## ARE SOCIAL DETERMINANTS OF TRUST DETERMINED BY OUR CHOICE OF TRUST MEASUREMENTS?

Jennifer C. Erves<sup>1</sup>, Victoria Villalta-Gil<sup>2</sup>, Alecia Fair<sup>3</sup>, Jacquelyn Favours<sup>2</sup>, Rowena Dolor<sup>4</sup>, Duane Smoot<sup>1</sup>, Consuelo H. Wilkins<sup>2</sup>

- 1. Department of Internal Medicine, Meharry Medical College, Nashville, TN, USA.
- 2. Meharry-Vanderbilt Alliance, Vanderbilt University Medical Center, Meharry Medical College, Nashville, TN, USA
- Vanderbilt Institute for Clinical Translational Research, Vanderbilt University, Nashville, TN, USA
- 4. Duke Clinical Research Institute, Duke University School of Medicine, Durham, NC

<u>Background:</u> Public participation in research, especially among underrepresented populations, is commonly impeded by lack of trust towards research. To assess trust towards research is an important evaluation, and few validated measures exist. It is unknown if different variables will predict the scores in different validated trust scales. We aimed at studying if choice of trust scale will shape different sociodemographic determinants of trust.

<u>Methods:</u> This cross-sectional study had a total of 3753 adults (565 African American (AAP)/3188 Caucasian (CP) adults randomly assigned to complete one of two surveys, which were identical other than including one of two scales assessing trust in medical research (1,2). The surveys also assessed willingness to participate in research and barriers to participation. Linear regression was used to determine predictors of trust among both trust measures.

Results: 1906 participants completed the HTS and 1847 completed the MTS. Including race as a covariate changed the model accuracy from 10.1% to 11.2% for the HTS, and from 14.8% to 21.3% for the MTS. Scores of the HTS were predicted (R=0.294,F=28.75\*\*\*) by barriers to research participation( $\beta$ =-0.067), race ( $\beta$ =0.38), education ( $\beta$ =-0.063), Health literacy (HL) ( $\beta$ =0.028) and health numeracy(HN) ( $\beta$ =0.010). Scores of the MTS were predicted (R=0.445, F=73.53\*\*\*) by race ( $\beta$ =0.110), HL( $\beta$ =0.51), TB( $\beta$ =-0.061), HN( $\beta$ =0.020) and age( $\beta$ =-0.002).

<u>Conclusion</u>: Despite differences in the relative importance of trust determinants, there was overlap between the scales: race, health literacy, health numeracy, and barriers to research participation were relevant predictors of trust measures. When designing interventions to improve trust, we should consider these sociodemographic factors.

## References

- 1. Hall MA, Camacho F, Lawlor JS, DePuy V, Sugarman J, Weinfurt K. Measuring Trust in Medical Researchers. Med Care. 2006;44(11):1048–53.
- 2. Mainous AG, Smith DW, Geesey ME, Tilley BC. Development of a Measure to Assess Patient Trust in Medical Researchers. Ann Fam Med. 2006 May 1;4(3):247–52.