Author's response to reviews

Title: Role of Community Health Outreach Program "Living for Health" (R) in Improving Access to Federally Qualified Health Centers in Miami-Dade County, Florida: A Cross-sectional Study

Authors:

Aws S Almufleh (aws almufleh@ gmail mcgill.ca)
Tori Gabriel (tori@florida heart org)
Laura Tokayer (laurat@florida heart org)
Mary Comerford (mcomer2424@yahoo.com)
Ahmed Alaqqeel (ahmedalageel@hotmail.com)
Paul Kurlansky (doctorwu18@aol.com)

Version: 3 Date: 15 March 2015

Author's response to reviews: see over
Title: Role of Community Health Outreach Program “Living for Health”® in Improving Access to Federally Qualified Health Centers in Miami-Dade County, Florida: A Cross-sectional Study
Version: 2 Date: 11 March 2015
Reviewer: Rahbel Rahman
Reviewer's report:
Decision: This is a novel article that has great value in the literature on how community outreach centers can improve access to FQHCs. However, the article lacks depth in the background section and the conclusion. Recommendations are stated below. Provided revisions are to be made, this article should be published.
Background Section:
Strength:
• A succinct explanation for why FQHCs need to be utilized.
• The goal of the paper has been clearly stipulated.
• Recommendations:
  • A few clarifications are required:
  • Greater distinction should be made between FQHCs and community health clinics/centers/programs.
  • We have clarified that in the following statement “Federally Qualified Health Centers (FQHCs) which are Community Health Clinics that have been approved for the main purpose of enhancing the provision of primary care and preventative services in underserved communities with charges for services on a sliding-scale basis”
  • Line 61 when referring to “effective physician care”, the authors should stipulate why physician care is necessary as opposed to allied health professionals and at what stage. Who does the screening in the community and who refers to the health centers. This seems to be unclear in the background section.
  • An effective comprehensive healthcare is needed, not just physician care. We have therefore edited the sentence as the following “Essential to the prevention of cardiovascular morbidity and mortality is not only the identification of risk, but also the effective provision of healthcare to those with known risk factors”.
  • Regarding who makes the referral decision, it was clarified in the following sentence “L4H program educators, who have received training on recognizing abnormal health parameters, decide on whether a participant needs referral and they make that decision. Physicians and community nurses provide this training to educators prior to starting the program”.
  • Is there a reason why cardiovascular morbidity and mortality is discussed as a chronic condition? Statistics justifying that it is a chronic condition in the United States is lacking
  • We have added statistics to show how cardiovascular disease is a very significant public health problem in the United States affecting 17.6 Millions and responsible for about one third of all deaths. The new sentence reads “Cardiovascular disease remains the leading cause of death among both men
and women in the United States affecting 17.6 millions of the population in 2010 and responsible for 787,650 (31.9%) of 2,468,435 deaths. It is also responsible for significant morbidity, with an estimated 620,000 Americans having a new heart about 295,000 having a recurrent attack every year."

- Line 96-99: While discussing “Living for Health” it is important to discuss what population it serves. The study has an inclusion criterion but does the program do too? Why is the program only focused on cardiovascular risk factors?

- We clarified this in the following sentence: ““Living for Health®” (L4H), a community health outreach program, organizes free cardiovascular risk factors screening events to adults (age ≥ 18) in zip codes in Miami-Dade County which were designated by the federal government as medically underserved areas” The program is focused on cardiovascular risk because it is organized by Florida Heart Research Institute which is an independent not-for-profit organization with the mission to stop heart disease through research, education and prevention.

- Methods/Subjects and Settings/ Data Collection/ Study Variables/ Data Analysis:
  A few clarifications are required:
  - Why is a cross-sectional survey more apt rather than a longitudinal study?
  - We selected a cross-sectional study design because most of our subjects had only participated in one living for health screening event. This can build a strong basis for a future longitudinal study analyzing how the factors that we studied affect subjects matching to FQHC and possibly able to link it to longterm outcomes (e.g. number of ER visits, blood pressure, cholesterol and glucose control and mortality).

- In line 114, what “events” are the authors referring to?
  - We refer to the cardiovascular screening events organized by L4H campaign. After clarification, the new sentence reads “The cardiovascular screening events take place in areas of common gathering within the identified zip codes with utilization of local media and cooperation with community leaders to advertise those events.”

- In line 121, who makes the referrals – a physician, community nurses?
  - “L4H program educators, who have received training on recognizing abnormal health parameters, decide on whether a participant needs referral and they make that decision. Physicians and community nurses provide this training to educators prior to starting the program”.

- Subjects and Settings are well-articulated. Although line 137 seems incomplete.
• Line 137 was clarified as the following “participants who require referral but do not have a Primary Care Provider and consented to be referred to FQHCs”.

• Data Collection: Why is match rate important for this study? How was the confidentiality of patient information maintained given that the FQHCs had an agreement with FHRI for sharing information? Who was collecting the data?

• We indicated in a new sentence that “The importance of using the match rate is to provide an objective quantitative measure for FQHC access and utilization”.

• The data was collected by L4H educators, submitted to the Florida Heart Research Organization who coded and confidentially saved them without appearance of names or identifying variables to any of research team members. Confidentiality was maintained unless there was a need to share the information with FQHCs. Subjects were requested a permission for data sharing, and data was shared only if they consented for that. We clarified that in the following sentence:

• “Participants who consented to sharing their information with FQHC did so by signing a form during the screening events. The database was stored at the FHRI office with only relevant and clinically important data being shared with concerned FQHC”.

• Study variables should be in a table format articulating the type of variable – nominal, ordinal.

• We updated the current tables to include types of variables

• Line 154 should state that the authors employed pairwise deletion.

• We added the following sentence “missing data were excluded with pairwise deletion method.”

• Data Analysis: What version of SPSS was used? What univariate analyses were performed – frequencies, percentages, etc? What was the purpose of running Chi-Square tests and logistic regressions? Please provide an explanation. What was the significance level?

• We elaborated that we used SPSS 16 version. We categorized our continuous variables then performed univariate analysis including frequencies and percentages as shown in the table at the end of this letter. We did not show this table because we are concerned that it is a repetition of table 1 (in the main manuscript) which includes the frequencies and percentages after splitting the dependent variable into matched or unmatched. The purpose of using tests of significance (Chi-square and logistic regression) was to identify variables that significantly affected the probability of matching to FQHCs. Details were discussed in the second and fifth paragraphs of discussion. Significant variables on bivariate testing were fitted into a logistic regression model to determine which retained their
significance (table 3). Variables which attained a P-value < .05 were considered significant.

Table

- Results: Strengths:
  - The tables were well articulated.

No changes to be made

Discussion/Conclusion:

A few clarifications are required:

- Line 224 speaks to the matched rate being 11%? Please provide an explanation as to why the match rate is disturbing? What does this tell the reader about the outreach programs effectiveness?

- In our opinion, a matched rate of 11% is disturbing because it indicates that this low rate was attained despite the efforts of L4H educators to connect patients who had no primary care physician to the FQHCs and despite FHRI’s efforts to assist clinics with recruitment by providing a referral log and educating the patients about the importance of having steady medical follow-up. We are mindful that there may be an interaction between the effectiveness of our program and FQHC utilization, which is hard to isolate with the available statistical methods.

- Line 234-236 is a generalized statement and should be avoided unless references are supported.

- We have deleted the statement

- Other limitations should be considered such as study design, etc?

- We have included study design as a limitation in the new manuscript. We also included this statement “lack of long-term follow-up precluded linking matching to FQHCs to better control of chronic illnesses and improved survival”

- Line 265 states that cardiovascular diseases are a killer of men and women without providing statistics in the introduction.

- Statistics were provided in the introduction.

- Line 267: How is the program novel? With a matched rate of 11% is it novel?

- We have removed this sentence

- Line 273-275: Implications to research, practice and policy need to be further elaborated.

- We have re-phrased the previous conclusion to include the following sentence “It is hoped that community outreach screening programs like L4H can contribute to the solution by providing wellness visits (health screening and risk factors modification education) and encouraging many uninsured patients to seek care in FQHCs”.
• It elaborates the potential roles that community outreach programs can play in screening, education and if needed, directing uninsured and underinsured to seek care in FQHCs. Policies to enhance funding for both FQHCs and programs they support will be a cornerstone in the solution. We also included a sentence on future research "More studies are needed to assess the FQHCs utilization in multiple counties over the United States and link that to long-term health outcomes."

Reviewer's report

Title: Role of Community Health Outreach Program "Living for Health"(R) in Improving Access to Federally Qualified Health Centers in Miami-Dade County, Florida: A Cross-sectional Study

Version: 1 Date: 22 January 2015
Reviewer: Hector Balcazar

Reviewer's report:

This is an interesting and important study. Few comments:
Can the authors provide a figure that identifies all of the different steps that were used to capture all the data? For example starting from 9452 then dividing it into 5571 and 3882 participants for abnormal or not, followed by 2787 and 2784 data for having or not personal physician, then 889 and 1889 for new referrals and existing FQHC patients, and finally 201 and 1688 for match and non-matched samples. That would clarify the sequence of steps better.
Figure 1 was provided to illustrate this point.

There is no definition of what FHRI stands for.
FHRI is Florida Heart Research Institute. We have included the explanation both in the text, and in the abbreviations section.

The matching rate can be clarified better. Who did the matching? How exactly was it done and what variables were used and how? The window of matching was between 2008-2012 and what was the time elapsed between screenings and referrals? Can the low matching be a result of underestimating a match?
In a new sentence we clarified the first question “L4H program educators, who have received training on recognizing abnormal health parameters, decide on whether a participant needs referral and they make that decision. Physicians and community nurses provide this training to educators prior to starting the program”.
Exact variables that were used were clarified in the following sentence “Participants with an abnormal clinical or laboratory value in blood glucose, cholesterol or blood pressure namely systolic blood pressure > 140 mmHg, diastolic blood pressure > 90 mmHg, total cholesterol level > 240 mg/dL, TC / HDL ratio ≥ 4.1 or glucose level > 200 mg/dL are referred to their primary care doctor, if unavailable to FQHCs”.
Participants who were found to satisfy the above criteria were immediately referred to FQHC, if they did not have a primary doctor. Follow-up with FQHCs that received referrals continued for at least 2 years after patient’s referral. We therefore do not think that the match rate is underestimated.
I was interested to know more about the sample of 898 participants that were existing patients of FQHC. Any differences from this group as compared to the matching group of 201 participants? This is certainly a valuable area for future research. However, we have decided that studying existing patients of FQHCs was beyond the scope of this research paper.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:** I have no conflicts of interest.

Univariate analysis of the relationship between baseline demographics, last physical exam, and insurance characteristic and matching

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<th>Demographic Variable</th>
<th>Distribution</th>
<th>Frequency</th>
<th>Percentage %</th>
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<td>-Age</td>
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<td>25-&lt; 65 years</td>
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<td>Excellent or very good health</td>
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