Muevete NAHN
Miami Chapter Project USA™ Reducing Obesity in Hispanic Children

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Background

- Florida was named the 29th obese state in USA with cost of obesity in Florida-$8,079 with 26.6% of the population obese.
- Latino children are at a greater risk for obesity with prevalence increasing.
- In Miami-Dade County, Florida 20% of children are obese, especially boys.
- Obese children are more likely to develop Diabetes Type 2 and cardiovascular diseases (RWJ & NCSL, 2012).
- The Miami Chapter of the National Association of Hispanic Nurses (NAHN) was designated as one site for NAHN Muevete USA™ Project,
- NAHN Muevete USA™ Project was an educational program developed to reduce childhood and adolescent obesity throughout the United States, funded by the Coca-Cola Foundation (Millan, 2012).
The Muevete USA event took place in South Florida at the “Wild Things Happen Summer Camp” and at another site in Homestead, Florida.
Purpose of the Project

• Demonstrate awareness and understanding of Nutrition Facts Labels

• Identify daily portions of fruits, vegetables, grains, dairy and protein needed each day

• Describe importance of incorporating daily physical activity and exercises

• Have fun doing exercise with a Physical Fitness instructor to Hip Hop Spanish music or other exercises and games
Methodology

- A descriptive exploratory research design was used.
- The children completed five pre and post tests with four responses in most cases; otherwise it was a yes or no answer.
  - 1st test “My Plate”
  - 2nd test “Food Label”
  - 3rd test “Physical Activity and Exercise”
  - 4th test “Healthy Snacks”
  - 5th test “Goal Setting”
- Content validity was established.
Implementation

- Prior to the event, a nutrition seminar was presented by a certified nutritionist from Miami Dade College in order to prepare the nursing students on the five lessons and assist them in creating their storyboards.
- Community Health ASN & BSN students (31) participated in Muevete, receiving 10 community hours for a two hour nutritional seminar, a one hour orientation and the seven hour Muevete event.
- The children were divided into 12 groups with two students/group; taking food cutouts and making plates with appropriate portions, nutritional requirements, reading labels. MDC School of Nursing NAHN officers, members and community health students collaborated with MDC Continuing Education & Professional Development who offers a summer camp.
Implementation

- Nursing faculty facilitated the event while a certified physical fitness instructor presented the HIP HOP/Zumba fitness session.
- Each student made two posters outlining nutrition aspects and obesity health risk factors.
- One ASN student with an Associate Degree in Fine Arts constructed two life-like cardboard dolls (7’ male chef and 5’8” waitress) with “Choose My Plate gov” and food cutouts, outlining necessary meal portions, addressing Muevete objectives.
Results

• The children (5-12), were divided into 12 groups with two students per group.
• The children took the food cutouts and made plates with appropriate portions, nutritional requirements, reading labels.
• Most were complete, even with younger children progressing to kindergarten; They were able to understand all the information requested.
• The children ranged in age from kindergarten to 7th grade,
• 50% females to males and with Hispanic descent.
• When small flags from different countries were distributed, the children identified their native country.
Findings/Implications

- 1st year (Kendall campus) 130 children participated (ages 5-12) males 50%, females 50%; mostly
- 2nd year (Kendall campus) 125 children participated
  - ages ranged 4-15 mean= 8 years, kg-8th grade
  - males-62%, females 38%;
  - Hispanic 55%, White 30%; Black 9% Asian 6%;
  - pretest-posttest scores ↑ 9.40-10.68 with a 13.62% change;
- 2nd site (VG)- 102 children participated
  - ages ranged 4-15 mean= 9 years;
  - males- 54% females 46%.
  - Hispanic 41%, Black 38%, White 13%, Asian-8%
  - pretest-posttest scores ↑ 8.33-9.45 with a 13% change.
Findings/Implications

- 3rd year (Kendall campus) 128 children participated;
  - ages ranged 4-15 mean= 8.51 years, kg-8th grade
  - males-59%, females 41%
  - Hispanic 74%, White 29%; Black 5% Asian 1%;
  - pretest-posttest scores ↑ 9.65--12.91 with a 25% change
- 2nd site (Homestead) 109 children participated
  - ages ranged 5-12 mean= 8.51 years;
  - males- 65% females 35%.
  - Hispanic- 41%, Black 36%, White 22%, Asian-1%
  - pretest-posttest scores ↑ 9.77-11.81 with a 21% change
Findings/Implications

• Community Health ASN & RN-BSN students participated in five Muevete projects at five different sites over 3 years
• Students received 10 community hours
• 594 children participated, predominately Hispanic
• Aerobic exercises were provided
• Parents received nutrition classes.
• Most missed question: "How much Sodium is in this entire food product"? Although Sodium was 440mg it was for 4 servings-correct answer was 1760 mg.
Recommendations

• Preplanning and orientation of faculty
• Organization of site and staff
• Orientation, teaching and debriefing
• Advising revising surveys to be culturally sensitive
• Limit size of children/per groups
• Design posters for younger children
Conclusion

- The children loved the program as they received healthy snacks and exercised.

- They understood the need to manage childhood obesity according to pre/post test results.

- The implementation of this program helped to reduce the number of Hispanic and other children with obesity.

- This should decrease the level of obesity in Hispanics and reduce the associated costs
The nursing students created the storybooks.
References

• Bauer, CC, et al. Child overweight and obesity are associated with reduced executive cognitive performance and brain alterations: a magnetic resonance imaging study in Mexican children Pediatric Obesity 10(3), 196-204.


• Obesity update June, 2014 OECD

• Puerto Rico law would brand parents of obese children as child abuses www.theguardian.com

• Mexico Plays the Heavy on Food Ads www.wsj