

## The Influence of Education and Religion on the Perceived Benefit of Two Resources for Enrollment in Clinical Trials

Jerry Chang  
*College of New Jersey*

Anita Kurt PhD, RN  
*Lehigh Valley Health Network, Anita.Kurt@lvhn.org*

Follow this and additional works at: <https://scholarlyworks.lvhn.org/research-scholars-posters>

**Let us know how access to this document benefits you**

---

### Published In/Presented At

Chang, J., (2014, July, 25) *The Influence of Education and Religion on the Perceived Benefit of Two Resources for Enrollment in Clinical Trials*. Poster presented at LVHN Research Scholar Program Poster Session, Lehigh Valley Health Network, Allentown, PA.

This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact [LibraryServices@lvhn.org](mailto:LibraryServices@lvhn.org).



# The Influence of Education and Religion on the Perceived Benefit of Two Resources for Enrollment in Clinical Trials

Jerry Chang, Anita Kurt, Ph.D. Department of Emergency Medicine

Lehigh Valley Health Network, Allentown, Pennsylvania

## Abstract

This study presents the data gathered from surveying 187 individuals and compares the answers to two questions using religion and education as qualifiers. Individual patients were surveyed at four different Family Practice clinics and completed surveys were collected and data was analyzed. The mean, median, and mode were taken for two questions regarding possible available information sources during clinical trials from questions from the survey. Each question allowed survey takers to select from 0 to 4. Further statistical analysis was done to see possible differences in choice based on religion and level of education from questions in the survey. Religious choices were summarized into two possibilities as was level of education. Student t-tests were done to ascertain whether or not significant differences were present.

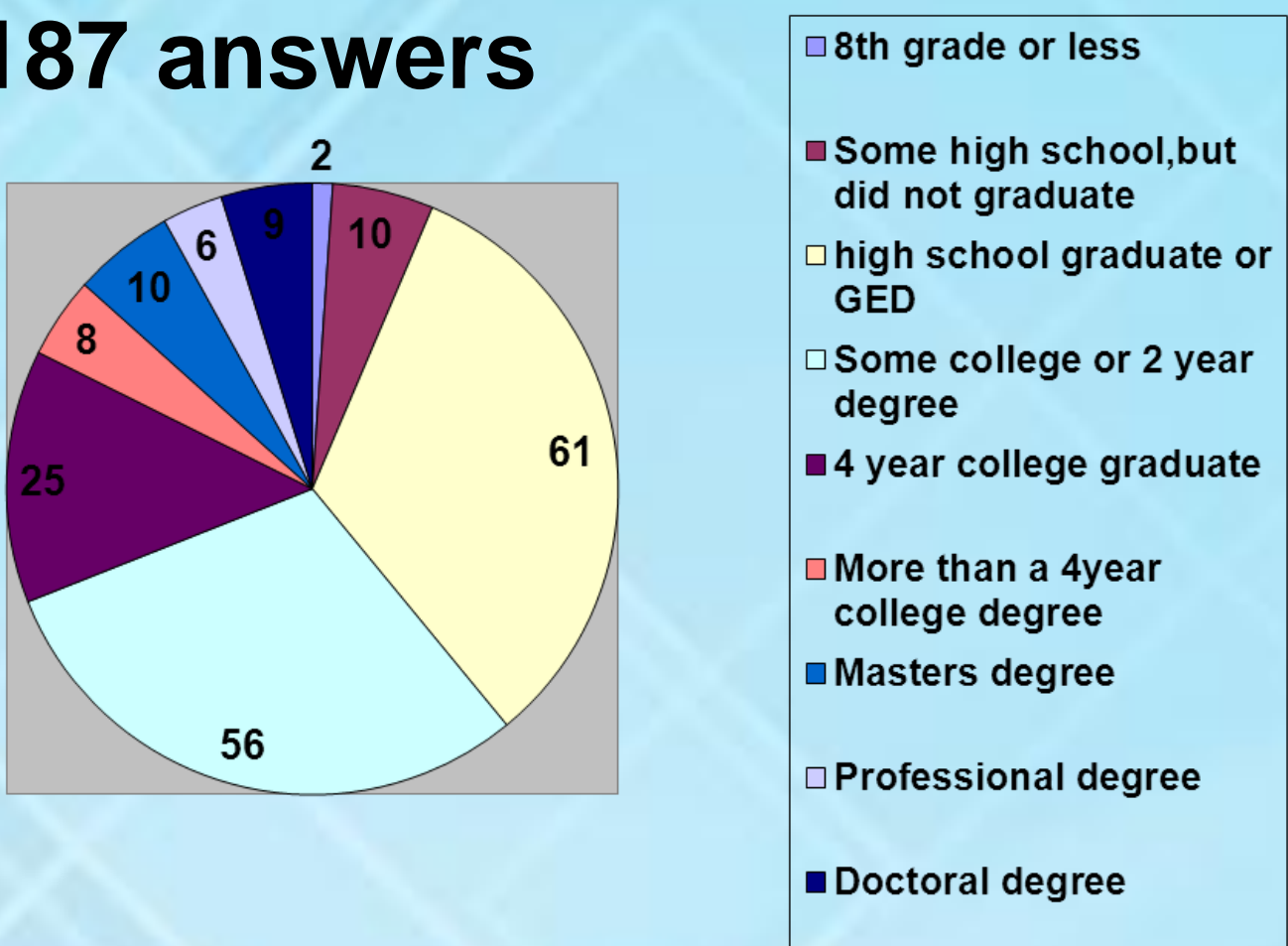
## Background

As innovations in medicine become more and more common, the practice of conducting clinical trials does as well. Woman as well as those of a minority race are often do not participate in clinical trials in correct numbers to accurately represent the population. These disparities result from influences they may stem from the patient or the provider. Often patients are afraid of trials and prefer not to take part. Doctors have been found to select preferentially for their trials as well. However, much less attention has been placed on other demographic factors such as education and religious belief compared to This is what the study incorporates in part, to understand what previously ignored factors may be truly important.

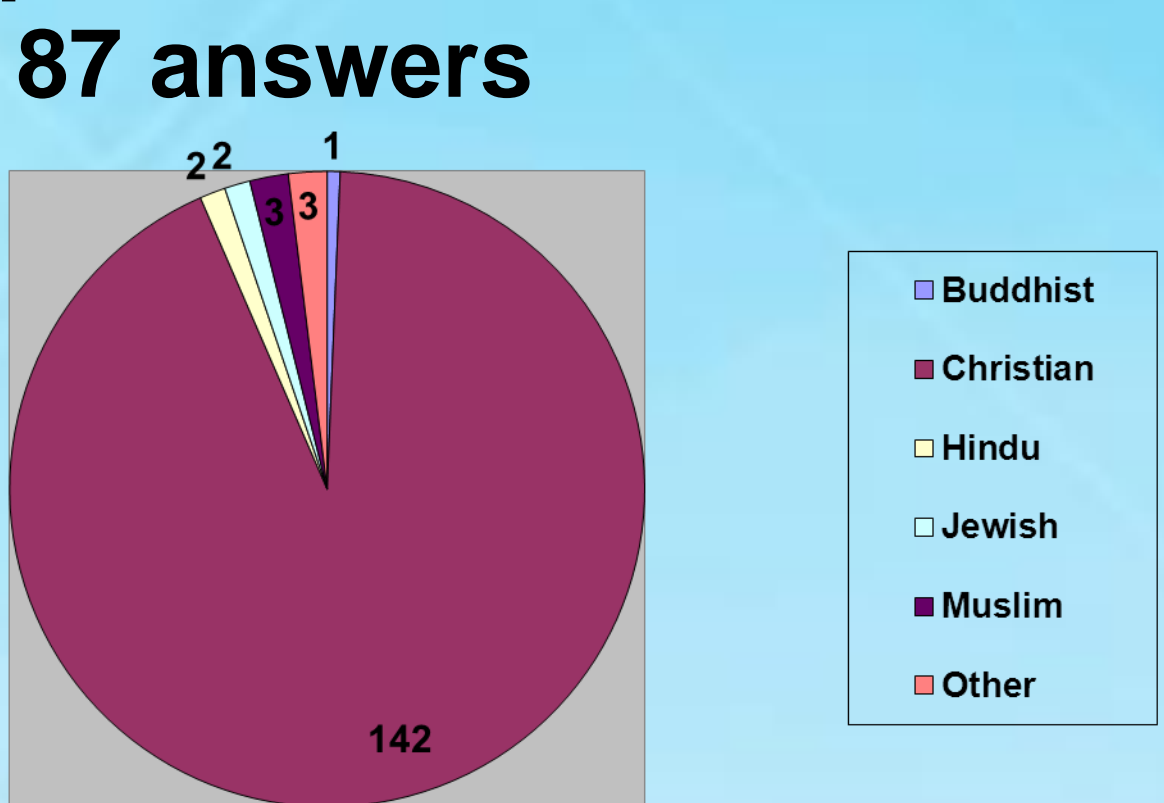
Having different forms of resources available affects whether or not some people are willing to enroll in a clinical trial. Possible resources include brochures, dvds, support groups, and translated materials. The study includes two other resources; the availability of a former clinical trial enrollee and whether or not there is a medical interpreter. From this, further steps are taken to utilize the previously mentioned demographics and compare their choices.

## Results

**Distribution of answers to question 3P from 187 answers**



**Distribution of answers to question 3S from 187 answers**



**Answers to question 2L3 separated by category**

Category	Education		Category	Religion	
	<2	≥2		<2	≥2
Did not reach four years of college	31	103	Christian	27	113
Had at least four years of college	6	47	Other Religion	10	37
Total	37	150	Total	37	150

**T-Tests for comparison of answers for two different subcategories of two categories for question 2L3**

Categories for comparison	T-Test p value	Significance	Other Religion	Categories for comparison	T-Test p value	Significance
Less than 4 years of college education	0.185	No significant difference		Christian	0.533	No significant difference
Had at least four years of college						

**Answers to question 2L6 separated by category**

Category	Education		Category	Religion	
	<2	≥2		<2	≥2
Did not reach four years of college	50	82	Christian	42	97
Had at least four years of college	18	37	Other Religion	16	22
Total	68	119	Total	37	150

**T-Tests for comparison of answers for two different subcategories of two categories for question 2L6.**

Categories for comparison	T-Test p value	Significance	Other Religion	Categories for comparison	T-Test p value	Significance
Less than 4 years of college education	0.746	No significant difference		Christian	0.599	No significant difference
Had at least four years of college						

## Methods

Surveys were handed out by summer research scholars at 4 locations, Bethlehem Family Medicine, Community Health and Wellness Center, Lehigh Valley Family Center, and Lehigh Family Medicine Associates. The surveys were available in both English and Spanish. Chinese surveys in both traditional and simplified were also created but none were yet collected. Patients 18 years of age and older were asked to participate in this survey that also served as consent. In total, 198 surveys were collected from the four locations. Omitting surveys with too multiple incomplete portions, 187 were used for analysis. The mean, median, and mode were found for the questions regarding contact with a former participant and availability of a medical interpreter. The data for the questions was then further analyzed based on answers to the questions regarding level of education and religious beliefs. T-tests were done after categorizing the education choices into reaching less than 4 years of college and reaching 4 or more years of college.

## Conclusion

The results show that on average people feel that having the chance to meet a person who had taken part in a clinical trial would be more influential in helping them decide to take part in a clinical trial when compared with having the aid of a medical interpreter. Furthermore, the T-Tests show that although they are considered factors in clinical trial enrollment, religious beliefs and education have no significant differences when comparing the answers found by separating each category into two different groups.

While this data seems to contradict the idea that these two factors are in fact influential to choosing whether or not a person will enroll, it must be taken into consideration that these two questions in general do not rely on religion or education. The acceptance or desire for information is not affected by what level your education is. While this particular sample did not show the influence of education level and religion, the willingness to enroll is very often affected.

A limitation to this study can be seen in the fact that only four clinics were selected to participate and were located in close vicinity to each other. The limited population may have skewed the results. as less opportunity was available for trends to become significant. Another limitation is that not all surveys were answered completely, further changing the results. Future research could add an additional question such as whether or not having a contract explicitly stating the processes that will occur will help participants decide to enroll. The contract would serve to hold the doctors to standards and allay issues that the patient may have towards possible deviations from what they had signed up for.

## REFERENCES

- Butler, K. L. (2007). African Americans' participation in clinical research: importance, barriers, and solutions. *The American Journal of Surgery*, 32-39.
- Coakley, M., Fadiran, E.O., Parrish, L.J., Griffith, R. A., Weiss, E., & Carter, C. (2012). Dialogues on diversifying clinical trials: Successful strategies for engaging women and minorities in clinical trial. *Journal of Women's Health*, 21 (2), 713-716
- Corbie-Smith, G., Thomas, S. B., Williams, M. V., & Woody-Ayers, S. (1999). Attitudes and beliefs of african americans toward participation in medical research. *Journal of General Internal Medicine*, 14(9), 537-546.
- Giuliano, A., Mokuau, N., Hughes, C., Tortolero-Luna, G., Risendal, B., Ho, R., & McDaskill-Stevens, W. (2000). Participation of minorities in cancer research: the influence of structural, and linguistic factors. *Annals of Epidemiology*, 10(8 Suppl), S22-S34
- Noah, B.A. (2003). The participation of underrepresented minorities in clinical research. *American Journal of Law & Medicine*, 29:221-245
- Murthy, V.H., Krumholz, H.M. & Gross, C.P. (2004) Participation in cancer clinical trials: Race-, sex-, and age-based disparities. *JAMA*, 291 (22), 2720-2726

© 2014 Lehigh Valley Health Network

A PASSION FOR BETTER MEDICINE.™



610-402-CARE LVHN.org