepare healthy meals in a resource-constricted environment. The participants also expressed a lack of knowledge on where and how to participate in exercise in an environment compromised by poor water quality, pesticides, and crime.

At the individual ecological level, lack of engagement in health and health promotion was identified as issues of concern. The reasons for this may relate to the poor local economy, high poverty rates which are powerful social determinants in and of themselves. In addition there were noted stresses over conflicting needs to individual health and meeting the household expenses. These can be potent barriers to engaging people in health education and prevention efforts with a long range focus. The community environment presented additional challenges to health with its limited access to healthy foods and the lack of safe places for physical activity.

At the relational level, the African American community cohesion was compromised at several levels, limiting the benefits to health and wellbeing that can come from positive social capital. The participants continued to suggest that potential intergenerational variability in appraisal and social adjustment processes are in play. Autonomy, personal control, and quality of life for older participants are logically based on their normative expectations rooted in early life socialization (Hertzman, 2010). The younger community members had fewer life skills and less understanding to contend with health issues than older community members. It might be speculated that because younger members lacked survival skills, they reflect more depression and frustration to change the environment than older community members.

The legacy of segregation and poverty emerged as potential social determinants of health at the environmental and structural ecological levels. The stark reality is that since the poor tend to be politically disenfranchised, these Arkansas Delta communities lack the ability to overcome the lack of political will on the part of the government to deal with problems facing residents. Changing the paucity in the

numbers of doctors and specialists and providing sustainable transportation is a challenge that requires metrics to enhance infrastructure on health disparities. The participants described a community life that is largely segregated with racism in play at the doctors' office, placement of community resources, and in civic life. Studies have linked the ongoing stress caused by discrimination to increased risk of chronic and psychosocial diseases (Yeary et al., 2011). In these Arkansas communities there is interplay among the various levels that impact the individual level. For instance, the racial discrimination at the structural/superstructural levels have created a negative feedback loop at the individual level. If a resident attempts to seek preventive care and is not treated well, or lacks healthy, low-priced food options, negatively reinforces practices that encourage obesity. These factors together negatively reinforce perceived efficacy with no positive external influence to counter any of these problems.

6.0 Conclusions

This study is descriptive and exploratory and not intended to determine causal relationships. The findings of this study represent the viewpoints of the African American women of the Arkansas Delta, who participated in our qualitative study. The findings are specific to this group and this region of the U.S., though they are suggestive of larger issues for African-American women and other minority groups. Our discussions with the focus group participants uncovered beliefs, attitudes, and ideas about the environment of health in the Delta that relate to the development of chronic disease for rural African-American women (Johnson & Nies, 2005; Parham & Scarinci, 2007; Yeary et al., 2011). The ultimate aim of relating social determinants in the context of multiple ecological levels is to design community-based interventions tailored to the needs of a selective community. Further work is needed to explore each of these potential social determinants quantitatively and to assess their relationships with specific health behaviors and outcomes. These findings suggest the need of health interventions that support community economic development, capacity building for local health promotions, collaborations with city planners and network building within the rural African American community.

Acknowledgements

Funding for this research was made possible by a grant from the UAMS Center for Rural Health, Health Disparities Research Scholars Program 2T32HD049302-06; Arkansas INBRE program, with grants from the National Center for Research Resources - NCRR (P20RR016460) and the National Institute of General Medical Sciences - NIGMS (P20 GM103429) from the National Institutes of Health.

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