A Community Health Fair Survey Addressing Child Care

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INTRODUCTION

As an interprofessional team focused on advocating preventative health in the Charleston community, we decided to continue an already formed partnership with the Lowcountry Pregnancy Center and set up a second annual health fair for the community that it serves[1]. The Lowcountry Pregnancy Center is a non-profit organization that provides pregnancy-related and sexual health resources for families in need in the Charleston area. The center expressed a need for health education and pregnancy-related resources in the areas of physical activity, infant positioning, family law, child discipline, physician contact, dental health, lactation, and drug addiction.

OBJECTIVE

To organize a successful health fair through interprofessional collaboration and to compare the change in participants' child care knowledge after attending the health fair

METHODS

Health Fair and Survey:
The team developed a pre-test and a post-test to evaluate participants' child care knowledge on the topics of physical activity, infant positioning, family law, child discipline, physician contact, dental health, lactation, and drug addiction. The pre-test and post-test contained two questions from each topic. A health fair was organized to educate participants on these topics. The paper pre-test was given to participants before cycling through five booths, in five to ten minute intervals, that covered the topics. The post-test was given to participants after completion of the five booths.

Data Analysis:
Data from the paper pre-tests and post-test were entered into RedCap. A knowledge score was calculated for each pre-test and post-test by determining how many questions a participant answered correctly. SPSS 22 was utilized to perform statistical analyses. Descriptive statistics were used to describe demographic statistics and to describe if the knowledge score improved, stayed the same, or worsened. A Wilcoxon signed ranks test was used to compare paired pre-test and post-test knowledge scores. A Mann Whitney U test was used to compare percent change in knowledge score in English and Spanish participants
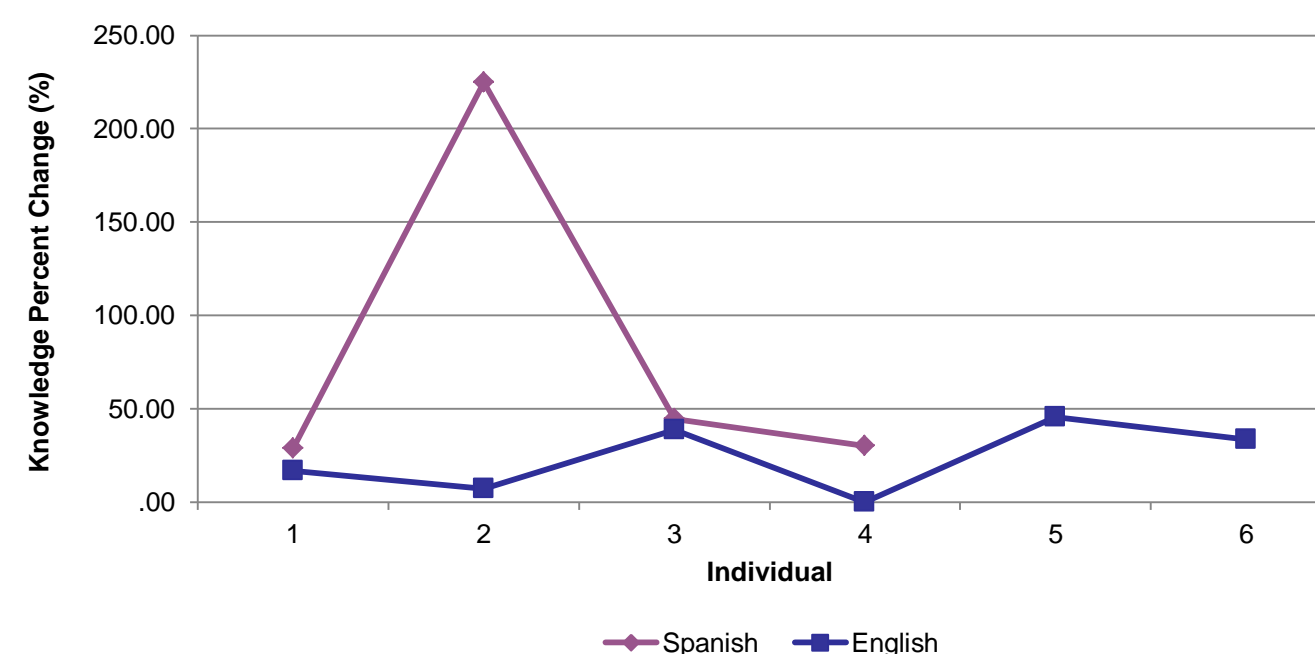
RESULTS

Demographics (n = 10)		
Age	Younger than 30	Older than 30
	43%	57%
Marital Status	Married	Never Married
	30%	70%
Ethnicity	Non-Hispanic	Hispanic
	60%	40%
Education Level	Did not complete high school	Completed high school
	40%	60%

Pre-test vs. Post-test Knowledge Scores
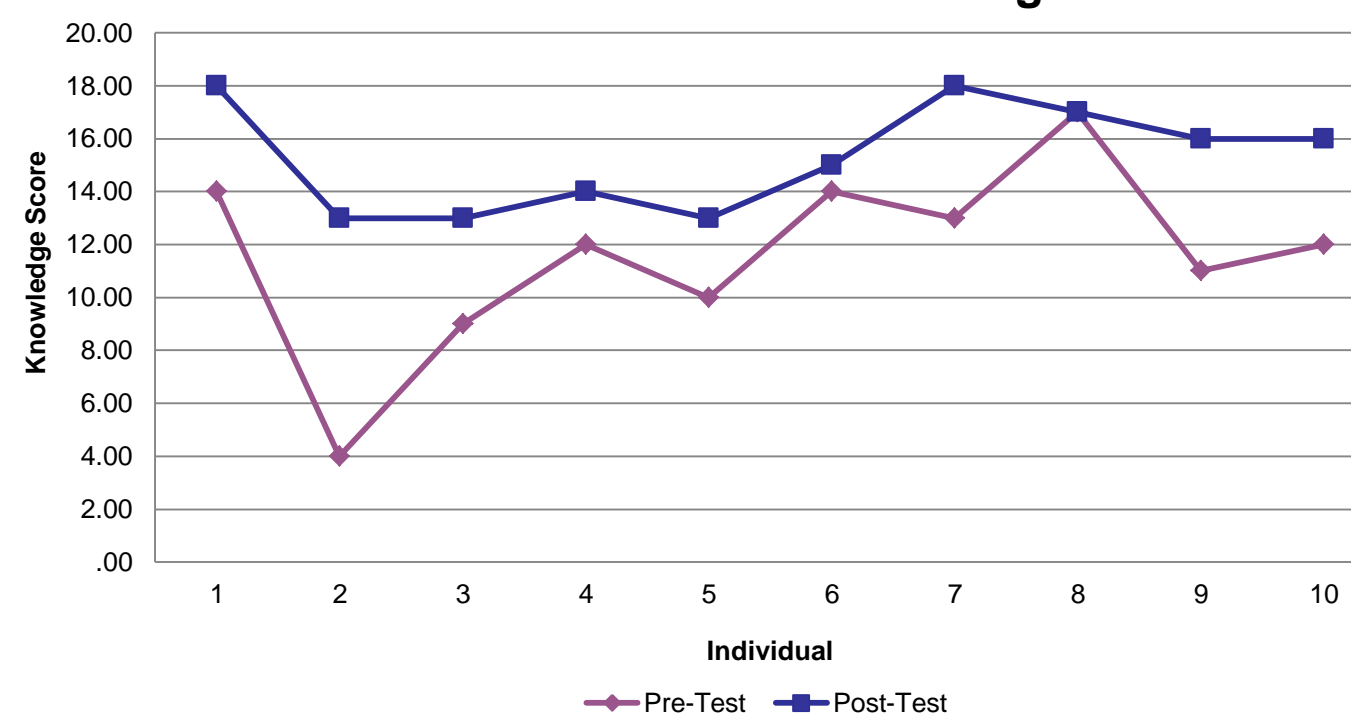
Knowledge percent change in English vs. Spanish participants

The mean pre-test score for all, English, and Spanish participants were 11.60, 13.17, and 9.25, respectively. The mean post-test score for all, English, and Spanish participants were 15.30, 16.00, and 14.25, respectively. There was a statistical significant difference in post-test versus pre-test knowledge scores (p = 0.007). The mean percent change in knowledge for all, English, and Spanish participants were 46.91, 23.91, and 82.00, respectively. There was no statistical significant difference in percent change in knowledge score in English and Spanish participants (p = 0.286).

DISCUSSION

English participants had a higher baseline knowledge (13.17) than their Spanish counterparts (9.25).

Improved post-test scores compared to pre-test scores (p=0.007). Similar knowledge improvement when comparing English and Spanish speaking participants.

Topics of greatest knowledge improvement:

- Foods that prevent cavity development (70% improvement)
- Child support, child custody, child dehydration signs, tummy time, breastfeeding, and physical activity (>40% improvement)

Limitations:

- 11 out of 21 surveys were improperly filled. The knowledge score assumed that if a question was not answered, the participant did not answer the question correctly
- Low sample size, and surveys likely did not meet power, presence or lack of statistical significance should be interpreted with caution

RECOMMENDATIONS

- Shorten the survey (10-12 questions)
- Ensure the survey is easy to understand; possibly at an elementary level of knowledge.
- Our group collaborated interprofessionally by having separate booths with information from each of the different disciplines.
- Continue to have at least 3 Spanish interpreters.
- Reach out to the new West Ashley location & possibly host two fairs
- Provide more information on the rearing of children, how to stay healthy while pregnant, and the stages of pregnancy.
- Account for participants who may not be able to read, participants who are under the age of consent, amount of time needed to complete the survey, and participants who may not complete the survey.
- Provide Spanish versions of handouts

REFERENCES

1. Hill K, McDevitt K, Marenakos K et al. The community health fair as a tool to address maternal and infant health. 2014 MUSC Presidential Scholars Symposium. April 2014 [Poster Presentation]