Author’s response to reviews

Title: Area Health Education Center (AHEC) Programs for Rural and Underrepresented Minority Students in the Alabama Black Belt

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Author’s response to reviews:

The manuscript aimed to evaluate the implementation of health education programs for high school students. There are some questions needed to be clarified by the authors.

1. Please shorten the title.

The title has been shortened:

Area Health Education Center Programs for Rural and Underrepresented Minority Students in the Alabama Black Belt

2. Please clarify the significant of the present program.

This has been added to the background/introduction section:

This study explores the usefulness of various West Central Alabama AHEC (WCAAHEC) programs. Objectives of this study include: 1) evaluating the effectiveness of WCAAHEC health professional enrichment programs for rural and underrepresented minority students; 2) Establishing a pathway for future WCCAHEC program development for cohorts of rural and underserved minority students; 3) Assessing the importance of health professional program implementation to effectively care for patient populations residing in the Alabama Black Belt.

3. Please summary your description in the section of "Data Collection"
Data Collection

Health outcome factors in Alabama and the United States were compared to evaluate differences that exist between the state and nation (Table 1) [6,12]. Categories include primary care providers (PCP) per 100,000 persons, geriatric (>65 years of age) population, median household income, uninsured, Medicare beneficiaries, Medicaid beneficiaries, poverty, infant mortality, and causes of mortality. County rankings for health outcomes and factors were numbered based on severity (Table 2) [13]. Health outcomes represented the healthiness associated within each county, and were measured using how long people live and how healthy people feel while alive [13]. Health factor rankings were used to assess the health of a county and were based on measures of health behaviors, clinical care, social and economic, and physical environment factors [13].

Sociodemographic information from high school students was aggregated using a web-based database called iAHEC. Program characteristics necessary for successful engagement in a variety of enrichment activities were qualitatively and quantitatively evaluated for effectiveness.

The participants in the school-based enrichment program completed the pre-test and post-test via Survey Monkey to measure knowledge acquisition over the course of the program; responses were gathered using the same web-based program. The Survey Monkey tutorial program assessment included 25 true and false questions designed to test current knowledge about various health care professionals. Questions included: A medical social worker creates new kinds of medicines; All doctors have to work with blood; a nursing assistant is licensed to perform surgery and prescribe medication; nutritionists help people manage chronic disease like diabetes; A phlebotomist works on people’s eyes; A nutritionist can help you develop a weight loss program; pharmacists only work in drugstores; A pharmacist is responsible for medications safety; Health administration incorporates business and management skills; most dentists have at least eight years of education after high school; The study of diet (what you eat) is a science; In addition to classes in physics, biology, mathematics, and chemistry, premedical students should also take English; To become a licensed Physician, requires four years of medical school, and a minimum of two to three years of training after graduating from medical school in a residency program; Nurse Practitioners are registered nurses with four year degrees and a graduate or certificate nurse practitioners program; Public Health Epidemiologists work to figure out what is causing a particular disease (such as contaminated food or water); Community Health Workers (CHWs) work in laboratories; Some people can become certified Nursing Assistants while still in high school; A Family Physician is a doctor who is trained to take care of people of all ages, including delivering babies; A Pediatrician is a medical doctor who specialized in taking care of skin; A clinical position in a hospital or clinic is one where a person works directly with patients; The only people who work in hospitals are doctors and nurses; Medical Laboratory Technicians help doctors figure out what is wrong with patients; Registered Dental Hygienist can take X-Rays; A biostatistician collects and prepares blood for analysis.
Comments on the Title (Topic): The title is too long. Could it be shortened? There are words or phrases repeated like West Alabama. Could it be removed? Also you can cancel the last words (using qualitative and Quantitative Methods) and you can explain within the methods section of the manuscript. Rather it is better to mention the country (USA) to indicate the specific country in your Topic. Please see above. The title has been shortened and modified.

Keywords: you used too many (more than the recommended number of words for keywords (which is not more than 8))

Keywords have been reduced:

Keywords: Area Health Education Center; West Central Alabama; Alabama Black Belt; rural; minority; underserved;

Abstracts:

In methods section; it is good to mention the number of participants (How many students were participated in the enrichment activities) because abstract should be standalone.

Please note, I listed the number of survey responses that were received for assessment. The total number of participants per activity has also been listed.

Methods: Students participated in enrichment activities related to prospective health careers that included: successful college preparedness, knowledge about health careers, and the types of primary care health professions that are needed in underserved Alabama communities. The curriculum studied 593 (ACT preparation: n=172, AHEC 101: n=56, FAFSA: n=109, Health Career Exploration: n=159, College Career Readiness: n=67, Dixie Scholars NERD: n=30) baseline measures for the programs to evaluate effectiveness when rated by participants both quantitatively and qualitatively.

Background: Line number 37 (don`t start a line (statement) with number/percent/abbreviation. Please would you like to make it Sixty five percent? For me it is good to change Background to Introduction. What do you think/feel about this? Also your background (Could it be Introduction?) is not indicated the objective(s) of the study (Evaluation) and not linked with the significance of the study (Why Evaluation?)

Archives of Public Health uses the heading “Background”

This regional population includes 65% of individuals who identify as African American. Many within this population fall below the federal poverty level, which limits access to necessary resources that have the potential to improve literacy rates and health outcomes.

The following has been added to the end of the background/introduction section:
This study explores the usefulness of various West Central Alabama AHEC (WCAAHEC) programs. Objectives of this study include: 1) evaluating the effectiveness of WCAAHEC health professional enrichment programs for rural and underrepresented minority students; 2) Establishing a pathway for future WCCAHEC program development for cohorts of rural and underserved minority students; 3) Assessing the importance of health professional program implementation to effectively care for patient populations residing in the Alabama Black Belt.

Comments on the Methods section; - It is better to express the time period (from when (month) to which month it covered; like from May 2013 to June 2014). Or during the year length from January 2013 to November 2014 (if it conducted throughout the year).

September 1st, 2013 – August 31st, 2014 has been added

The statement of Line 21 under the first sub-section of the methods section Should be changed to make it more clear for the reader; like it can be changed to "----- those available participants to partake the various enrichment programs; participants from an undeserved county in the 13-county service area; and interested participants in pursuing health career in a rural or undeserved community."

Please see changes below:

The inclusion criteria for each participant in the program included the following: participants available to partake the various enrichment programs over the required time period; participants from a medically underserved county in the 13-county service area; and participants interested in pursuing a health career in a rural or undeserved community.

- The last words of the statement in Line 28 ".... to determine interest in program participation." is not clear. would you like to clarify? For me it is good if you say "......... to determine interested students..."; unless it is not clear.

That sentence has been removed, as it is not relevant to the program evaluations.

who (what) is to be determined? - line 2 "... most sessions..."; How many sessions (or what percent of the planned sessions)? -Context, Participants, and Recruitment;

That sentence has been removed, as it is not relevant to the program evaluations.

Please make it clear for participants: who are the participants? how many participants partake the program? - Under Data collection: How many students attended the pilot programs?

The following paragraph includes more information about the participants and the number of participants per session.

Demographic data reported by each high school participant yielded a total 77.9% minority students and 61.5% disadvantaged students. A total of 593 (ACT preparation: n=172, AHEC
101: n=56, FAFSA: n=109, Health career exploration: n=159, College career readiness: n =67, Dixie Scholars NERD: n=30) baseline program satisfaction surveys responses were assessed. Table 3 measured 95% confidence interval ranges and statistical significance for program content and presenter’s delivery ratings based on student responses.

consider revising the paragraphs on page 9 because it is too long and difficult for the reader to comprehend. I mean, since the paragraph it to large and it take the whole page (boring to read it), consider breakdown into smaller paragraphs.

The following heading have been added:

Health Outcome Factors

Program Evaluation

Survey Monkey Health Career Pre-test and Post-test