

Implementation of a Nutrition Education Module in an Elementary School System in Belize

Christopher Adam West, BSN, RN, DNP-Student; Amanda Harper, DNP, APRN, CPNP-PC, EBP-C; Anya Moguel, MD

BACKGROUND

- Diabetes rates have increased in recent years, specifically in children of low-income regions.
- Diabetes is the 5th leading cause of death with a 7% increase each year.
- 7.31 (per 100,000) youth aged 0 to 14 are newly diagnosed with T1D each year in Central and South America
- There is a direct link between nutritional intake and an individual's risk for diabetes.
- Education on proper nutrition can lead to healthier diet choices among children.

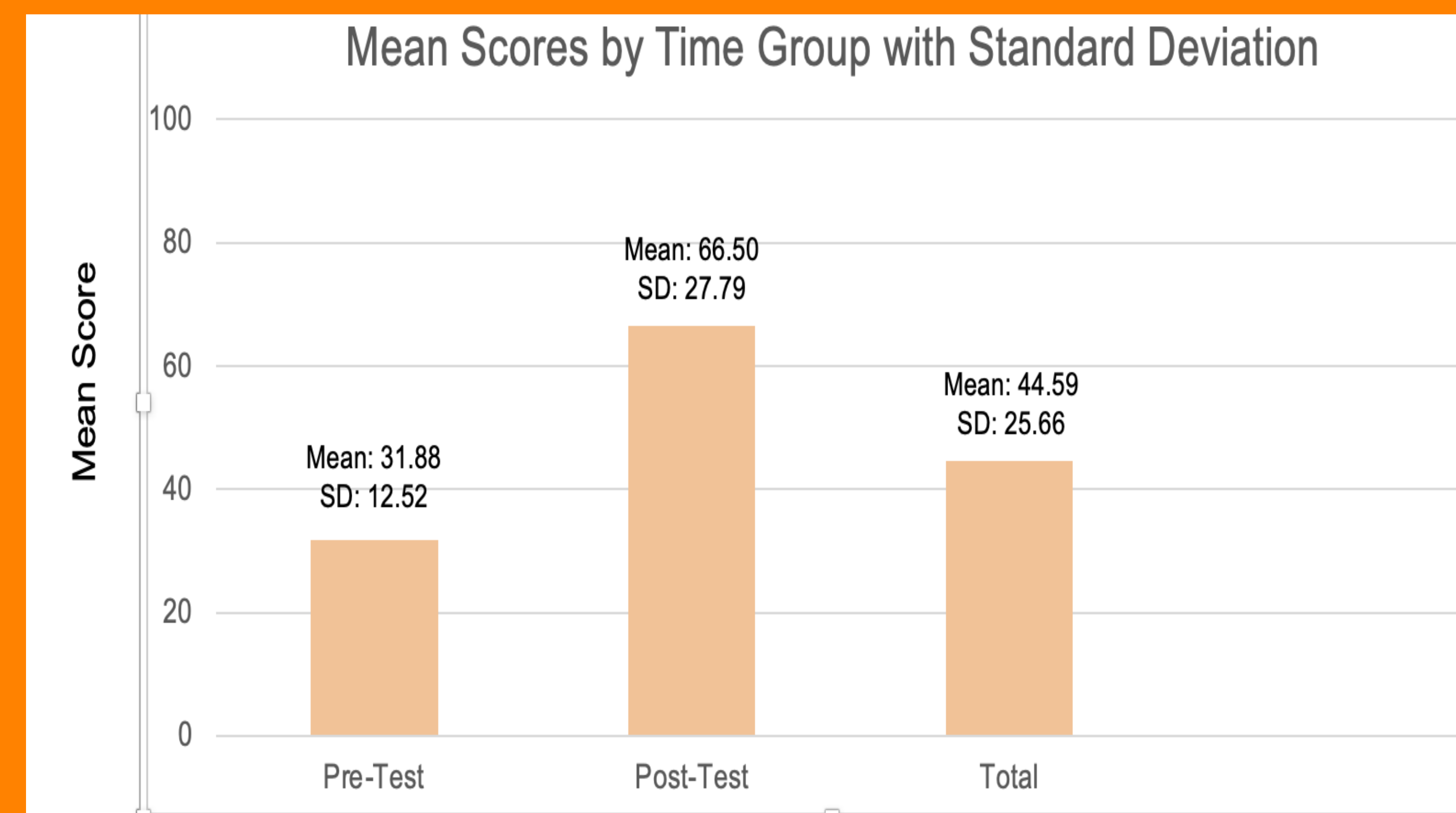
LOCAL PROBLEM

- The site for this practice improvement project was a rural elementary school outside San Ignacio, Belize.
- Prior to implementation, there was no standard nutrition education curriculum established within the school system.
- The purpose of this project was to create a standard education module focused on nutrition and implement the module during classroom sessions.
- The aim of this project was to increase student's nutritional knowledge by 30%.

METHODS

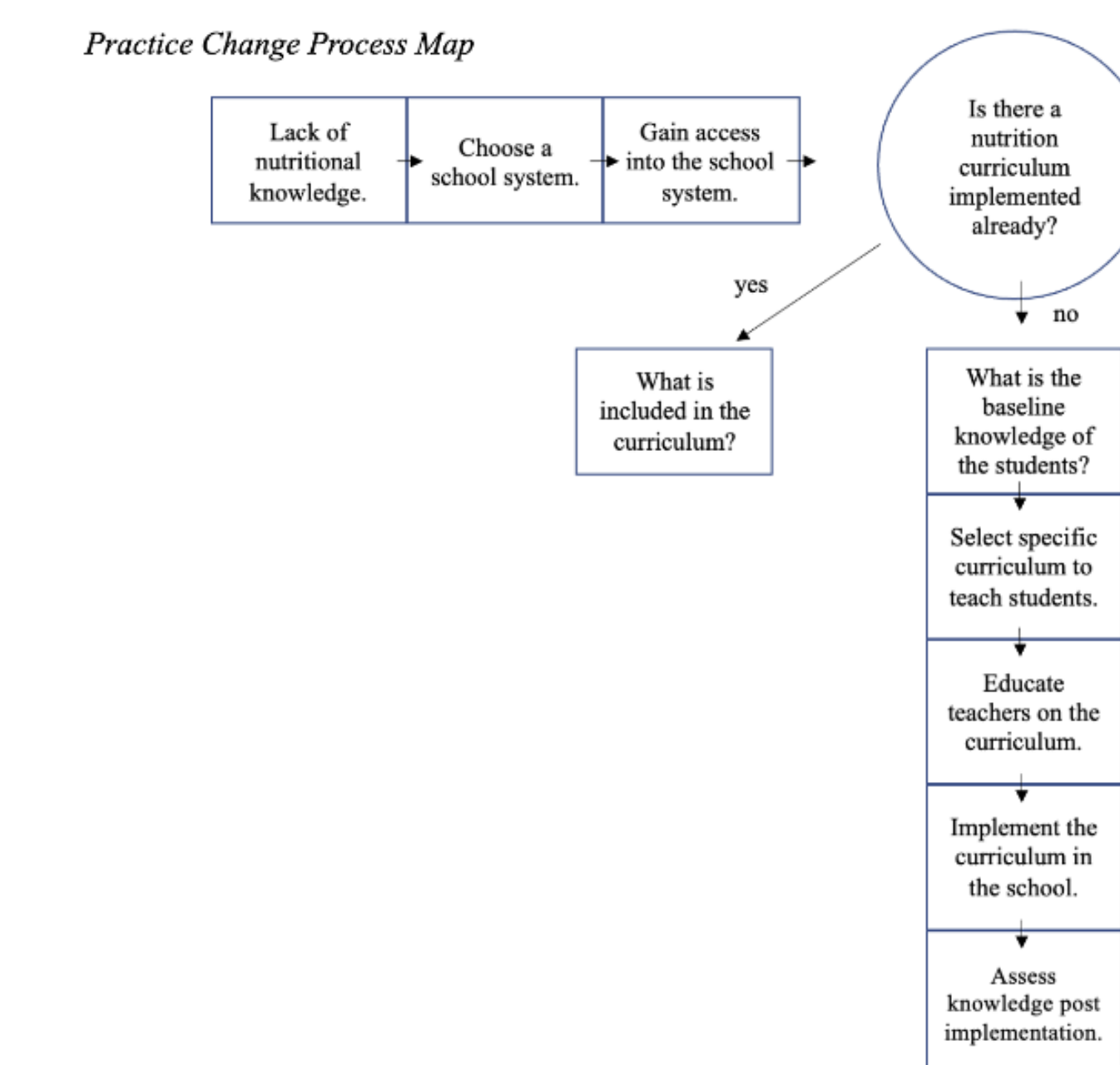
- The Evidence-Based Practice Improvement (EBPI) was the guiding framework for this project.
- A literature search and critical appraisal found that educational modules that incorporated hands-on activities were effective for increasing nutrition knowledge.
- Plan-Study-Do-Act (PDSA) cycles were utilized to measure effectiveness throughout implementation.
- Outcome measures were obtained through pre- and post-tests.

Knowledge of healthy diet habits increased in students after implementation of nutrition education.



INTERVENTIONS

- 3 education modules were implemented over 3 separate days.
- Education modules consisted of a PowerPoint presentation covering that day's topic followed by one hands-on activity to reinforce the content.
- A pre-test was administered on Day 1 before any teaching happened. A post-test was delivered on day 4 at the conclusion of the module.



RESULTS

- Clinical significance was established with an increase of 48% in nutritional knowledge from baseline post-implementation.
- Statistical significance was found with a p-value of <.001.
- The aim of this practice improvement project was exceeded substantially.

CONCLUSIONS

- The implementation of standard education modules in school systems significantly increases student knowledge on nutrition.
- This education is a simple, low-cost practice change that can drastically improve health outcomes.
- Providing education is the first step in helping to reduce diabetes rates amongst children.