The Psychosocial Needs Assessment among African Americans with Hypertension

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Abstract

Problem: The prevalence of hypertension in African Americans is a health disparity that needs to be addressed. The purpose of this study was to assess the psychosocial needs of African Americans with hypertension and to identify community resources to meet their health management needs. The research was guided by Orem’s Self-Care Deficit Nursing Theory, which states that persons use their own knowledge and beliefs to make decisions about their own health.

Methodology: The descriptive, cross-sectional design utilized a convenience sample of 30 African Americans who attended an inner-city church in a Midwestern state. Participants had their blood pressures taken and completed the Psychosocial Needs Assessment questionnaire. Psychosocial needs assessed were: informational, practical, supportive, and spiritual needs.

Analysis: The sample was 53.3% female, 56.7% were married, and 33.3% had achieved graduate/professional education. Mean age was 57.03 years (SD=10.6) with a range of 29-78 years old. Descriptive statistics analyzed the Needs Assessment questionnaire and determined mean blood pressure.

Findings: The mean systolic blood pressure was 132 mmHg (SD=14.24) and mean diastolic was 82 mmHg (SD=11.06). The Psychosocial Needs Assessment showed that the sample’s needs were mostly informational (alternative treatments, family history, complications, healthy eating, lifestyle changes) and supportive (relaxation and stress management) and did not have a need for practical or spiritual resources.

Implications: It is important for nurses and other healthcare professionals to be aware of the psychosocial needs of African Americans with hypertension in order to make this the center of their plan of care.
High blood pressure or hypertension is an increase in the force of arterial blood flow and is defined in adults as “a systolic pressure of 140 mm Hg or higher and/or a diastolic pressure of 90 mm Hg or higher” (American Heart Association, 2011). Diseases such as stroke, kidney disease, and heart disease are often associated with hypertension. Stroke occurs when blood does not reach a certain part of the brain due to a broken or blocked vessel (Moulton, 2009) and affects approximately three million people in the United States, and further complicating diseases such as hypertension (Moulton, 2009). Another disease often associated with hypertension is kidney disease which occurs when there is a reduction of blood flow to the renal system (Moulton, 2009). Hypertension complicates kidney disease because it increases the resistance in the small arteries of the kidney. The more severe the high blood pressure, the greater the reduction in blood flow to the kidneys. Heart disease is a broad term that includes any diseases that impede the correct function of the heart. Hypertension causes the heart to become bigger, because it has to do more work to pump against a higher pressure (Moulton, 2009).

Hypertension is a major health problem in the United States, with approximately 50 million people having this disease (Moulton, 2009). This disease is more prevalent in the African American population than in the Caucasian population. According to the National Stroke Association, approximately 40% of African Americans have hypertension, compared with 28% in Caucasians (National Stroke Association, 2011). African Americans often do not seek treatment for hypertension because of lack of means to access resources or until there is considerable damage to organs in the body (Moulton, 2009).
It is important for health care professionals to be proactive in detecting hypertension in high risk populations, such as African Americans, and aggressive in managing and treating this disease. To decrease and prevent mortality and morbidity in African Americans with hypertension, education about illness management and the availability of resources should be the primary focus of healthcare professionals. The purpose of the study is to assess the psychosocial needs of African Americans with hypertension. Information about community resources will be given to participants based on the needs assessment. The study will address the following research questions:

1. What are the psychosocial needs of African Americans with hypertension who attend an inner city church in a Midwestern state?

2. What are the community resources available to meet the psychosocial needs of African Americans with hypertension who attend an inner city church in a Midwestern state?

**Review of the Literature**

**Prevalence**

Fernandez, Scales, Pineiro, Schoenthaler, & Ogedegbe (2008) found that African Americans and older adults experience higher hypertension prevalence than do Caucasians and younger adults. The American Heart Association further elaborated on the prevalence estimating that more than 40% of African Americans have this disease, compared with 28% of Caucasians (American Heart Association, 2011). Along with increased prevalence, hypertension is more severe in African Americans and tends to develop earlier compared to Caucasians. Researchers have found that this is partly related to an inadequate availability of resources to the African American population with hypertension. For example, only about half of African Americans
with hypertension are being treated, and as many as two thirds of those being treated have poor control (blood pressure greater than 140/90) (Peters & Templin, 2008).

Approximately 27% of Ohioans (about two million people) have been diagnosed with hypertension (Ohio Family Health Survey, 2010). This is in line with prevalence rates in northern Ohio, Summit County, where one in four adults have been diagnosed with hypertension (Ohio Family Health Survey, 2010). This accounts for 90,000 adults in Summit County alone. Approximately 36% of African Americans in Summit County have been diagnosed with hypertension, compared to 24% of Caucasians in the county (Ohio Family Health Survey, 2010). Based on these statistics, the prevalence of hypertension of African Americans in Summit County is one and a half times that of Caucasians. The prevalence of hypertension in African Americans needs to be further studied and healthcare providers should investigate a potential gap in the delivery of healthcare to the population.

**Psychosocial Needs**

A psychosocial needs assessment may aid healthcare providers to identify the needs of a population so that care and health education may be modeled to better meet the population’s needs. Moadel, Morgan, and Dutcher (2007) explored the illness related needs of adults and identified four categories of need: informational needs, practical needs, and spiritual needs. The ability to meet these psychosocial needs may impact an individual’s quality of life. By identifying these types of needs, researchers may be able to determine specific resources from which individuals may benefit. Informational needs focus on obtaining knowledge needed to manage hypertension. These include information about treatment of the disease, lifestyle changes, and ways to manage symptoms. Specific information needs relate to managing side
effects of medications, decreasing chances of complications, promoting healthy eating patterns, and using alternative or natural treatments.

Practical needs are those used to manage hypertension in everyday life and center around transportation, finances, family care, and any type of personal assistance. For example, transportation to medical visits may be something with which individuals need assistance. Assistance with paying for medical visits may be a concern to individuals living in the community.

Supportive needs pertain to stress management, emotional support, coping support, and having connections with others. Individuals with this category of need may want ideas about how to cope with feelings of sadness and share those feelings and thoughts with people who are close to them. Overcoming fears may also be a concern with individuals. Also, finding someone who is going through the same disease may be a need for them and it may provide a means of support.

The final category of need relates to finding a meaning in life and having hope, and falls under the category of spiritual needs. These needs may be important to members of the community, and they may need help with access to them. Individuals may want help finding someone with whom to talk about finding peace of mind, the meaning of life, or discussing death and dying issues. Locating places of worship may be beneficial to these types of individuals.

Resources

Wu & Eamon (2010) studied barriers to accessing resources of public benefits programs by low income families. The main goal of public benefits programs is to meet the basic needs of low-income families, however, the researchers found that the programs are not meeting families’ needs for a variety of reasons. Wu & Eamon (2010) identified the common barriers to accessing
public benefit programs as eligibility criteria, bureaucratic hassle, lack of knowledge, and social stigma. They concluded that even though resources are available in the community, often times they are not being utilized by members of society.

De Voe, Graham, Angier, Baez, & Krois (2008) discussed the barriers to obtaining health care services for low-income families. They found that the most consistent predictor of unmet health care needs was because of a lack of health insurance. Major concerns of low-income families were a lack of access to services despite having insurance and unaffordable costs.

Based on one of the purposes of this study, available resources in Summit County and around the Akron area for the population were identified. OPEN M is a free clinic that serves uninsured community members by providing free medications and basic medical and dental care. It also provides spiritual and supportive care to families and individuals. Akron Community Health Resources serves individuals and families needing primary medical care. A sliding fee scale is used to determine charges for care. Barberton Community Health Clinic offers free health care for uninsured low income individuals. Finally, the Morley Health Center is a resource for residents in Summit County. This institution has a hypertension clinic, which serves community members that do not have health coverage.

**Theoretical Framework**

The study is guided by Orem’s Self-Care Deficit Nursing Theory (SCDNT; See Appendix A), which describes how persons naturally care for themselves and use their knowledge and beliefs to make decisions about their health. *Self-care* refers to beliefs, habits and practiced behaviors acquired through cultural socialization (Peters & Templin, 2008). *Self care deficits* are the relationship between the ability to self-care and the demand for self-care, when the capacity cannot meet the need a deficit forms (Aponte & Nickitas, 2007). Deficits
create a need for help from another source and is the condition supporting nurses’ entry into the situation. Nurses are needed when persons are unable to meet self-care needs. Nursing agency is the provider of nursing care who can help compensate for deficits. When nurses enter the situation, they are responsible for recognizing self-care deficits and needs, increasing knowledge and giving information on resources that can be utilized. These efforts decrease the self-care deficits and increase self-care agency. Self care agency is founded on knowledge and includes ability to read, write, and reason for decision, as well as socioeconomic and insurance status, which affects the amount of education on health care needed to address self-care deficits. Nurses affect self care agency by providing information about resources for missing areas of knowledge, thereby increasing therapeutic self care demands, which are what one requires to remain in health. There are three levels of demands: (a) Basic needs of all humans, such as air, (b) Demands that vary based on age group and developmental level, and (c) Demands related to mental health/physical deviations (Aponte & Nickitas, 2007).

This framework was relevant to the research project as the researchers responded to self-care deficits by providing participants with specific community resources to help fulfill their needs as indicated by the needs assessment. The Self Care Assessment of African Americans with Hypertension (See Appendix B) was used to determine self-care needs, which was a central concept of the research study. The self care agency, therapeutic self care demands, and self care deficits all revolve around this. Hypertension was the focus of physical health deviations, health promotion activities, screenings, literature, and community resources. Factors that were associated with hypertension in the population included cultural predisposition of African Americans to hypertension and lack of knowledge of available community resources. Based on the SCDNT, if persons know the factors that can affect blood pressure, they may use that
knowledge to change behaviors which may bring about better blood pressure control. The nursing student researchers and faculty co-sponsors acted as the nursing agents, who supplied resources to the participants. Based on SCDNT, it was anticipated that individuals with psychosocial needs will more likely have higher blood pressure. Further, it was anticipated that providing information about available community resources would help the individuals meet some of their psychosocial needs for managing their blood pressure.

**Methods**

**Design**

A descriptive, cross-sectional design was used in this study.

**Setting and Sample**

The study occurred at a predominantly African American inner city church congregation located in a Midwest state. The sample consisted of African Americans who were 18 years of age or older and English-speaking, had a diagnosis of hypertension, and who attended the inner city church. The study was approved by the University Institutional Review Board.

**Measures**

The Psychosocial Needs Assessment measured psychosocial needs related to four dimensions of needs: informational needs, practical needs, supportive needs and spiritual needs. Response options included (a) Learning more about. (b) I would like help with. (c) I would like someone to talk to about. Response options include, “Yes,” “Yes, but not now,” “No,” and “Does not apply.”

Blood pressure was measured according to the American Heart Association’s Blood Pressure Guidelines (2011) and using the appropriate sized cuff. Blood pressure was taken after
participants had been sitting for three minutes without their legs crossed. The pressure reading were taken with a manual sphygmomanometer and using the upper left arm, unless the participants had a mastectomy or shunt (Pickering, Hall, Appel, Falkner, Graves, Hill, Jones, Kurtz, Sheps & Rocella, 2005). The researchers collected self reported data about gender, age, educational level, marital status, number of children, when they were first diagnosed with hypertension, and height and weight of the participants.

Data Analysis

All data was reviewed for completeness prior to entry into the SPSS data base. Descriptive statistics were used to describe the sample and variables. To analyze the psychosocial needs of the participants, the questionnaire was scored according to the instrument guidelines discussed by Moadel, Morgan, Dutcher (2007), as a score was determined for each of the four categories (informational, practical, supportive, or spiritual need). Responses from the psychosocial needs assessment were converted into averages and percentages, depending of levels of measurement.

Demographics

The convenience sample of 30 consisted of almost equal amounts of males and females. The majority of the sample were married, highly educated, living with someone, and had children. A more detailed description of the demographics can be found in Table A. The mean systolic blood pressure was 132.3 mmHg (SD=14.237) with a range of 160-110 mmHg. The mean diastolic blood pressure was 82.7 mmHg (SD=11.061) with a range of 102-58 mmHg. For the particular questionnaire that was used, only questions which received 40% or more “Yes” responses were considered statistically significant in regard to specific needs of this population.
The percentages to the statistically significant answers to the informational questions are shown in Graph A.

Results

The informational questions were Learn 1, 2, 3, 4, 5, 6, 7, 8, 9, 11 & 15, Help 5 & 6. Nine of 13 of the informational questions had “yes” responses while the others were statistically insignificant. A bar graph of the statistically significant informational questions can be found under Graph A. The practical questions were Learn 12, Help 4, 10 & 12. All of these questions had a majority “no” response indicating no need for practical guidance. The supportive questions were Learn 10, 13 & 14, Help 1, 2, 3, 8 & 13. 7 out of 8 of these questions had a “no” response. In this category the question regarding relaxation and stress management was statistically significant, having 57% with a “yes” response. The spiritual questions were Help 7, 9, 11, Talk 1, 2 & 3. All of the spiritual questions had majority “no” responses indicating no need for spiritual guidance.

Discussion

Overall, this study showed a majority of the participants having a need for informational resources. They wanted to be aware and more educated about their condition of hypertension. They seemed to be intrigued with alternative and natural treatments as well as how to eat healthier. Making and keeping healthier lifestyle choices was also an overall need for this population. Resources were provided for these specific informational needs in the form of handouts and pamphlets which included information about eating healthier, hypertension medications, and information about the link between African Americans and hypertension.

Practical resources did not appear to be a particular need of this population. The population was a highly educated sample which may have contributed to the population already
having these types of resources available to them. Because the majority of this population had well controlled blood pressure, this could conclude that they were proactive with their disease and had the transportation to get to their doctor appointments. They were also aware of places that they could call for emergencies after hours.

The church setting for this sample had a major impact in the resource of having connections with people and having someone to share feeling with. Therefore the population did not have many supportive needs, except for relaxation and stress management resources. Since this population was well educated, stress management may have been needed because of their careers.

Spiritual needs were not a significant need for this population. Participants for this study were obtained from a church setting which may have been the contributing factor for not requiring spiritual needs.

The majority of the sample in this study were married, highly educated, living with someone, and had children. Gender was almost evenly split between males and females. These demographics play a major role in the needs for this sample. Since the sample was solely taken from a congregation of church members, future studies need to assess a larger sample of African Americans with hypertension in order to attain a better picture of overall needs for individuals with hypertension. Knowing this vital information can lead health care members to providing adequate resources to their patients, particularly those with this chronic disease.

**Conclusion**

While it would appear from this study that hypertension was well-controlled in this sample, it is important to consider that the participants of this group were for the most part well-educated, married individuals who may not represent the entire African American population.
The first study limitation was our sample; their education, income, marital status, and attendance of church, may be factors that lead to better control of their health. Future studies may determine whether organizational and demographic factors influence the degree of control an individual may have over chronic illnesses such as hypertension. Our sample size was small and was another study limitation. Future studies should evaluate the needs of larger samples and furthermore the general population of African Americans. Another limitation of the study was that while a majority of the participants in this study were diagnosed with hypertension, some had only been classified as pre-hypertension from their healthcare providers. However, attending the blood pressure clinic was a preventative measure, which shows that the sample understood that prevention is important to stay healthy and in charge of the disease. While evaluating the needs of these individuals it became apparent that stress management and relaxation was a need for many. Future studies should evaluate stress in different populations and the relation to incidence of chronic disease, such as hypertension.

The results reflect the need for better education about hypertension for individuals who are at risk. Many participants expressed a desire for information regarding types of hypertension medications and their side effects, how to prevent hypertension, and ways in which changing one’s lifestyle can help prevent or delay the damage of hypertension. Although many of the participants were well-educated and held degrees, they still desired more information. This study indicates that people with higher education may still need help with medications, lifestyle changes and desire more information from healthcare providers. It is important for healthcare providers to provide this information and explain medications to patients so they may be more knowledgeable about their medication regimen. Some participants were also interested in alternative therapies, and healthcare providers need to be able to educate patients on effective
alternative therapies to hypertension or be able to refer them to physicians who practice alternative medicine. Identifying an unmet psychosocial need in the population may help healthcare providers further close the gap in the prevalence of hypertension.
References


Appendix A

Self-care Deficit Theory Framework

- **Self Care Agency:** Reading, Writing, Reasoning, Socioeconomic status, Insurance Status
- **Self Care Assessment of African Americans with Hypertension**
- **Therapeutic Self Care Demands:** Health promotion activities, Screenings, Literature, Community resources
- **Self Care Deficits:** Lack of knowledge of community resources, & Cultural predisposition to hypertension.

**Nursing Agency:** Nursing Student Researchers and Faculty
### Appendix B

**The Psychosocial Needs Assessment**

<table>
<thead>
<tr>
<th>I. I would like to learn more about:</th>
<th>Yes</th>
<th>Yes, but not now</th>
<th>No</th>
<th>Does not apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My high blood pressure.</td>
<td></td>
<td></td>
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<tr>
<td>2. Immediate side effects of the medications I am taking</td>
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<td></td>
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<tr>
<td>3. Long-term side effects of the medications I am taking</td>
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<tr>
<td>4. Community resources I can call for information.</td>
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<tr>
<td>5. Alternative &amp; natural treatments for my blood pressure</td>
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<td></td>
<td></td>
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<tr>
<td>6. How I can quit smoking.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>7. Family history &amp; high blood pressure.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>8. Things I can do to reduce my chance of complications with high blood pressure</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>9. What can I eat to help control my blood pressure.</td>
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<tr>
<td>10. How to be in touch with others who have high blood pressure</td>
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<tr>
<td>11. Tests that are used to measure my kidney function.</td>
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<tr>
<td>12. Ways to get transportation to medical visits.</td>
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<tr>
<td>13. What I can do about depression.</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>15. Healthier ways to eat.</td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>II. I would like help with:</th>
<th>Yes</th>
<th>Yes, but not now</th>
<th>No</th>
<th>Does not apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Learning to cope with feelings of sadness.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Finding someone to talk to about my high blood pressure with.
3. Sharing my thoughts and feelings with those close to me.
4. Having a place to call with questions/emergencies after hours.
5. Making lifestyle changes.
6. Keeping lifestyle changes I have made.
7. Finding spiritual resources.
8. Worries I have about my family.
11. Finding hope.
12. Taking care of my family when I feel weak or sick.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>Yes, but not now</th>
<th>No</th>
<th>Does not apply</th>
</tr>
</thead>
</table>

I. I would like to have someone to talk to about:

1. The meaning of life.
2. Death and dying.
3. Finding peace of mind.

(Revised with permission of Moadel, Morgan & Dutcher, 2007)
Would you take another few moments to answer the following questions?

1. Gender (Check one): _____ Male _____ Female
2. Age__________ years old____
3. How many years of schooling have you completed? (Check one)
   ______Elementary school or less   _____High School   _____Some College   ___
   ______College_________Graduate/Professional School   ____Other
4. What is your marital status? (Check one)
   _____Single   _____Married   _____Divorced   _____Living with someone
   .
   _____Separated_____Widowed
5. Number of children?_______________
6. Do you currently live by yourself?____ Yes _____No
7. When were you diagnosed with high blood pressure? _______________________
8. Please list your blood pressure medications.____________________________________
   ____________________________________________
   ____________________________________________

9. Blood Pressure Reading: _______/__________
10. Height: ________
11. Weight:________
12. Body Mass Index:________
13. Body Fat:________
Table A
Demographics  n=30

<table>
<thead>
<tr>
<th>Variable</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>14 (47)</td>
</tr>
<tr>
<td>Female</td>
<td>16 (53)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>4 (13)</td>
</tr>
<tr>
<td>Some College</td>
<td>9 (30)</td>
</tr>
<tr>
<td>College</td>
<td>7 (23)</td>
</tr>
<tr>
<td>Graduate/Professional School</td>
<td>10 (33)</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>4 (14)</td>
</tr>
<tr>
<td>Married</td>
<td>17 (57)</td>
</tr>
<tr>
<td>Divorced</td>
<td>5 (17)</td>
</tr>
<tr>
<td>Living with someone</td>
<td>1 (3)</td>
</tr>
<tr>
<td>Widowed</td>
<td>2 (7)</td>
</tr>
<tr>
<td>Living Alone</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>20 (67)</td>
</tr>
<tr>
<td>Yes</td>
<td>10 (33)</td>
</tr>
<tr>
<td>Age, mean ± SD (range)</td>
<td>57.03 ±10.598 (29-78)y</td>
</tr>
<tr>
<td>Number of Children, mean ± SD (range)</td>
<td>2.20 ±1.518 (0-4)n</td>
</tr>
<tr>
<td>Diagnosis in years, mean ± SD (range)</td>
<td>6.90 ±13.028 (0-51)y</td>
</tr>
</tbody>
</table>
Graph A - Statistically Significant Informational Needs of Population

**Informational Needs**

- High Blood Pressure: 40%
- Family history and HTN: 46.7%
- How to reduce chances of complications: 46.7%
- What I can eat to control my blood pressure: 60%
- Tests used to measure kidney function: 66.7%
- Healthier ways to eat: 56.7%
- Making lifestyle changes: 60%
- Keeping lifestyle changes: 43.3%

**Percentage of Participants Who Answered "Yes"**