

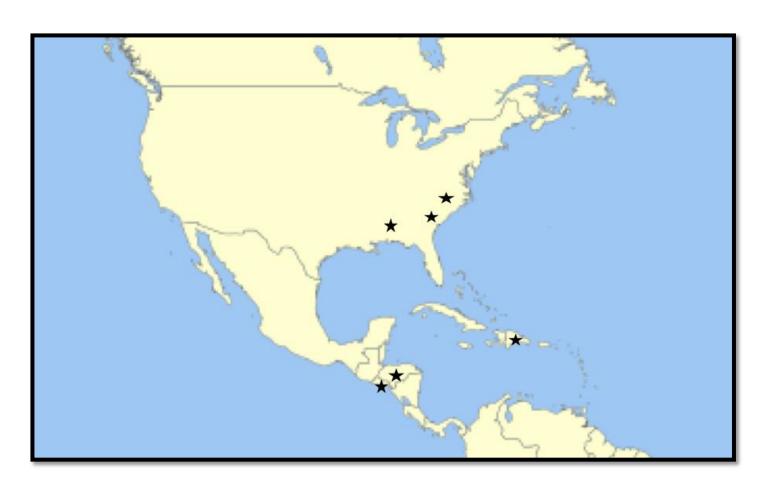
# **Changes in Self-Reported Competencies in Medical Students After Participating in a Global Health Seminar**

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# ABSTRACT

VCOM provides a Global Health Seminar Course that implements a "constructivist" cognitive approach in providing students with experience in cultural competency. This elective utilizes a broad curriculum of case-studies, forum discussions, interviews with medical school faculty, and interactive video conferences across medical schools in the U.S., Caribbean, and Central-America.

The research hypothesis proposed in this study is that participation in the 14week Global Seminar for Health and the Environment will significantly change  $(\alpha=0.05)$  the self-reported general and cultural competency scores among course participants at the campuses at VCOM (Virginia, Alabama, and Carolinas), UEES in El Salvador, INTEC in Dominican Republic, and UNITEC in Honduras. Positive results from the study would support our model for global communication and education techniques leading to understanding across cultures for disease prevention, diagnosis, treatment and disaster response along with other culturally sensitive medical education.





## BACKGROUND

Cultural competence is imperative and necessary among an ever-changing and diverse world. Students in medicine must be culturally competent in order to adequately meet the essential needs of all patients, regardless of ethnic, social, or economic backgrounds. Additionally, cultural competencies are a defined benchmark set by the American Association of Colleges of Osteopathic Medicine (AACOM) to be integrated into the osteopathic medical curriculum. VCOM and its affiliates provide a Global Seminar for Health and the Environment program in order to better prepare students for situations they may encounter in the medical field, both nationally and internationally.

# OBJECTIVES

Our main objective is to determine whether there was a statistically significant difference in general and AACOM cultural competencies prior to and following participating in a Global Health Seminar. We will compare selfreported competency ratings in each category through a pre-course and postcourse self-assessment in order to determine changes in general and cultural competencies associated with the course.

# METHODS

The study population included 85 voluntary participants from the students enrolled in the 2019 Global Seminar course from six medical schools in the U.S. and abroad. Inclusion requirements were: 1) English-speaking 2) selfselected application 3) approved by the school Dean or committee and 4) voluntary participation in the research

The data was collected using a 61-item Qualtrics self-assessment survey separated in two sections, General Background Information and AACOM General and Cultural Competencies, using a 10-point Likert scale (1=None, 10=Very High). Instrument validity was established by a panel of experts.

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IX.	Cultural Competencies
1.	Demonstrate an understanding of the scope of culture and the elements that form and define it
2.	Recognize personal and professional tendencies toward bias and stereotyping, and work to counter them.
3.	Understand the public health implications of cultural competence in health care.
4.	Demonstrate familiarity with basic religious and cultural beliefs that affect patients' understanding of the etiology of their illness and/or the efficacy of their treatment.
5.	Assess other health care resources and methods patients use (or used) either in addition to, or instead of their physician's recommended treatment (e.g., home remedies, traditional healers).
6.	Assist the health care team in developing a mutually acceptable, culturally responsive plan for patients.
7.	Demonstrate effective communication that takes into consideration the ability to elicit another's perspective, present concerns from another's perspective, refrain from behaviors that cause others to become defensive.
8.	Identify and attempt recovery from mistakes in communication.
9.	Use interpreters appropriately and effectively.
10.	Use the cultural profile and history in the treatment of individual patients and record them appropriately in the medical record.
11.	Use the cultural profile and history with individual patients to assess health care needs in the community.
	community.

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Test	Pre-Test (N=82)	Post-Test (N=81)	P Value (<0.05)	Notes
One Sample T-Test with Test Value (Threshold)-General Competencies Pre- and Post-Test	Mean 6.52	Mean 8.32	P <0.001	Signif differ betwo post a comp mean
One Sample T-Test with Test Value (Threshold)-Cultural Competencies Pre- and Post-Test	Mean 6.40	Mean 8.33	P <0.001	Signif differ betwo post o comp mean

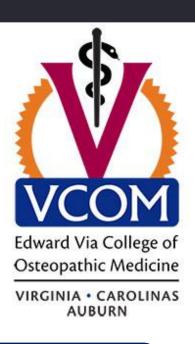
The pre-course survey had 82 respondents with mean reported "general" and "cultural" competency of 6.5 and 6.4, respectively. Following the Global Seminar course, the post-course survey was administered with 81 respondents reporting a mean "general" competency of 8.3 and a mean "cultural" competency of 8.3. A two samples t-test was performed on the pretest and posttest for "general" and "cultural" competencies, leading to both p-values < 0.001.

## CONCLUSIONS

These results suggest that participation in the VCOM Global Seminar course significantly changes self-reported "general" and "cultural" competencies across the U.S. and abroad sites. One limitation to our study is that because the surveys were reported anonymously, we are unable to match individual general or cultural competency changes. Collectively, the self-reported means improved after participation in the course leading to a successful study. Thus, the hypothesis is accepted. This also implies the innovative experimental education methodology is viable for transnational participation.

# ACKNOWLEDGEMENTS

Lebrón, Ana, MD; Beltre, Alba, MD; Estrada, Gabriela, MD



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# SAMPLE POPULATION AND SURVEY DESIGN

Use of Evidence based practice to solve problems without diagnostics

Prior to participatio	n in Globa	al Sem	ninar (0	=Non	e to 10	)=Ve
	1	2	3	4	5	6
Indicate Proficiency	0	0	0	0	0	C

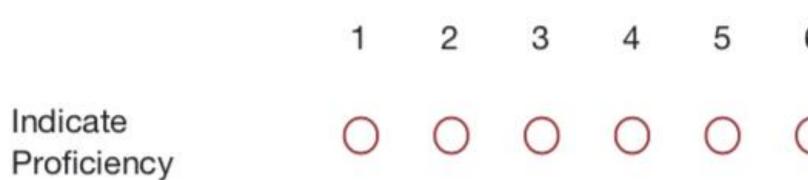
Solve problems professionally across cultures and health fields

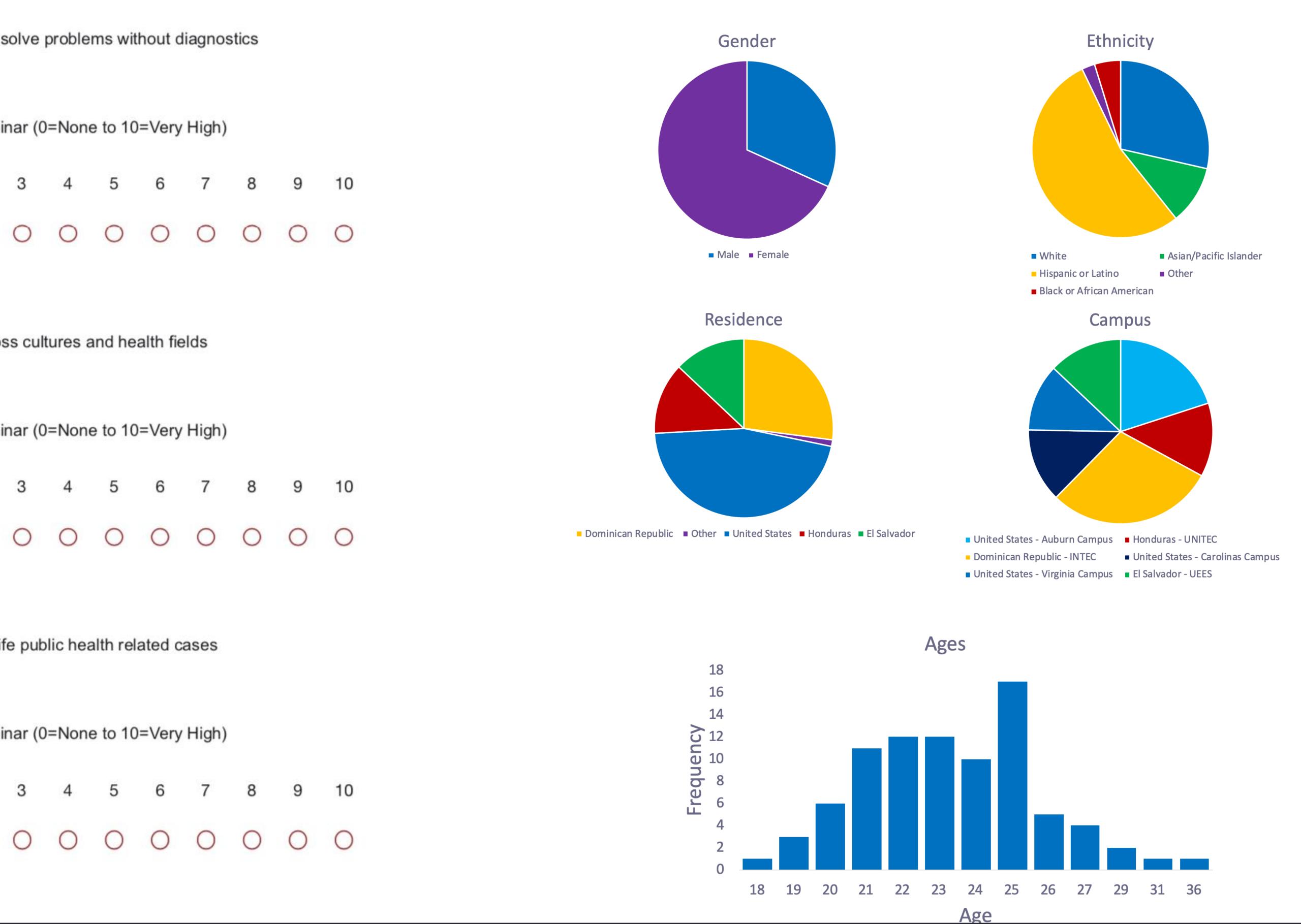
Prior to participation in Global Seminar (0=None to 10=Very High)

	1	2	3	4	5	(
Indicate Proficiency	0	0	0	0	0	(

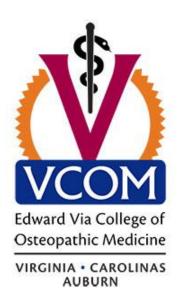
Apply quality improvement to real life public health related cases

Prior to participation in Global Seminar (0=None to 10=Very High)











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