

Development and Evaluation of an Asthma Educational Module for WIC Dietitians

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Background

- 7.1 million children under 18 years were affected with asthma in 2009.
- Asthma is also the third leading cause of hospitalization among children. (1)



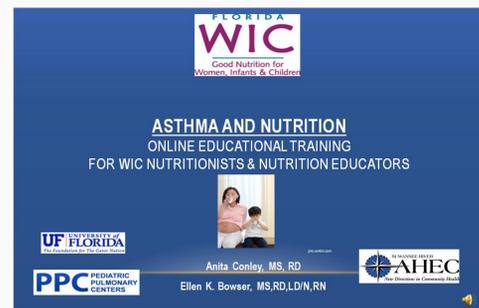
- Federal guidance for the Supplemental Nutrition Program for Women, Infants and Children (WIC) identifies asthma as a nutritional risk.
- Results of a 2009 needs assessment of Florida WIC dietitians indicated they lacked formal instruction on the nutritional implications of pediatric asthma.
- Florida WIC dietitians requested education on the relationship between asthma and nutrition.
- Florida is a large state with limited access to travel funds for WIC dietitians.

Purpose

The objective of this project was to evaluate the efficacy of a web-based continuing education program improving the knowledge and attitudes of Florida WIC dietitians in the nutritional implications of asthma in children.

Method

A web-based continuing education (CE) module was developed using Microsoft PowerPoint format and audio-capture. The module included asthma pathophysiology, treatment and nutritional implications. After pilot-testing the initial module, a revised program was distributed statewide via the Florida WIC intranet. Florida WIC Dietitians were informed about the availability of this online module through their program directors and state WIC staff.



http://www.peds.ufl.edu/divisions/pulmonary/training_module/

Process

The WIC dietitians completed the pre-test, watched the module, and then completed the post-test. The participants were asked to identify a unique four-digit code which they included for both the pre-and post-tests so that their pre-and post-test scores could be matched while the participants remained anonymous. The pre- and post-tests were completed via Survey Monkey.

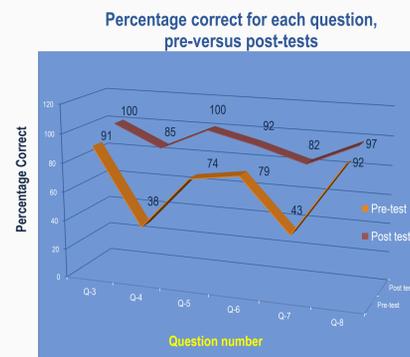
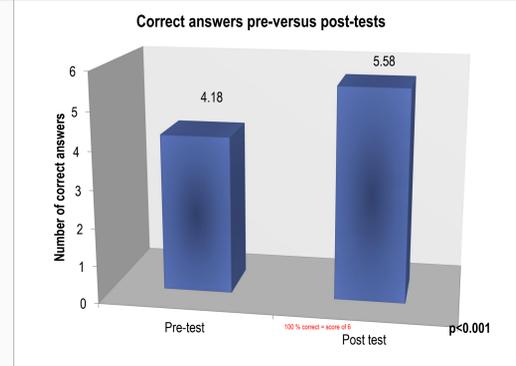
The pre- and post-tests included questions that assessed knowledge gained by the use of multiple-choice questions and change in attitudes by a Likert scale. Ten (10) identical questions were on the pre- and post-tests.

Once the module was completed the participants received a certificate of completion and 1 Continuing Professional Education credit from the Commission on Dietetic Registration of the American Dietetic Association.

- Seventy (70) dietitians completed the online module within the project time frame.
- Sixty-six (66) matched pre- and post-tests were compared using paired t-test analysis via SAS.

All these tests were included in the statistical analysis. Non-completion of the post-test was the only exclusion criterion.

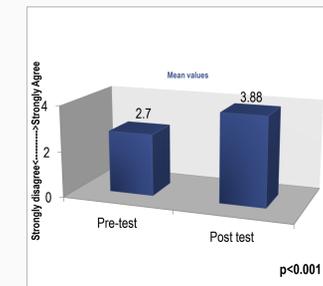
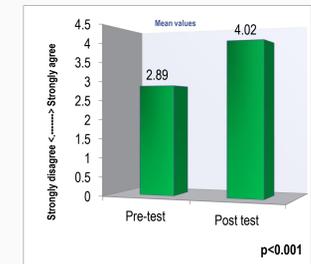
Results –Knowledge Change



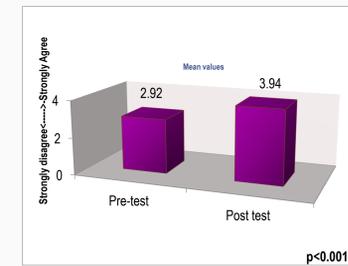
Significant increase in the number of multiple choice questions answered correctly (p<0.001) on the post-tests compared to the pre-tests

Results –Attitudes Change

“I feel knowledgeable about nutritional implications of asthma in children.”



“I feel knowledgeable about the types of medications used for asthma in children.”



“I feel knowledgeable about the relationship between asthma and overweight in children.”

Conclusion and Discussion

- Use of a web-based continuing education module on the nutritional implications of asthma in children resulted in a significantly increased knowledge and improved attitudes of Florida WIC dietitians.
- The production and distribution of a web-based educational module is a reliable method for professional development of WIC dietitians.
- This method of continuing education development may be used for other topics and disciplines in public health settings.

Reference

- Asthma & Children Fact Sheet, American Lung Association. February 2010. Accessed 8/26/2011.