

1-23-2013

# Is Blood Donation an Opportunity for Hypertension Awareness?

J. Hao

C. Kerrigan

L. Kreiger

J. McAvoy

C. Sikavi

*See next page for additional authors*

Follow this and additional works at: [http://scholarworks.uvm.edu/comphp\\_gallery](http://scholarworks.uvm.edu/comphp_gallery)

 Part of the [Community Health and Preventive Medicine Commons](#), and the [Health Services Research Commons](#)

## Recommended Citation

Hao, J.; Kerrigan, C.; Kreiger, L.; McAvoy, J.; Sikavi, C.; Swift, D.; Wickberg, L.; Dembeck, C.; Frenette, C.; Carney, J.; and Fung, M., "Is Blood Donation an Opportunity for Hypertension Awareness?" (2013). *Public Health Projects, 2008-present*. Book 82.  
[http://scholarworks.uvm.edu/comphp\\_gallery/82](http://scholarworks.uvm.edu/comphp_gallery/82)

This Article is brought to you for free and open access by the Public Health Projects, University of Vermont College of Medicine at ScholarWorks @ UVM. It has been accepted for inclusion in Public Health Projects, 2008-present by an authorized administrator of ScholarWorks @ UVM. For more information, please contact [donna.omalley@uvm.edu](mailto:donna.omalley@uvm.edu).

---

**Authors**

J. Hao, C. Kerrigan, L. Kreiger, J. McAvoy, C. Sikavi, D. Swift, L. Wickberg, C. Dembeck, C. Frenette, J. Carney, and M. Fung

# Is Blood Donation an Opportunity for Hypertension Awareness?

<sup>1</sup>Hao J, <sup>1</sup>Kerrigan C, <sup>1</sup>Kreiger L, <sup>1</sup>McAvoy J, <sup>1</sup>Sikavi C, <sup>1</sup>Swift D, <sup>1</sup>Wickberg L, <sup>2</sup>Dembeck C, <sup>2</sup>Frenette C, <sup>1</sup>Carney J, <sup>1</sup>Fung M.

<sup>1</sup>UVM College of Medicine, <sup>2</sup>American Red Cross Northern New England Region, Burlington VT



## Introduction

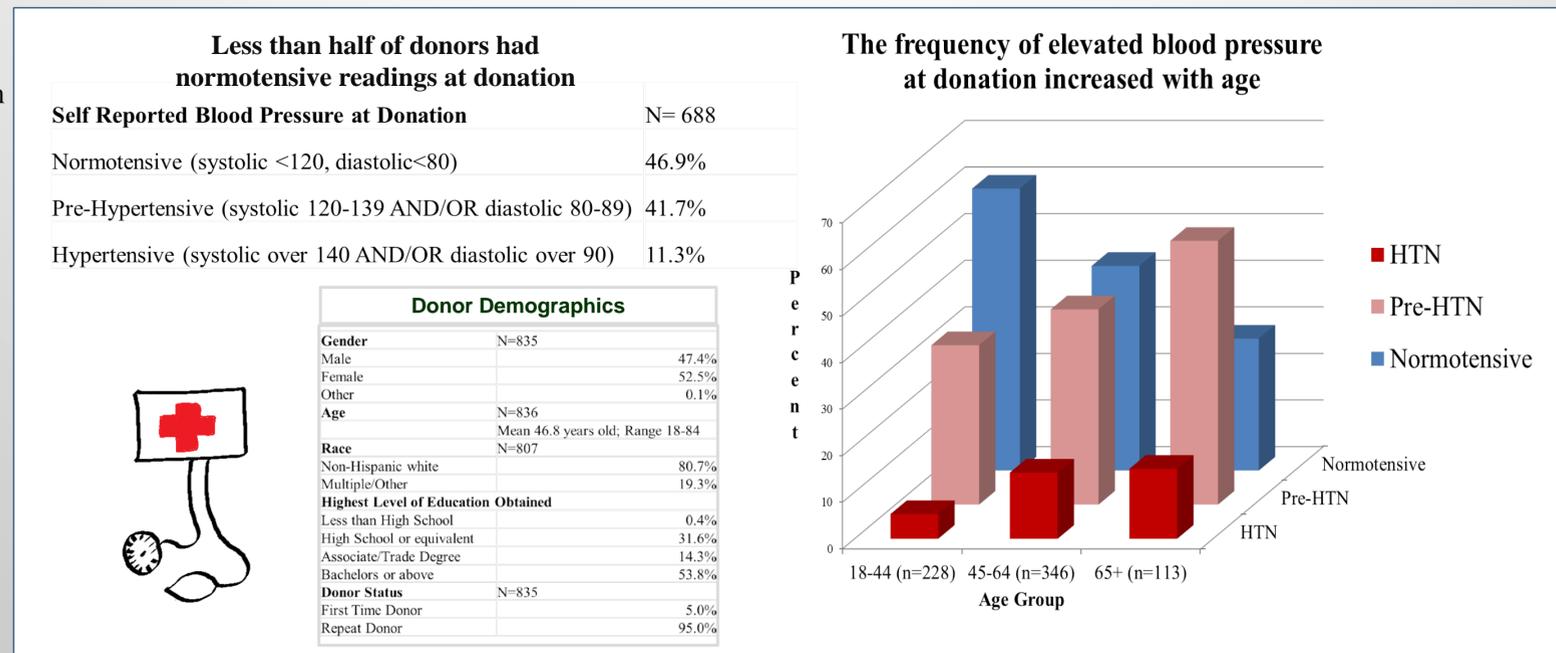
- Blood centers serve as a cornerstone of public health by providing potentially lifesaving blood products. Interactions with millions of potential donors provides these centers with a unique means of health education and screening opportunities<sup>1,2</sup>.
- Hypertension screening is one potentially feasible option in these centers. Hypertension, a modifiable risk factor affecting one in three adults, contributes to nearly half of all cardiovascular disease related deaths in the U.S.<sup>3</sup>. **14.1 million U.S. adults are unaware of their hypertension<sup>4</sup>**, which has designated this disease “the silent killer.”
- Blood pressure screening is required in the United States for the donation of blood. **Many hypertensive donors, even those who are deferred for this reason, are never educated on the meaning of their blood pressure results.**
- Numerous studies have evaluated the efficacy of blood centers in screening populations for risk factors ranging from hyperlipidemia and hyperglycemia<sup>5,6</sup> to genetic diseases<sup>7</sup>.

## Our study seeks to determine:

- How many donors fall within the pre-hypertensive or hypertensive blood pressure range based on their reading at the time of donation.
- How many at-risk donors are not aware of these hypertensive or pre-hypertensive readings.
- Whether blood centers can effectively provide blood pressure education by means of an informational pamphlet.

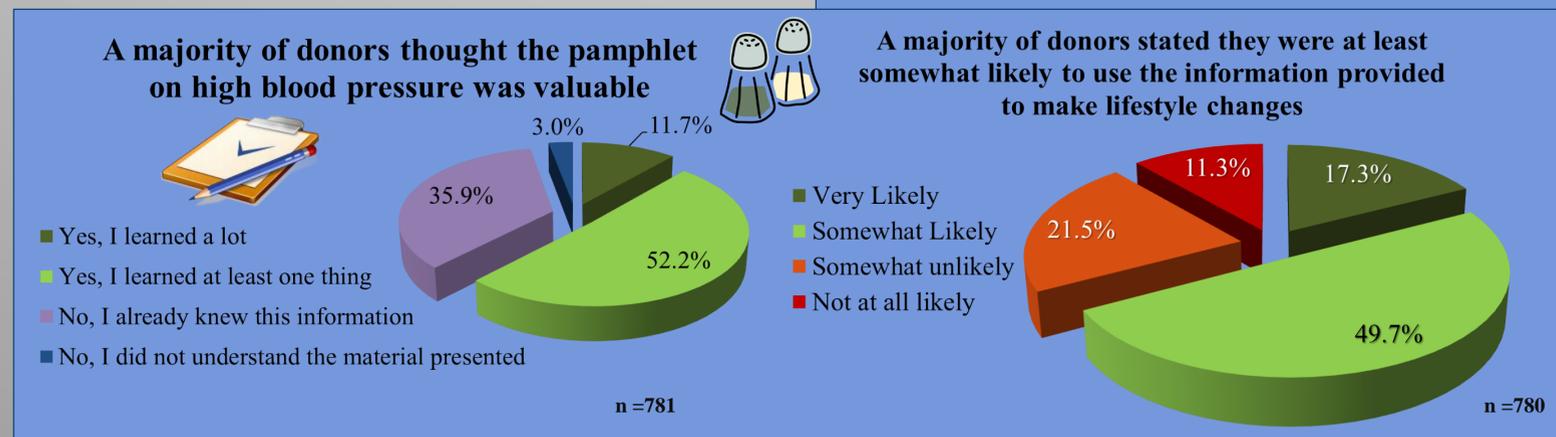
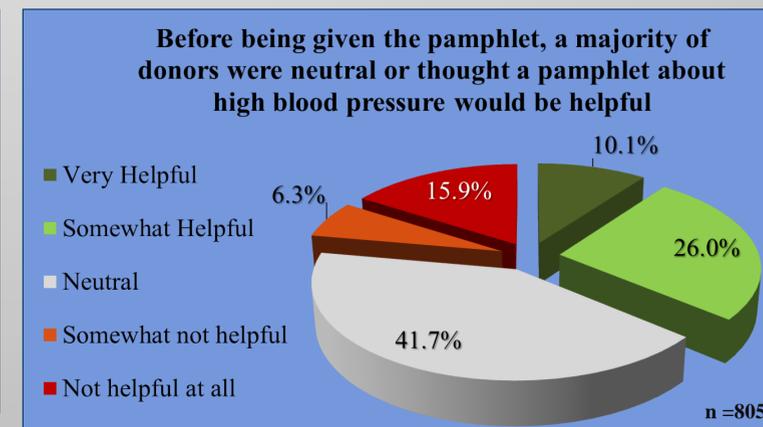
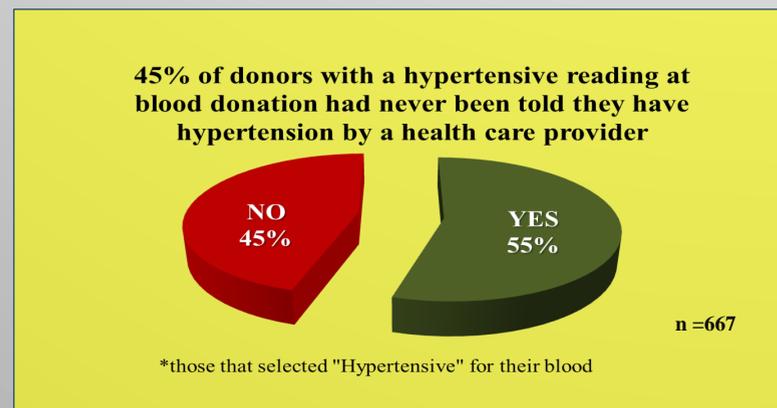
## Methods

- 1200 voluntary and anonymous 25-question surveys were distributed to presenting blood donors through the Red Cross in VT and NH and collected from 10/10/12 to 10/26/12.
- Deferred donors could still participate in the study
- Participants first answered twenty-two questions, then read an informational pamphlet about hypertension. Three additional questions were asked regarding the utility of this handout.
- Prehypertension/hypertension was defined as having either a diastolic or systolic blood pressure measurement falling into the respective range.
- Data was double-entered into Microsoft Excel 2010 and crosschecked for accuracy.
- Descriptive statistical analysis was done using SPSS.



## Conclusions

- Based on these findings, we conclude that there is an opportunity for increasing hypertension awareness at the time of blood donation.
- Within the highest risk group, those reporting a hypertensive blood pressure, almost half of them had not ever been told they had hypertension.
- In addition, the surveyed donors largely felt that the pamphlet of educational material about hypertension was valuable and were at least somewhat likely to use that information to make lifestyle changes.
- These findings suggest that increasing hypertension awareness as part of a blood donation screening is not only needed, but useful as a public health measure.



## Acknowledgements

Tom Delaney, Ph.D; ARC Collection Staff and Supervisors. Nancy Gostyla, RN, Kathleen Bovat, RN Kristy Corbett, RN & Marni Willms, RN; Volunteers of Bennington, White River Jct., Shelburne, Rochester, Montpelier, Troy Richford, Charlotte, Burlington & Williston VT. Communities. Colebrook, Canaan & Groveton NH Communities. Also, University of VT, Green Mountain College, Dartmouth College, Fletcher Allen, Alice Peck Day Hospitals and Green Mountain Coffee Roasters

## References

- Davey RJ. Vox sanguinis. 2006;91(3):206-13.
- Shaz BH, et al. Transfusion medicine reviews. 2012;26(1):58-67.
- Centers for Disease C, et al. MMWR Morbidity and mortality weekly report. 2011;60(4):103-8. Epub 2011/02/05.
- Centers for Disease C, et al. MMWR Morbidity and mortality weekly report. 2012;61:703-9. Epub 2012/09/07.
- Kessler DA, et al. Transfusion. Online Only Feb 10, 2012.
- Geringer W, et al. Transfusion. 2003;10A(43):[abstr].
- Geringer W, et al. Transfusion. 2004;44S:81A.