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Is Blood Donation an Opportunity for Hypertension Awareness?

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Introduction

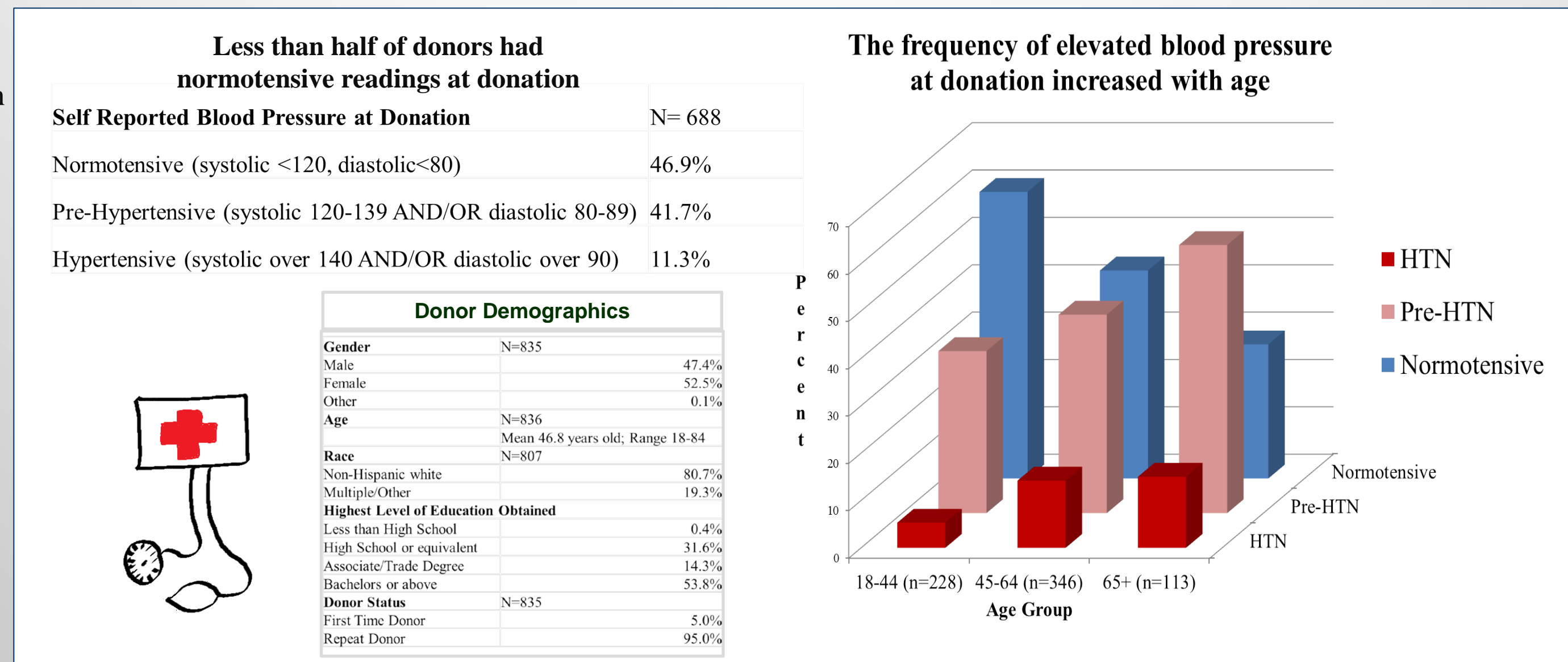
- Blood centers serve as a cornerstone of public health by providing potentially lifesaving blood products. Interactions with millions of potential donors provides these centers with a unique means of health education and screening opportunities^{1,2}.
- Hypertension screening is one potentially feasible 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.³. **14.1 million U.S. adults are unaware of their hypertension⁴**, 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^{5,6} to genetic diseases⁷.

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.

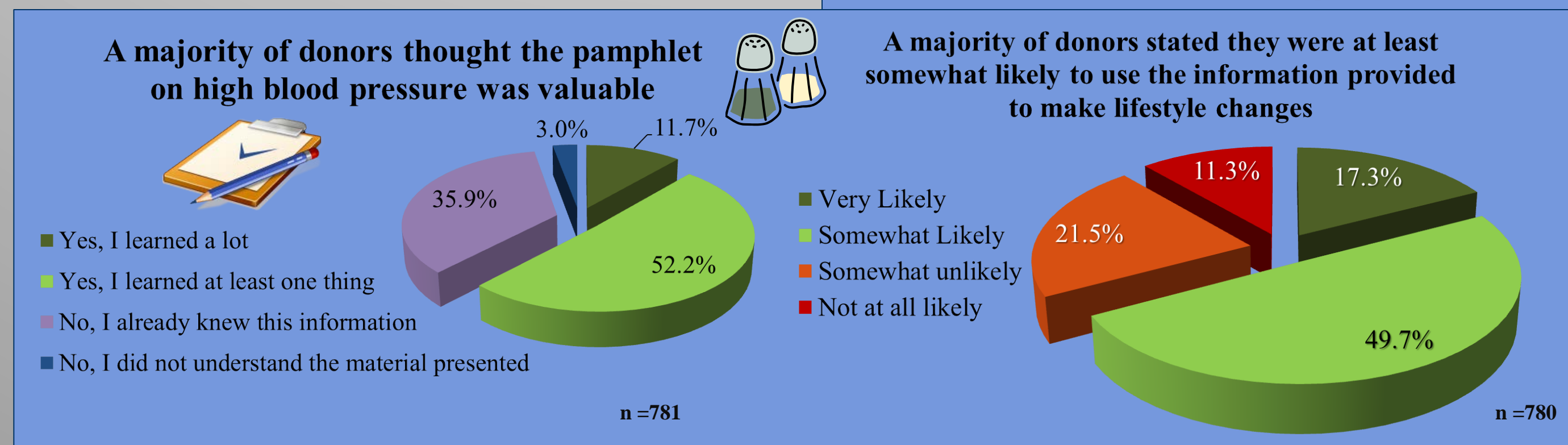
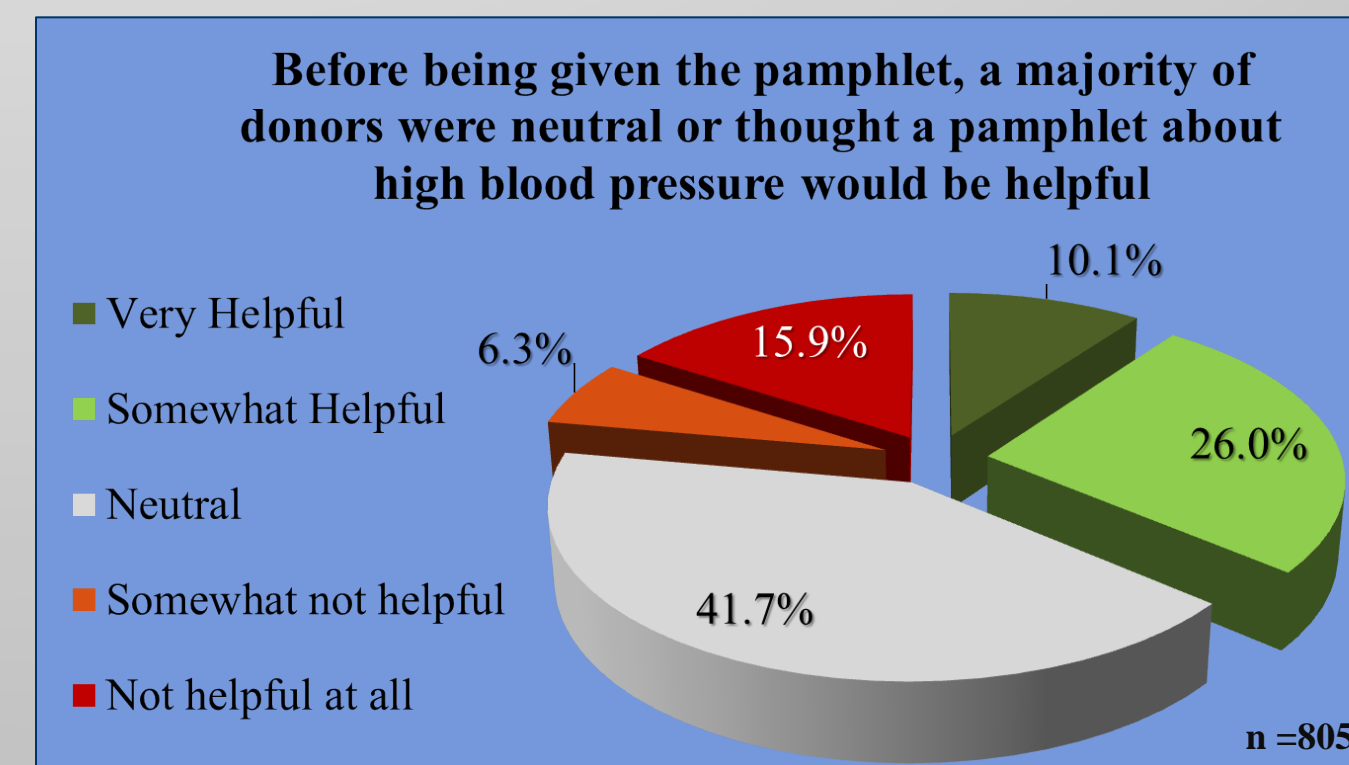
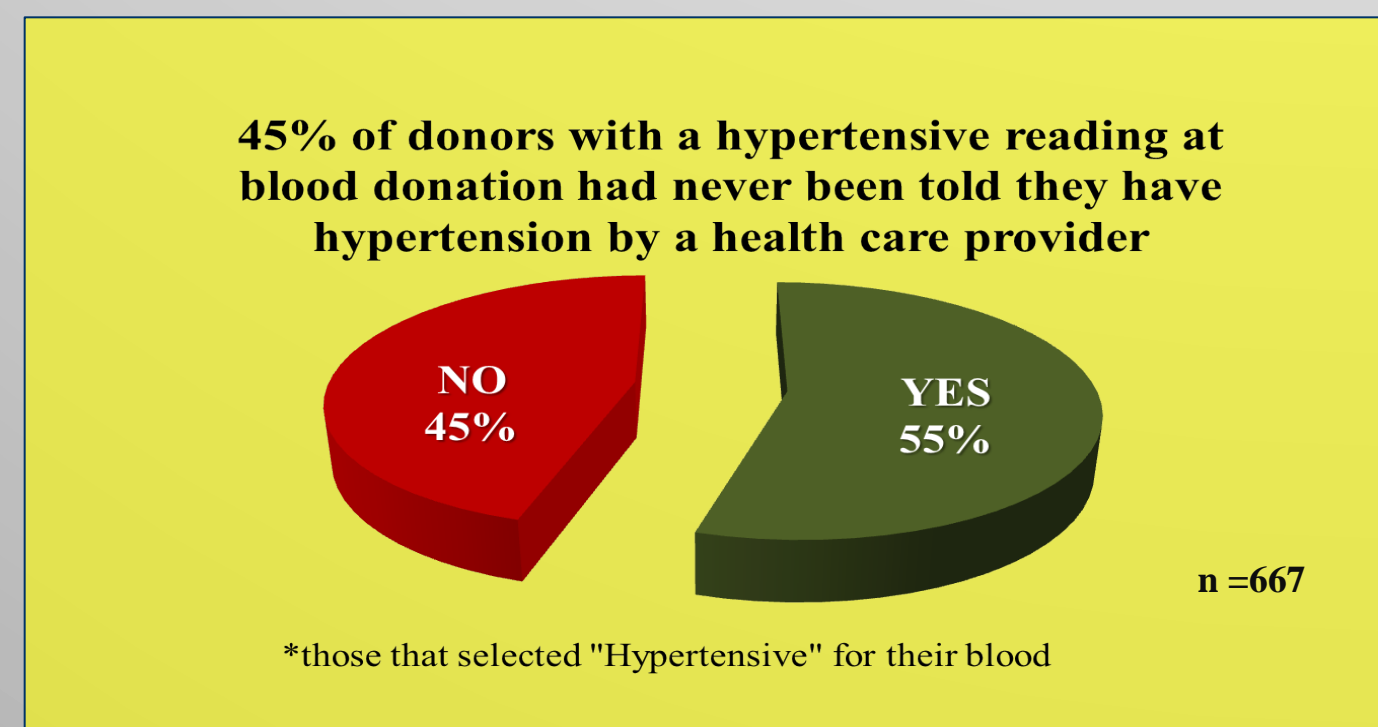
Methods

- 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.



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