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# Hypertension Education and the Burlington Housing Authority

Evans, Rebecca; Greene, Matt; Iberri, David; Johnson, Casey; Kunz, Benjamin Mason, Annice; Tatsumi, Kanayo; Walton, Kelsey; Russell, Sarah; Rubin, Alan; Carney, Jan



### Background

- 2/3 seniors are hypertensive (>140/90 mm Hg) (1)
- Hypertension is the most common risk factor for premature heart disease and stroke
- Non-modifiable risk factors: race, age, sex, diabetes mellitus, and hypercholesterolemia (2)
- Modifiable risk factors: smoking, obesity, and excessive alcohol (3)
- Clinical trials show that lifestyle modification and medications can reduce the incidence of adverse outcomes associated with hypertension (1)
- Patient education is a high priority

## Objective

Are seniors informed of the risk factors, consequences and therapies for hypertension?

### Methods

#### Hypertension clinics

- Designed by students to educate residents of the Burlington Housing Authority's South Square Apartments
- Included survey and educational pamphlet distribution, educational lecture, and blood pressure measurement

#### Survey design

- 18 questions querying demographics, knowledge of hypertension, and current health status
- Observational analysis performed



### Results

Nineteen hypertension clinic participants completed surveys. (Table 1) All participants (19/19) saw a physician within the last year.

| Demographic characteristic               | % (n)    |
|--|----------|
| Total surveyed                           | 100 (19) |
| Age (years)                              |          |
| <20                                      | 11 (2)   |
| 21-30                                    | 0 (0)    |
| 31-40                                    | 5 (1)    |
| 41-50                                    | 5 (1)    |
| 51-60                                    | 5 (1)    |
| ≥ 61                                     | 74 (14)  |
| Race                                     |          |
| White                                    | 100 (19) |
| Sex                                      |          |
| M  | 32 (6)   |
| First language                           |          |
| English                                  | 85 (16)  |
| Diagnosed with diabetes mellitus         | 32 (6)   |
| Diagnosed with high cholesterol          | 58 (11)  |
| Positive family history for hypertension | 16 (3)   |
|  | <b>.</b> |

- Table 1. Survey and hypertension clinic participant demographics
- Over half of the participants were previously identified by a health care worker as hypertensive (10/19) and were taking hypertension medications (9/10).
- Few were able to identify their medication (6/8) or correctly identify a blood pressure of >140/90 mm Hg as hypertensive (0/10).
- Hypertensive participants practiced better dietary and lifestyle habits than non-hypertensive participants. (Figure 1)

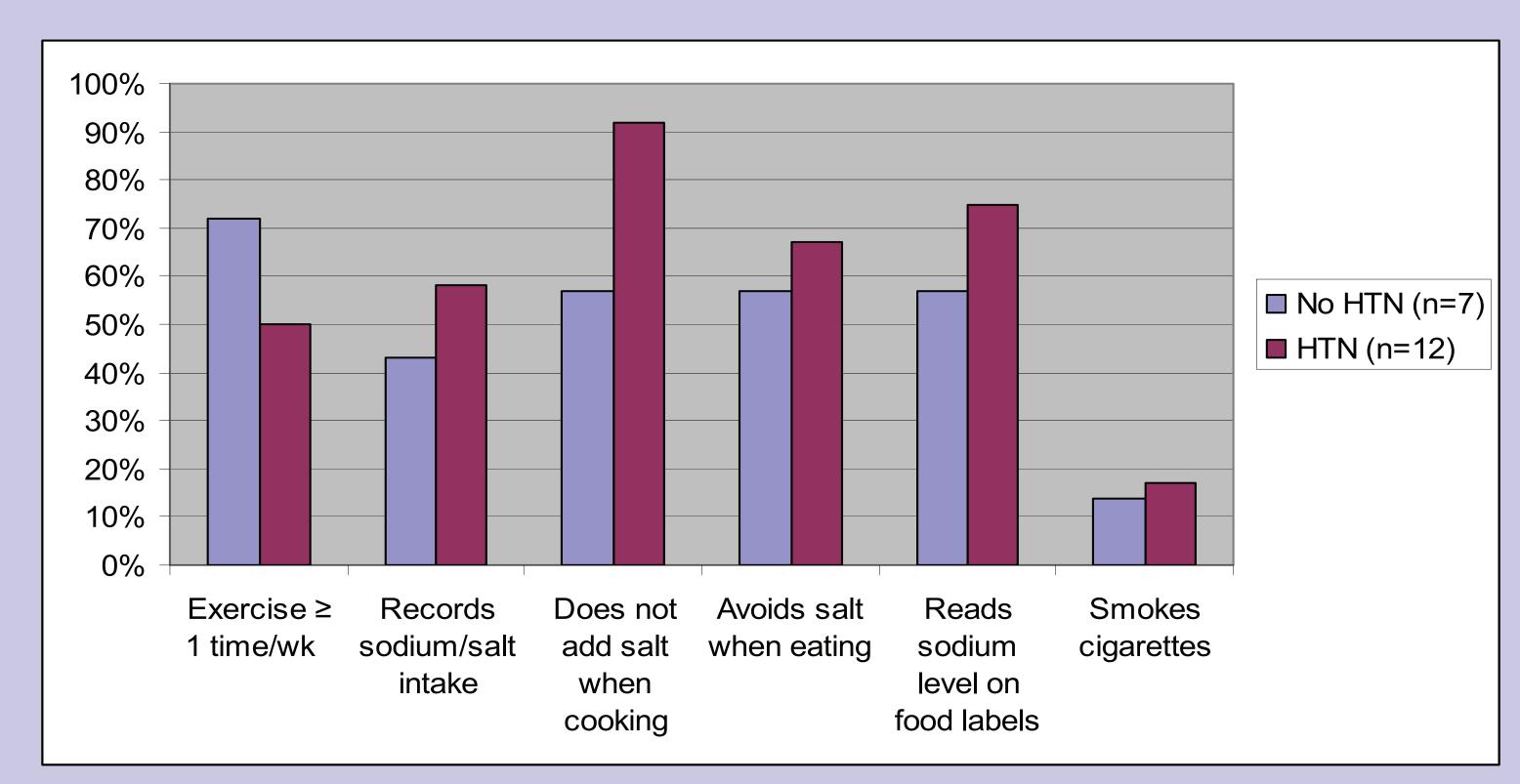


Figure 1. Comparison of behavioral risk factors in participants presenting with or without hypertension via student measurement at the hypertension clinic.

- Upon screening, 12/19 participants were hypertensive
- Most of the hypertensive participants were previously identified as hypertensive by a health care worker (9/12) and of these, most were taking antihypertensive medication (8/9).



### Conclusions

- Participants had adequate access to healthcare.
- Regular physician visits did not ensure adequate understanding of hypertension in our patient population.
- Hypertension was challenging to control despite adherence to a medicinal regimen.
- Behavioral risk factors were not associated with hypertension in this patient population.

### **Lessons Learned**

- Older individuals may adhere to myths about how to achieve cardiovascular health despite being knowledgeable about the benefits of blood pressure control and the negative effects of uncontrolled hypertension.
- While public health projects endeavor to satisfy a specific, well-documented need, sometimes the greatest benefits in working with an elderly population are achieved by bringing company and conversation.
- Said one BHA resident, "[Most helpful was] the opportunity to be with so many professionals that know how to be so nice and make people happy."

### References

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