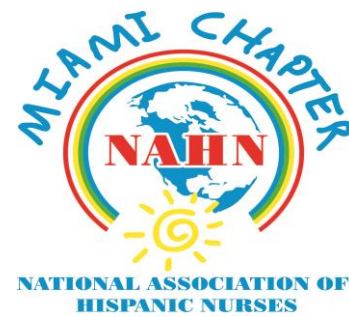




**Sigma Theta Tau International
Honor Society of Nursing**



Moving “Ninos Obesos” Project: Reducing Obesity in Hispanic and non-Hispanic Children

Yolanda, Nitti, MSN, RN, **Patricia R. Messmer, PhD, RN-BC, FAAN**

Gianna Santos, DNP, ARNP, NP-C, Yamina Alvarez, DNP, RN

Kathleen Muniz, MSN, RN, **Marie O Etienne, DNP, ARNP, PLNC,**

Roxana Orta DNP, ARNP, AP-BC, Guillermo Valdes, DNP, RN-BC

Ann Graziotti, MSN, RN, & Elisa Rodriguez, DNP, ARNP

Benjamín León School of Nursing, Miami Dade College, Miami, Florida

Nora Hernandez-Pupo, MSN, RN *Barry University, Miami Shores, Florida*

Faculty Disclosure

- ▶ **Faculty Name**

- ▶ **Patricia R. Messmer, PhD, RN-BC, FAAN**

- ▶ Conflicts of Interest–None

- ▶ **Employer:** Benjamín León School of Nursing

- ▶ Miami Dade College, Miami, Florida, USA.

- ▶ Sponsorship/commercial support–None

- ▶ **Faculty Name**

- ▶ **Marie, O. Etienne, DNP, ARNP, PLNC**

- ▶ Conflicts of Interest–None

- ▶ **Employer:** Benjamín León School of Nursing

- ▶ Miami Dade College, Miami, Florida, USA.

- ▶ Sponsorship/commercial support–None

Goals and Objectives

▶ **Session Goal:**

- To understand and explain the global issue of obesity in children

▶ **Session Objectives:**

- ▶ To demonstrate awareness and understanding of the factors of the eating habits of children and their families
-

Background

- ▶ Florida ranks 35th in overall prevalence with 33.1% of children considered either overweight or obese (ww.nichq.com)
- ▶ Hispanic children are at a greater risk for obesity with ↑prevalence with 34.3% overweight/obese in Florida and 41% nationally.
- ▶ 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) designated as one site for NAHN Muevete USA™ Project,
- ▶ NAHN Muevete USA™ Project- an educational program developed to reduce childhood and adolescent obesity throughout the United States, **funded by the Coca-Cola Foundation** (Millan, 2012).
- ▶ Kilpatrick, K (2015). Child obesity in Mexico
<http://projects.aljazeera.com/2015/08/mexico-obesity/>
- ▶ Lanpher, K & Rydoff (2015) 2nd part The Amaranth Solution

Morbid Obese Child in Mexico



Amaranth, an ancient grain- answer to Mexico's obesity solution



The Muevete USA event at Miami Dade College Kendall Campus



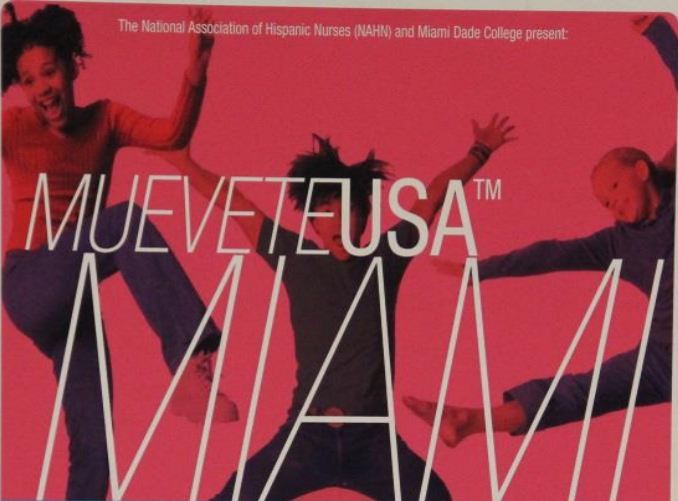
The Muevete USA event was held “Wild Things Happen Summer Camp” in Kendall, Florida



Purpose of the Project

- ▶ To demonstrate awareness and understanding of Nutrition Facts Labels
- ▶ To identify daily portions of fruits, vegetables, grains, dairy and protein needed each day
- ▶ To describe importance of incorporating daily physical activity and exercises
- ▶ To engage children doing exercise with a Physical Fitness instructor to Hip Hop Spanish music or other exercises and games

The National Association of Hispanic Nurses (NAHN) and Miami Dade College present:



MUEVETEUSA™

Muevete USA™ Project is a NAHN educational program developed to reduce childhood and adolescent obesity in selected locations throughout the United States. While Latino/Hispanic children are the focus, the program is open to all children regardless of ethnic background.


Muevete USA™ was inspired by First Lady Michelle Obama's *Let's Move* campaign.

YOUR CHILD WILL HAVE FUN LEARNING HOW TO :




- Demonstrate awareness and understanding of the Nutrition Facts Label
- Identify the daily portions of fruits, vegetables, grains, dairy and protein needed each day
- Describe the importance of incorporating physical activity and exercise in daily lives
- Have some fun doing exercise with a fitness instructor

JUNE 26, 2013
Wild Things Happen Summer Camp
Kendall Campus
11011 S.W. 104th Street, Miami, FL

Time: 9:00 a.m. to 4:30 p.m.
Lunch break from
11:30 a.m. to 12:30 p.m.

 School of Continuing Education & Professional Development

MUEVETE USA™ MIAMI
BROUGHT TO YOU BY:



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 MDC certified nutritionist to prepare the nursing students on the five lessons and assist them in creating their storyboards.
- ▶ Community Health ASN & BSN students (130) 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

- ▶ Seven nursing faculty and three physical fitness instructors facilitated the event while two certified physical fitness instructors presented the HIP HOP 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

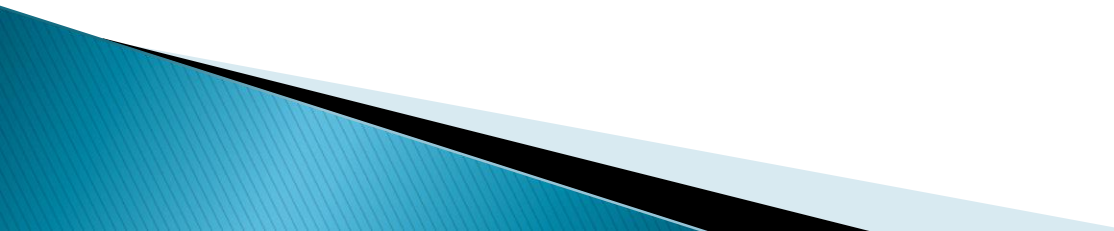
- ▶ The 594 children (5-12), were divided into 12 groups with two students per group.
 - ▶ The children took the food cutouts and made plates with appropriate portions, nutritional requirements, reading labels.
 - ▶ Most were complete, even with younger children progressing to kindergarten; They were able to understand all the information requested.
 - ▶ When small flags from different countries were distributed, the children identified their native country.
- 

Findings from MDC Kendall Campus

- ▶ 1st year 130 children participated in 2013
 - ages 5-12; males 50%, females 50%; mostly Hispanics
 - All mean scores increased from pre-to posttest
 - 1st test 3.13 to 4.67 3rd test 3.50 to 4.55
 - 2nd test 2.94 to 3.72 4th test 3.50 to 4.13 5th test 2.96 to 3.52
- ▶ 2nd year 125 children participated in 2014
 - ages ranged 4-15 mean= 8 years, kg-8th grade
 - males-62%, females 38%;
 - Hispanic 55%, White 30%; Black 9% Asian/other 6%;
 - pretest-posttest scores increased from 9.40--10.68 , 13.62% change
- ▶ 3rd year 128 children participated in 2015
 - ages ranged 4-15 mean= 8.51 years, kg-8th grade
 - males- 59%, females 41%;
 - Hispanic 74%, White 20%; Black 5 % Asian/other 1%;
 - pretest-posttest scores increased from 9.77--11.81, **42% change**

Findings from Homestead, Florida

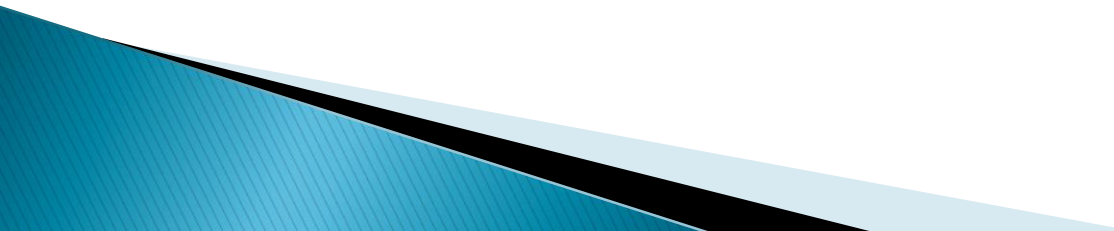
- ▶ 2nd site 102 children at Verdes Garden, Homestead, 1st site in 2014
 - ages ranged 4-15 mean= 9 years;
 - males- 54% females 46%.
 - Hispanic 41%, Black 38%, White 13%, Asian/other-8%
 - pretest-posttest scores increasing from 8.33-9.45, a 13% change.
- 3rd site 109 Migrant children at South Dade Park, Homestead in 2015
 - ages ranged 5-12 mean= 8.51 years;
 - males- 65% females 41%.
 - Hispanic 41%, Black 36%, White 22%, Asian/other-1%
 - pretest-posttest scores increasing from 9.77-11.81, a 21% change
- 3rd site 55 Migrant children at South Dade Park Homestead in 2016
 - ages ranged 5-12 mean= 9.16 years;
 - males- 45% females 54% with one identified no identify.
 - Hispanic 65%, Black 22%, White 12%, American Indian-1%
 - pretest-posttest scores increasing from 9.77-11.81, a 21% change

- Over 594 children participated from 2013-2015, scores increasing in
 - My Plate
 - Food Label
 - Physical Activity & Exercise
 - Healthy Snacks and
 - Goal Setting
- 

Findings/Implications

- ▶ Community Health ASN & RN-BSN students (130) participated in five Muevete projects at three different sites over three years, receiving 10 community hours.
- ▶ Aerobic exercises were provided with hand washing teaching provided by Federal Drug Administration (FDA).
- ▶ Parents received nutrition classes.
- ▶ Children with pretest-posttest scores increased in all sites over the three years
- ▶ The most missed question: "How much Sodium is in this entire food product"? Although Sodium was 440mg it was for 4 servings so the correct answer was 1760 mg.

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.
- 





Camp in Homestead, Florida



Zumba



Zumba





Miami Marlins baseball role models



References

- ▶ Bauer, CC, et al. (2015). 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.
- ▶ Brown, RE, Kuk, JL S. Lee, S (2015) Measurement site influences abdominal subcutaneous and visceral adipose tissue in obese adolescents before & after exercise *Pediatric Obesity* 10(2), 98-104.
- ▶ Kilpatrick, K (2015). Child obesity in Mexico
<http://projects.aljazeera.com/2015/08/mexico-obesity/>
- ▶ Knop, C. et al (2015). Extremely obese children respond better than extremely obese adolescents to lifestyle interventions *Pediatric Obesity* 10(1), 7-14.
- ▶ Lanpher, K & Rydoff (2015) 2nd part Child obesity in Mexico The Amaranth Solution <http://projects.aljazeera.com/2015/08/mexico-obesity/>
- ▶ Hennessy, M, (2014). Mexico restricts junk food ads: time for rethink on advertising? <http://www.foodnavigator-usa.com/Regulation/Mexico-restricts-junk-foods-ads-time-for-think-on-advertising>
- ▶ Mexico tries taxes to combat obesity
<http://online.wsj.com/news/articles/SB10001424052702304864504579141462546165155>

Thank you!
Ngiyabonga!
Questions?

<http://youtu.be/Z4h07B-WLsY>

