Cultural Influences of Herbal Supplementation in Hypertension Management Among The United States Virgin Islander

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Hypertension Prevalence

- Hypertension (HTN) one of the most treatable illnesses leading to premature morbidity and mortality
- 32% American Adults have the Diagnosis
- People of African decent disproportionately affected
- 43% African American men and 45.7% African American Women
- 26 to 55% Caribbean Islanders have the diagnosis
- 26% United States Virgin Islander are hypertensive
  - Virgin Islander is Caribbean American
  - 76.2% of the population is Black or African American
- CDC Behavioral Risk Factor Surveillance Survey
  - Proportion of Virgin Islanders with HTN is higher than 42 of the 51 states
Adherence

- Adherence is the degree to which a person’s attitude and behaviors toward a care regimen parallels with established recommendations from a health care provider.
- Adequate adherence is essential for adequate blood pressure management
- Adherence is a multidimensional and multifaceted phenomenon
- Cultural practices can greatly influence health care practices
Problem

Enormous healthcare burden on population disproportionately affected.

Non-adherence increases morbidity and mortality.

Adherence decrease adverse effects.

No studies regarding adherence in this population.

Non-adherence in hypertension global phenomenon.
Study

- Presentation results stem from a larger study designed to:
  - Explore factors that impact adherence to hypertensive treatment regimen
  - Explore knowledge regarding hypertension
  - Present factors that foster or deter adherence
  - Afford the opportunity to provide better future assessment of medication adherence among this population

- Results revealed multiple themes and sub-themes that described behaviors affecting adherence in this population

- Theme highlighted in presentation
  - **Socializing** with subtheme: *Use of herbal supplements*
Complementary and Alternative Modalities

- Use in treatment of chronic problems growing phenomenon
- Factors leading to use
  - Cultural influence
  - Perceived superiority of benefits
  - Dissatisfaction with conventional modalities
  - Perceived enhancement of quality of life
  - Decreased adverse outcomes with use
Methodology and Sample

- Method: Grounded Theory articulated by Strauss and Corbin
- Individual sample $N=21$ Group Sample $N=4$

<table>
<thead>
<tr>
<th>Sample</th>
<th>Individual</th>
<th>Group</th>
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<tbody>
<tr>
<td>Male</td>
<td>38.1%</td>
<td>0</td>
</tr>
<tr>
<td>Female</td>
<td>61.9%</td>
<td>100%</td>
</tr>
<tr>
<td>Employed/Retired</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Insured</td>
<td>76.2%</td>
<td>75%</td>
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<tr>
<td>Missed Medication</td>
<td>81%</td>
<td>50%</td>
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<tr>
<td>Herbal Supplement Use</td>
<td>57.1%</td>
<td>50%</td>
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Data Analysis Procedure

Adapted from Strauss and Corbin Grounded Theory Method (Morton, J. A. 2016)
Results

- n=76% Eliminated blood pressure regimen at some point
- n=36% reporting deliberately eliminating their regimen
- n=90% used some form of herbal remedy at some point to manage their blood pressure
Exemplar Quotes Herbal Use related to traditional Influence

- **Taylor:** Well “bush” ... to me it is Caribbean and West Indian culture... you grow up on “bush”... for us “bush” was always a heavy thing (something that is of significance). For me if I had a fever ...sour sop bush, you are sick or you need a cleaning (used to refer cleansing) they give you some bitter bush...we have the moringa....the lemon grass and...Jamaican mint.....culture... Its culture and I guess the easiest way to explain it is, it is something that is taught and you do not ever forget.

- **Jasmine Guy:** Well my mother and a lot of the older generation they believe in their “bush”. They believe in herbal care. They tell you all the time, “Back in the day you didn’t have medicine and people were living longer and you need to use your herbs and your “bush” and stuff like that.” And if it worked for them, I want to live long too so I am going to try to do what I can.

- **Bernice:** The old times days in my grandmother time, she use these things (referring to the various herbs and remedies) back home. She would go and pick them, and say “that’s good for sugar (diabetes). that’s good for this and she used them things (referring to various herbs and such remedies)".
Mr. Indian: I would choose the bush tea because it makes me feel different, because it has fewer side effects. Because once you coordinate your teas or your *bush medicine*, you do not have those side effects as you do if you use western medicine. I do take it (referring to his prescribed medications) ..., not that I refuse, I do take it but I do not keep a long stretch with it. I just take it to alleviate the situation. Even with my respiratory medicine, I do have an asthma condition when the puffer does not work. I go boil some *marijuana leaf* and go make tea with it and that works for 1 week at least, I do not smoke it (referring to the marijuana) I don't use the *blunts*, I don't use enhanced plants from America I use the natural leaves with the chlorophyll and that works for me. In the Virgin Islands we have plants that the tablets are derived from those plants so why wait on the tablet when you can eat the plant directly?
Exemplar Quotes Discussing Perceived Safety of Herbal Supplements

- **Agnes**: People rather go and do the herbs and the spice opposed to go and take the pill. They feel that the pill is manmade and have all kind of different stuff. When I pick up my pills and I have the fact sheet in it because a, y, z. it’s like asking yourself why am I taking the pill…. because it’s going to kill something else. I do not have that with the bush. If I take it for my pressure it also good to flush out my kidney it also goes to clear the liver so it’s helping me more than destroying like what the pill would do.

- **Songbird**: There are the long-term side effects from these medications that we may or may not know about, and all those factors, I guess, all that builds up my wanting to stay away from it (referring to conventional medications). I use a combination of just about every and anything to control my blood pressure. There is garlic, there is moringa, there is a bush you call Lizard Food. There is the papaya as well, just a whole host of things and intermittently I just use different ones.
Exemplars of Understanding Medicinal Properties of Herbal Supplements

- **Mary**: I know about the herbs, I have a book, and I read and see what kind of herbs to get. I know you have to be very careful what you do because you taking the pressure pills. So you have to be very careful. When I drink bush, I do not take the pressure pills until much later.

- **Prince**: I do not use herbs and the medication at the same time. If I do not take the medication for a couple of days or whatever and I find that my pressure is up I am going to use herbs. I do not use all sort of other herbs...if I am feeling good I will not take my medicine ....I do monitor my pressure. I am on top of it and I feel that if need be I will take the medication and I will not mix them (meaning the herbs and her prescribed medications). I think if it is really kind of high I’ll take the garlic and then later on I’ll take the medications...I don’t think the garlic is going to give an adverse reaction but the regular bush may... I would not mix both of them.
Montgomery: Some of the herbs that I know that in the Caribbean, it is used for blood pressure or assisting in controlling high blood pressure... *papaya leaves*; we use *arude*... *fiscal* have you ever heard of *manchinin*? It grows by the sea, if you eat the *manchinin* fruit its deadly poison, but if you use the leaves, it is good for high blood pressure. Another bush that they say is good for high blood pressure is *murklime* it grows by the seaside. Whitehead bush and dandelion bush is also good for high blood pressure...
Exemplar of Various Herbal Supplements used in the Virgin Islands
Significance of the Study

- Nursing Education
  - Inform curricular
  - Develop prospectuses that highlight importance of ethnocultural basis of care

- Nursing Practice
  - Multi-dimensions of cultural care
  - Platform for establishing guidelines for care in this and like populations

- Nursing Research
  - Platform for like studies in this and similar populations
  - Investigate the properties and efficacy of herbal medicine used

- Health/Public Policy
  - Informs stakeholders, catalyst for health promotion and disease prevention programs
  - Implementation of funding for future research into this phenomenon
Summary

• Herbal remedy use is a factor that deters adherence to conventional management among this population

• Factors that promote the use of herbal remedies among this population
  • Cultural practice
  • Perceived superiority of herbal supplements
  • Perceived safety of herbal supplements over conventional allopathic regimens

• Health care providers must understand this cultural variant in order to ensure optimal treatment outcomes with this population

• More research must be done with this and like populations to have a better understanding of this phenomenon
References


  - Retrieved from http://www.who.int/en