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Rural Floridians' Perceptions of Health, Health Values, and Health Behaviors

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ABSTRACT

In order to determine health perceptions, values, and behaviors of rural residents across diverse ages, races, educational levels, and genders, random telephone surveys of 184 residents were conducted in three North Central Florida counties. Survey data were analyzed using descriptive statistics. Results indicated that the majority of residents defined health in either functional status or affective terms. Many were concerned about their health status and either engaged in some type of physical activity or altered their

diet for health reasons. Rural residents in this sample tended to favor self-directed rather than institutionalized forms of health maintenance and rely on their own assessments of health rather than those of healthcare professionals.

Keywords: ***health perceptions, health beliefs, health behavior, rural***

Introduction

Research shows that an individual's attitudes and perceptions influence his/her health-seeking behaviors. However, there is limited research to inform prevention health policies targeting rural residents, due to a lack of knowledge related to their perceptions and attitudes towards health. Nurse researchers need such information in order to develop and test disease prevention and health-promotion interventions, while nurses in practice can use such information to implement prevention-education outreach programs. For instance, in looking at the health perceptions of rural Pennsylvanian teenagers, Puskar et al.[1] call for community-health nurses to root their outreach programs in a holistic knowledge base, including both physical and psychosocial areas.

Literature Review

To date, little research about health values and perceptions of rural residents exists.[2] When literature is found, it focuses primarily on healthcare needs and access issues, rather than perceptions, values, and health behaviors.[3-7] A report from the National Institute of Nursing Research [8] concluded that although rural and urban residents face many similar structural issues which may affect health, such as poverty, drug abuse, violence and crime, they may each have different perceptions of health, according to residency. The report cites several studies that have found a link in rural perceptions of health between "good health" and the ability to work and perform daily tasks.[9,10]

Qualitative information about residents' perceived health concerns for their community, state, and nation showed that rural residents' health priorities differed from those identified

by healthcare organizations in the region.[8] Several studies [11-13] have indicated that people living in rural areas tend to define health as the ability to be productive. Chimonides and Frank [11] further note that rural residents may deal with stress by ignoring it or seeking help from family, friends, physicians, or clergy. If a problem is unusual, there may not be anyone in the area to serve as a resource. Utz and colleagues [13] found that rural residents defined the loss of functional health as the inability to walk, work, and generally care for one's self. Being a burden to others was a frequent concern. Some of the African American rural participants tended to attribute their health problems to the general state of "not taking care of themselves." Researchers found that the rural participants viewed health as the absence of illness, or worry, and considered productivity, working hard, and active play as being essential to their health. Participants overwhelmingly agreed that people need to stay busy to be healthy and that helping others is important to health.[12,14]

Another study, targeting rural, urban, and suburban southern women, investigated the differences in rates of obesity and perceptions of health status among these sub-samples. The researchers concluded that obesity and poor overall health were closely correlated in rural women. They further concluded that the greatest challenge to health care providers was to provide appropriate community-based weight management programs.[15] Fahs[0][16] described the health risks and practices of rural Delaware women, aged 35 years and older. Some positive health practices of women less than 65 years of age included frequent Pap smear testing, relatively low tobacco consumption for smokers, a high rate of seatbelt use, and safe driving speeds. Negative health practices included heightened cardiovascular risks and low frequency of mammograms and colo-rectal screenings. There have only been a few reports on how rural elderly populations practice healthcare and define healthiness. A recent study of the perceptions, needs, and health definitions for older multicultural rural participants in one county in southwestern New Mexico found that the participants were more likely to identify proper diet, regular exercise, and regular health exams as central to remaining healthy.[17] Hispanic elders

were more likely than White elders to report that they incorporated home and herbal remedies into their health care practices; more recent retirees believed that spiritual connections were vital to overall health.

In an investigation into the salient meanings of health maintenance behaviors among African American, Native Americans, and White rural older adults in North Carolina, researchers concluded that rural elders' concepts of health integrated physical, mental, spiritual, and social aspects. Interestingly, Native American participants tended to espouse the use of biomedical care for health maintenance more often than White or African American participants. In terms of other ethnic differences regarding health beliefs, however, the authors reported a "remarkable" consensus concerning a folk-explanation-for-health model.[18] A study on the meaning of healthcare values and practices of White men in the rural Midwest revealed that the participants most valued self-reliance, independence, and efficiency with immediate positive results.[19] Smith's study [14] with rural African Americans revealed similar results.

This review of literature related to rural health indicates that isolated studies of specific health aspects of rural residents of various ethnicities and ages have been conducted, but limited research has been conducted to discover general rural participants' perceptions, values, and health behaviors. Research implications will vary depending on the findings: if there are variations by age group, socio-economic status (SES), educational level, race, and gender, then these socio-cultural factors may explain differences in perceptions, values, and health behaviors. However, if little-to-no variation exists, the concept of "rurality" may indicate greater influence. In this study we address the perceptions of health by North Central Florida rural residents of various ages and educational levels. This information can be used to better understand what behaviors and activities rural residents engage in for health reasons, to identify incentives and motivators associated with rural residents' engagement in healthy life style changes, and to inform outreach prevention and health promotion programs for rural residents.

Methods

Setting. This study was conducted in three North Central Florida counties: Union, Columbia, and Alachua. A rural area is defined by the Census Bureau as an unincorporated area or a place with a population density less than 1,000 per square mile.[20] All three counties chosen for this study fall within this definition of a rural area, with persons per square mile (56, Union; 70.9, Columbia; and 249.3, Alachua) well under the 1,000 per square mile definition.[21] We targeted rural towns within Alachua County only to avoid the inclusion of Gainesville, a college town in Alachua County, that has a much higher population density and more resources than the other two counties. The three selected counties were chosen because of the variations in population densities and number of health-related resources.

Sample. The inclusion criteria for this study were residing in a rural area, having a telephone number listed in the phone directory, aged 13 years or older, and being an English speaker. A cutoff age of 13 years was chosen because 13-year-olds have the cognitive ability to understand their health values, what behaviors they engage in for health reasons, and the ability to articulate these values and behaviors.

Procedures. The Institutional Review Board of the University of Central Florida approved this research. Consent to participate in the interview was implied by the participants' responses to the interview questions. No incentives were provided for participation in the study. During May and June of 2001, random telephone surveys were conducted between the hours of 9:00 a.m. and 5:00 p.m. in the three North Central Florida counties. Calls were placed to every fifth number listed in the local telephone directories of the targeted areas. One thousand phone calls were placed, of which 184 respondents consented to participate in the survey. Phone surveys were conducted in order to capture a more diverse sample size than could have been captured with face-to-face interviews. Daytime phone calls were placed in order to avoid being mistaken as telemarketers, which in theory, could have resulted in more refusals.

A research assistant conducted all of the phone surveys, following a scripted protocol. The assistant introduced herself and the institution with which she was affiliated, and explained the

basic parameters of the project. She did not define health or health practices for the respondents, since the purpose of this project was to gauge the values and health behaviors of rural residents without introducing bias. After receiving the respondent's verbal consent to the interview and determining that he or she was 13 years old or older, the respondent was asked to respond to the following questions: 1) What does health mean to you? 2) How do you know when you are healthy? and 3) What behaviors or activities do you engage in to stay healthy? These questions were developed by the project's principal investigator, based on a review of the literature on health beliefs and perceptions. As the questions were developed for a descriptive exploratory study, reliability and validity testing were not conducted. Respondents were then asked five demographic questions, which included gender, occupation, race/ethnicity, educational level, and age group. At the conclusion of the interview, the interviewer thanked the respondent and ended the phone call.

Data Analysis. Text data generated from the three questions were coded and categorized manually according to similar responses. Consecutive numbers were assigned to each qualitative response, for the purpose of organizing and being able to quantify the number of responses per category. These numbers were then entered into SPSS and analyzed using descriptive statistics (frequencies and means) by the demographic variables: age, race, gender, educational level, and occupation. Similarities and differences in responses were noted during this analysis. This form of analysis was chosen, rather than conducting t-tests, due to the fact that samples from the three different counties were not evenly distributed. For presentation clarity, demographics are presented according to county of residence, although comparisons were made according to demographic variables disregarding the county of residence.

Results

Sample Description. The sample consisted of 184 respondents. The sample was not representative of the population in terms of gender, race, and age, although random sampling was conducted. The non-representative nature of the sample may be related to the hours when the calls were placed.

Whites composed the majority (77%) of the sample, while African Americans made up 22% of the sample. Approximately 66% of the sample was female. Few of the participants were adolescents (9%), while more than half of those interviewed were over the age of 55 (53%). A large percentage of participants were either retired (36%) or unemployed (34%), which is to be expected given that the calls were made during normal business and school hours; an additional 20% were professionals. Table I provides more detailed demographic information.

Table 1. Sample Demographics

	Counties			
	Alachua (*n*=129)	Columbia (*n*=26)	Union (*n*=29)	*Total (%)* (*N*=184)
Gender (*n*=182)				
Female	84	16	22	122 (67)
Male	44	9	7	60 (33)
Race (*n*=179)				
African American	27	4	8	39 (22)
White	97	20	21	138 (77)
Hispanic	2	--	--	2 (1)
Age Group (*n*=172)				
13-19	10	3	2	15 (9)
20-24	2	1	--	3 (2)
25-34	10	3	1	14 (8)
35-44	19	4	5	28 (16)
45-54	16	2	3	21 (12)
55 or older	61	12	18	91 (53)
Education (*n*=170)				
≤8th grade	3	--	1	4 (2)
9-12th grade	67	15	20	102 (60)
≥College	46	10	8	64 (38)
Occupation (*n*=173)				
Retired	43	12	8	63 (36)
Unemployed	41	6	12	59 (34)
Professional	22	5	7	34 (20)
Paraprofessional	13	2	2	17 (10)

Responses of the Entire Sample to Each Question

What does health mean to you? In response to this question, a large proportion (34.8%) of the population answered, "being in good shape or having a feeling of well-being." Many others (18.5%) felt that maintaining health was important, while some thought that simply living (8.7%) or

maintaining a certain quality of life (6.5%) was key to what health meant to them. Almost equal to this were the percentage of residents (7.1%) who were unsure what health meant to them. Interestingly, few respondents thought that doctors (0.5%) or family members (1.1%) had anything to do with health.

How do you know when you are healthy? For this question, the majority of participants (67%) said they knew they were healthy by the way they felt. In addition, 16.3% of the participants relied on regular check-ups by health care professionals to reassure them that they were in good health. A few (3.3%) relied on spiritual measures, replying that if they could get up in the morning and thank God for their health, they must be in good shape. Almost 5% were not sure how to determine if they were healthy.

What behaviors or activities were engaged in to stay healthy? Dieting or weight control (46.2%) was the primary activity engaged in by the largest number of participants. Others (33.7%) said that they engaged in exercise or physical activities. Again, institutionalized means of maintaining health, such as taking medicine (5.4 %) or relying on check-ups (1.6%) received fewer responses. Some participants reported less active means of staying healthy, such as spirituality and meditation (0.5%), or resting and sleeping (2.2%).

Responses to each Question by Gender, Race/ethnicity, Age, and Education

Tables are presented by gender, race/ethnicity, age, and education only when differences exist for each question.

What does health mean to you? There was a tendency for those with higher educational attainment to value the physical aspects of health. For example, 36% (n=37) of those with educational attainment between 9th and 12th grade and 49% (n=30) of those with educational attainment greater than or equal to college referred to physical aspects of health in their responses. In contrast, none of those with less than an 8th-grade education (n=4) considered health from a physical perspective. See Table 2 for responses according to educational level.

Table 2. Responses to the Question "What does health mean to you?" by Educational Level

	≤8th Grade (*n*=4)	9-12th Grade (*n*=102)	≥College (*n*=64)	Total Frequency (%) (*n*=170)
Being in good shape*	0	33	27	60 (35)
I'm getting old*	0	2	1	3 (2)
It's important to maintain**	1	23	6	30 (18)
Spending time with family**	0	1	1	2 (1)
When doctors help you	0	1	0	1 (0.5)
Everything**	1	11	5	17 (10)
Mobility*	0	1	2	3 (2)
Without it, you're not living*	0	1	0	1 (0.5)
Living**	1	10	4	15 (9)
Quality of life**	0	4	6	10 (6)
Don't know	0	7	3	10 (6)
Other	1	8	9	18 (10)

Note: *Responses with "physical" attributes
**Responses with "value" attributes

There was a slight difference by gender in response to this question. The most popular answer for females was almost evenly split (39% and 35%, respectively) between physical definitions, such as "being in good shape or well being" and value definitions such as "it's very important/it means everything to me." On the other hand, males were more likely (35%) to give answers related primarily to their values, while a smaller proportion (23%) defined health in physical terms. There was also a slight inverse relationship by race, as 38.3% of African Americans gave value-related responses and 28.2% gave physical-related responses, as opposed to 27.5% and 37% for Whites, respectively. When considered by age group, those younger than 55 tended to stress the physical aspects of health as opposed to those 55 and older who stressed the value aspects.

How do you know when you are healthy? The majority of both African Americans and Whites (56.4% and 70%, respectively) relied more on personal than professional assessments to determine when they were healthy, although African Americans were more likely to rely on doctors and check-ups (28.2%) than Whites (13.8%). See Table 3 for responses by racial groups. The responses to this question revealed no major differences by gender. There were no differences between age groups

related to how participants knew when they were healthy. The majority of all age groups relied on personal assessments more often than professional assessments, though the younger groups were more likely to rely on personal assessments than the older groups. Also, there were no notable differences by educational attainment, as the majority at all levels relied on personal assessments of health.

Table 3. Responses to the Question "How do you know when you are healthy?" by Racial Group

	African American (*n*=39)	White (*n*=138)	Total Frequency (%
When you feel good	10	56	66 (37)
When you have no problems/you're not sick	9	22	31 (18)
Going to doctor for checkups*	11	19	30 (17)
Feeling it/in tune with your body	2	2	4 (2)
When I have energy	1	4	5 (3)
When I can get up and thank the Lord	4	2	6 (3)
Having a clear mind to do things	0	2	2 (1)
By the way that I feel	0	10	10 (6)
When you are breathing	0	1	1 (0.6)
I don't feel good	0	1	1 (0.6)
I don't know	2	6	8 (5)
Other	0	12	12 (7)

Note: *Professional assessment. All other responses were classified as personal.

What activities or behaviors were engaged in to stay healthy? There were differences by race in response to this question. African Americans (48.7%) exercised more than Whites (30.7%), whereas Whites (48.6%) dieted more than African Americans (38.5%). See Table 4 for activities or behaviors that were engaged in to stay healthy, by racial group. There were no major gender differences in responses. Males and females both relied primarily on diet (41.7% and 49.6%, respectively) and to a lesser extent on exercise (36.7% and 33%, respectively) to maintain health. There was a slight variation by age in responses: the majority in the 13 to 19 and 20 to 24 age groups primarily used diet (53.3% and 66.7%, respectively) rather than exercise (20% and 33.3%, respectively) as a means of maintaining health. Similar results were noted for

those 45 years and older. However, those between 25 and 44 used diet and exercise equally to maintain health. There were no differences in the assessment of health status by educational attainment.

Discussion

Although several trends were revealed for the entire sample, the three major findings of this study were the following: 1) those with lower educational attainment perceived their health in terms of values rather than physical ability; 2) African Americans relied on doctors and checkups in knowing if they were healthy more so than Whites; and 3) African Americans relied more on exercise to maintain their health, while Whites relied more on dieting. When findings for all participants were combined, the majority of rural residents seemed knowledgeable about the meaning of health, expressed concern over monitoring their own health, and took some measures to stay healthy. In general, most of the rural residents preferred personal, active ways of staying healthy, like diet or exercise, rather than inactive means such as resting, spirituality, and meditation, or institutional methods like health care check-ups and medicine. They defined health in both physical and value-related terms.

Other researchers have documented similar findings. Utz and colleagues[13] and Sellers and colleagues [19] identified activity and independence as hallmarks of rural residents' attitudes about health. In particular, our finding that rural populations tend to rely less on physicians and institutional means of assessing and maintaining health echoes those of Sellers' findings. The rural residents' emphasis on diet and exercise and other active means of maintaining health, which this study notes, is also supported by the findings of Depoy & Butler,[12] Utz and colleagues,[13] and Averill,[17] all of whom noted that rural populations tend to define health as the ability to be active and productive.

Interestingly, our study found that family interaction and spiritual or religious involvement were not major influences on the health values or health behaviors of rural residents. This finding is in contrast to some of the findings in Averill's study,[17] which noted that rural elders believe spirituality to be a vital part of overall health, or Arcury and

colleagues,[18] who found that older rural participants' concepts of health integrated the physical, mental, spiritual, and social aspects of health. It is possible that this finding stems from the respondents' distinguishing between physical health and emotional or mental well-being, of which family and spirituality would be seen as a part. It is also possible that the parameters of this study resulted in a difference in overall value findings from that of Averill [17] and Arcury,[18] as those studies focused on an older rural sample, while the sample for this project was far more diverse in age range.

Also noteworthy is the fact that 7.1% of the sample seemed uninformed about preventive health behavior. It is unknown whether this points to a real gap in health promotion activities in rural areas, or if the brief and random nature of the telephone interviews might have been a factor. Residents might not have understood exactly what the interviewer was asking or might have been eager to end the conversation and attend to other things. Overall, while this survey was useful in determining general health attitudes, more in-depth, detailed information about the perceptions and values of rural populations is clearly needed.

One limitation of this study was the low response rate of 18.4%, as one thousand phone calls were made to recruit 184 residents, a fairly small sample for this type of research. Possible reasons for these refusals may have been that 1) the research assistant had a rather youthful voice that led a number of possible participants to tell her to "stop playing around on the phone," and 2) a possible perception that the research assistant was a telemarketer. Due to the small sample size, generalization of the study findings is limited. Also, the necessity of respondents having a telephone and speaking English biased the sample selection. Additionally, the hours of the survey, 9:00 a.m. to 5:00 p.m., may have skewed the age spectrum, as most young adults and middle-aged adults are at work or school during this time period.

Future Research Implications. A continuation of this study with a larger sample of English and non-English speaking rural residents, conducted during the day and evening hours, using a more detailed questionnaire, is warranted. Face-to-face or written

surveys for those without telephones would likely increase the diversity of the survey sample. Future studies could also address the possible separation between mental and physical well being, which appears to exist in the minds of rural residents, as well as the apparent mistrust of institutional methods of maintaining health, such as medicine and regular check-ups. More in-depth research into the area of rural residents' perceptions of health could prove valuable, since it has the potential to improve health outcome measures and, therefore, quality of life for a significant segment of the American population.

Practice Implications. Information gathered from the survey may prove useful in suggesting directions in health interventions for rural populations. These results may also assist in the identification of incentives and motivations for rural residents to engage in healthy lifestyle changes and development of outreach prevention strategies for rural residents. Outreach programs for rural residents should focus on more active, personal, and independent means of maintaining health. Programs which focus on independent measures, like designing individual diet and exercise programs and learning to monitor signs and symptoms of impending health problems at home, would probably best appeal to rural populations, who seem to favor active, independent means of assessing and maintaining health. These programs should be conducted at various times of the week and day in order to accommodate the varied schedules of rural residents. In addition, rural residents should be involved in their own healthcare by being taught how to monitor their vital signs and other signs and symptoms so that they may use these assessments instead of those of physical disability and pain[14] to determine when they should seek professional healthcare. This approach would appeal to the focus on the independent nature of rural individuals when considering health options, while also providing rural residents with more biomedical means of assessing their own health.

Since many rural residents in this study did not seem to favor the involvement of family members in their assessment of health, healthcare professionals should also emphasize why the input of family members is important, especially for teenagers and senior citizens, who are often dependent

on family members in other vital aspects of their lives. Overall, designing health interventions which are sensitive to the health values of rural residents, while also addressing any possible problems which might stem from those values, will result in more effective and acceptable programs for residents and may be time-saving and cost-effective for healthcare providers practicing in rural areas.

Conclusion. Research focusing on perceptions and values from the perspective of rural residents, and the influence of perceptions and values on health behavior, is still largely unmapped. However, findings from this exploratory descriptive study reveal that health and health maintenance is of considerable concern to rural residents of diverse ages, gender, race/ethnicity, and education levels. In most instances, rural residents in this study were interested in taking personal, active measures to ensure their continued health, though in some cases factual information about healthcare was lacking.

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